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China’s Belt and Road Initiative: too early for success stories

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China’s ‘Belt and Road Initiative’ (BRI) is causing more of a stir than any other global project. Launched in 2013 by President Xi Jinping, the initiative is first and foremost a worldwide infrastructure investment campaign centred on investment in transport, energy and communication networks.

The motives are diverse and cannot be attributed purely to China’s pursuit of hegemony. That is a major motive all the same but so are domestic economic policy and foreign trade. Even if China is mostly pursuing its own interests, the BRI projects can definitely be beneficial for the participating countries. After all, many developing countries have an enormous need for infrastructure investment, part of which can be met with the help of the BRI. Depending on the assumptions made, this comes with significant benefits for the participating countries’ trade and GDP. Asian regions will presumably benefit most.

Still, a number of challenges and points of criticism remain. That is not surprising given the dimension of the BRI but these points should not be downplayed nevertheless. The BRI is an enormous comprehensive project which some deem to be of historic importance. But it is still too early to deliver such a verdict.

The BRI – what’s in it for China?

To be able to understand the BRI, it is useful to clarify what China wants to achieve with it. Already in the summer of 2018, French President Emmanuel Macron said the following about the BRI in a speech before the French ambassadors deployed around the world: ‘It is a globalisation vision that has the benefit of providing stability in some regions but it is hegemonic.’[1] That is definitely an accurate, if incomplete, characterisation. Indeed, the BRI is often publicly viewed (simplistically) as a strategy which China is pursuing with the primary aim of strengthening its geopolitical position by creating a network of preferred while dependent national economies where it invests in return for natural resources. But this is only part of the story. The BRI is driven by a range of motives. Chief among them are the following:

- China owes its rise to the world’s largest economy (measured by purchasing power parities) to an investment and export strategy it has pursued for many years. But this has also created high overcapacity in China (Figure 1). The BRI is one method of continuing investment- and export-driven growth by enabling continued use of this capacity through additional demand.

- China’s foreign trade is heavily geared to the Asian region, which accounts for just under half of all exports and approximately 55% of China’s imports. The BRI can create conditions for diversifying China’s foreign trade. The construction of rail and road corridors, e.g. through Central Asia to Europe, will facilitate the transport of goods to and from these regions. That would generally make China somewhat less dependent on maritime routes through the South China Sea and the Indian Ocean. A further economic aspect, of course, is securing the supply of natural resources which China relies on and which it aims to access more readily through the BRI.

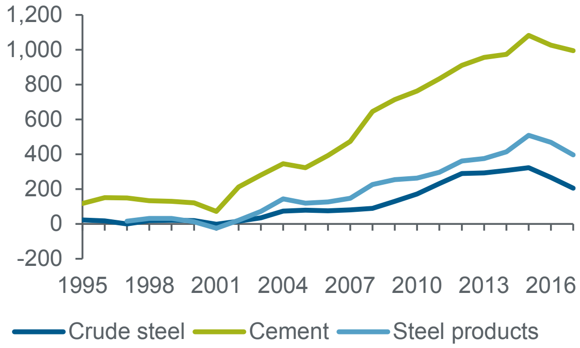
- Obviously, geostrategic motives also play a role in the BRI. China is aspiring to become an (economic and political) superpower similar to that of the US. Among other things, this implies expanding its economic influence and asserting own standards and norms but also placing political messages. Investment in the necessary local infrastructure in other countries can create long-term bonds which will primarily benefit China in the long term. Officially, however, forming alliances or influencing internal or other political processes in these countries is not an objective.

- Another motive sometimes mentioned is that China wants to set the BRI as an own model against the West’s financial cooperation (FC) with emerging markets and developing economies (EM/DE).

Thus, the BRI can indeed be characterised as a strategic long-term plan. It is driven by internal and external, as well as geopolitical, motives.

Figure 1: Overcapacity in China

Difference between production capacity and actual production, in millions of tonnes



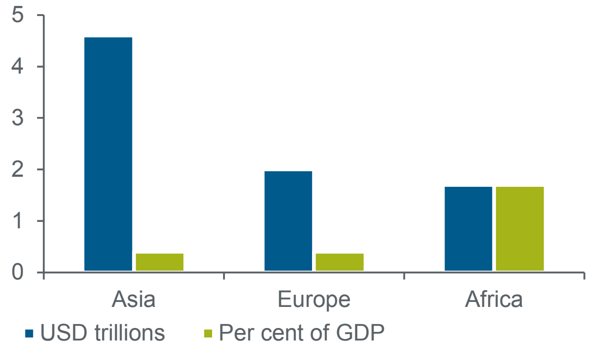
Source: CEIC, KfW Research

Enormous need for infrastructure investment

Even if China as the initiator of the BRI is likely to prioritise its own interests, that does not mean the participating countries have nothing to gain.[2] After all, according to the G20 Global Infrastructure Outlook 2017, the BRI regions have significant gaps with respect to infrastructure finance (Figure 2).[3] The combined annual infrastructure financing gap for Asia, Africa and Europe amounts to approx. USD 330 billion.

Figure 2: Infrastructure financing gaps*

Based on 2016, in USD trillions: cumulative 2016 to 2040, per cent of GDP: average 2016 to 2040



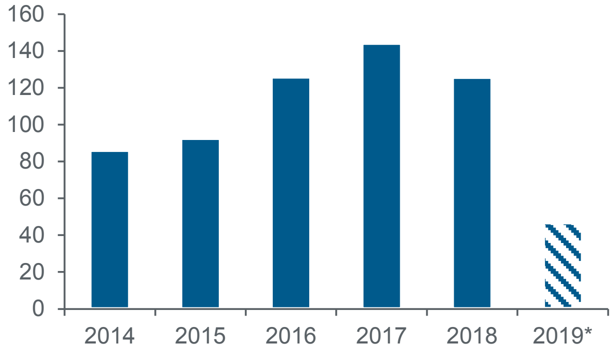
* Energy, telecommunications, transport, water
Source: G20 Global Infrastructure Outlook 2017

To what extent China's BRI can (partly) close this gap, however, is largely unclear. There are no complete statistics on the investment sums already attributable to the initiative, and intransparency is very high. Nor does there appear to be any clarity as to which activities are attributable to the BRI in which countries (and which are not). China's Ministry of Commerce publishes data on the contractual sums newly agreed with the other countries under the BRI. According to those data, China has made contractual commitments to a cumulative sum of approx. USD 620 billion in the past years (as at May 2019, Figure 3). If future commitments remain roughly on the level of the past years and are actually drawn down and implemented in projects, they could meet around 30% of the existing financing gaps, which is quite a significant share. Ultimately, however, these figures say nothing about the actual sum of investments made. It is difficult to estimate how high they are to date. Most estimates put the current volume at around USD 200 billion,[4] or around one third of total commitments made so far. Overall, the BRI is intended to reach an investment volume in excess of USD 1 trillion.[5]

China's financial commitment under the BRI involves not just lending – usually to the respective governments – but direct foreign investment (FDI), that is the acquisition or construction of own infrastructure projects. According to the Chinese Ministry of Commerce, annual BRI-relevant FDI was in the range of USD 14 - 16 billion in the past years. At any rate, for the year 2018 that amounted to some 13% of China's total gross FDI in non-financial sectors.

Figure 3: Contractual commitments newly agreed with other countries under the BRI

USD in billions



* Up to and including May.

Source: CEIC

Trade and GDP effects from the BRI: theoretically impressive

The investments can definitely trigger positive trade and growth effects in the BRI countries. These may occur through various channels that mutually influence each other:

- At the domestic level, infrastructure investments individually can generate a positive demand and, hence, income effect (GDP effect) in the relevant countries. But that effect is weaker the more construction activities, for example, are performed by Chinese workers.

- Investments usually lead to downstream effects such as higher productivity through shorter domestic delivery times, improved information and communications technology, higher energy efficiency or the subsequent establishment of commercial or industrial facilities. That can reduce costs and induce additional demand.

- With respect to foreign trade, BRI can lead to more dynamic trade simply through its function of intensifying trade ties, at least between the BRI countries (including China itself) but probably beyond as well.

- Infrastructure investment can improve trade conditions in such a way that it generates an additional expansionary effect on trade. Worth mentioning in this context are possible new trade agreements, lower market access barriers, shorter delivery times or – similar to the domestic perspective – lower trading costs.

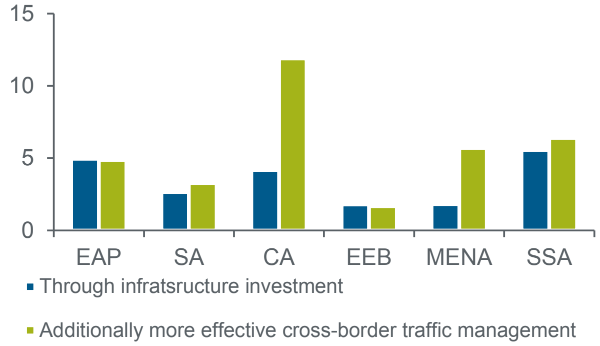
It is difficult to measure these mutually influencing effects, however, and any measurement can be only approximate. Nevertheless, a number of studies have attempted to make such a quantitative estimate. Examples include the works of Zhai (2018)[6] and Baniya et al. (2019)[7] who – using different approaches – analysed the effects of the BRI on trade and, in the case of Zhai (2018), on GDP.

Asia benefits the most

The BRI is primarily designed to invigorate and facilitate trade between the participating countries. Not all countries and regions will benefit from this equally, however. The study by Baniya et al. (2019) identified East and Central Asia, as well as Sub-Saharan Africa, as the biggest winners in trade. This should result from the expected export growth enabled by reductions in trade times. The MENA region too can expect tangible trade growth provided it also succeeds in managing cross-border traffic more effectively (Figure 4). On that basis, Eastern European regions will benefit least.

Figure 4: Effect of BRI infrastructure investment on trade by region (according to Baniya et al. (2019))

Per cent compared with the situation prior to the BRI (mean values of upper- and lower-bound scenario; the regional values result from the relevant median value of the countries assigned to the regions)



EAP=East Asia / Pacific, SA=South Asia, CA=Central Asia, EEB=Eastern Europa / The Balkans, MENA=Middle East / North Africa, SSA=Sub-Saharan Africa

Source: Baniya at al. (2019), KfW Research

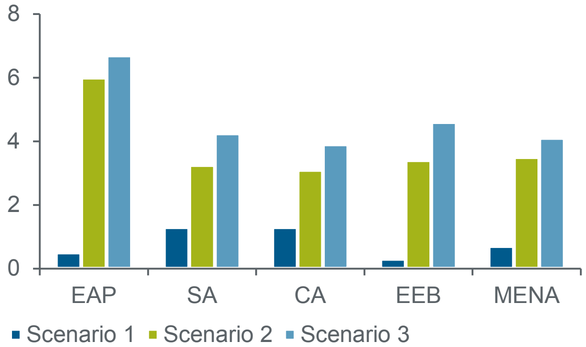
Zhai (2018) arrived at similar results. His study also established that Asian regions benefit most and European regions least. But he is much more optimistic about the quantitative trade effects, under the (additional) assumptions that the BRI investments will reduce the cost of trade and increase energy efficiency.

These results are not implausible. The projects thus far planned and realised are concentrated on Central Asia, which is unsurprising given the (original) orientation of the BRI to the historic Silk Road. East Asia benefits naturally, as it were, from its relatively close geographic link to China and the inclusion of the 'maritime Silk Road' in the BRI. This latter aspect is also the one that brings benefits to Sub-Saharan Africa.[8]

With respect to GDP effects, a somewhat different picture emerges. While the East Asia / Pacific region is set to gain the most here as well, the remaining regions hardly differ in terms of real income growth rates (Figure 5). What is notable, however, is that the pure demand effect of infrastructure investment on GDP is very limited. In this case (Scenario 1), the study by Zhai (2018) assumes an additional effect of 0.5% of GDP in total for all BRI countries in the year 2030 compared with a basic scenario development without the BRI. That is less than 0.05 percentage points of additional growth per year. It is not until reduced trade costs (Scenario 2) and reduced trade costs with increased energy efficiency (Scenario 3) are additionally taken into account that the effect of the BRI on real income actually becomes tangible.

Figure 5: Effect of BRI infrastructure investment on real income in 2030 (according to Zhai (2018))

Per cent of GDP assumed under the basic scenario without the BRI (the regional values result from the relevant median value of the countries assigned to the regions)



EAP=East Asia / Pacific, SA=South Asia, CA=Central Asia, EEB=Eastern Europa / The Balkans, MENA=Middle East / North Africa

Source: Zhai (2018), KfW Research

The preliminary conclusion that can be drawn is that the BRI can definitely have a significant impact on trade and income for the participating countries. Obviously, however, such an impact will occur mainly if we assume that the infrastructure investment induces further effects such as improved water management, greater energy efficiency, cost reductions and others. In light of the remaining challenges, the realisation of these additional assumptions cannot be taken for granted (see next section). The effect of infrastructure investment alone on trade and income, by contrast, appears to be quite moderate.

Criticisms and challenges

The enormous financing requirements in many countries and the effect which the BRI can potentially have speak in favour of China's initiative. Given the resoluteness with which China has pushed forward its initiative in the past years, the country is also deemed by many to be a prime example of efficient and fast implementation of infrastructure projects. However, the BRI is anything but a surefire success. A number of challenges and points of criticism remain. Some of these points of criticism have also been confirmed in an internal KfW survey (see box on page 5).

- Choice of projects: The infrastructure investment itself and its assessment on the basis of funds invested or committed say nothing about whether a project actually makes sense. So far there appears to have been little discussion in the context of the BRI as to whether motorways, railroads, industrial parks or ports will actually be used to capacity in the future and whether the investment will be worthwhile. In any event, the many analyses and contributions on the topic of the BRI so far say remarkably little or nothing about needs tests or similar assessments.

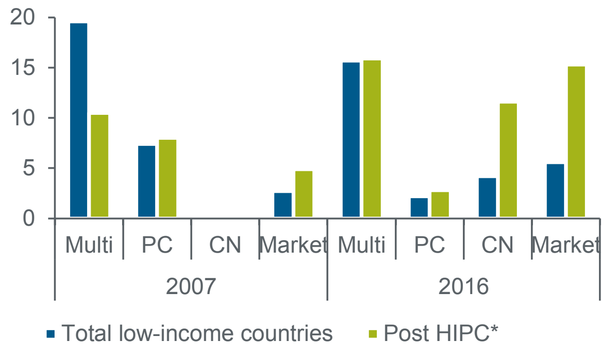
• Project governance: The success of the BRI projects in the individual countries also depends on how well the projects are managed and supervised. The risk of wastage, inefficiencies and major implementation problems cannot be contained without good project governance. This, in turn, is not independent of the structures existing in the individual countries. Although China is implementing some of the projects in the countries itself, this will not work without any cooperation with the local authorities and administrations. In addition to the already vast geographic extension of the BRI, the dissimilarity between the relevant partner countries makes the BRI an investment hodgepodge that may be very difficult to steer and manage.

• Development effect: Even if the BRI has (or should have) a positive effect on trade and income for the participating countries, as described above, it does not constitute a suitable model of financial cooperation like the one being offered by the World Bank or the IMF but also by other Western donors. It is true that the use of funds provided by these donors is also contingent in many cases on the fulfilment of conditions such as the implementation of reforms. But BRI loans from China are of an entirely different nature because they are commercial. Two main aspects illustrate this. First project realisation and, in many cases, subsequent operation is mainly in the hands of Chinese companies. This means payments for factor inputs made in the course of project realisation often do not remain in the country; rather wages, revenues and thus purchasing power flow out. This reduces the BRI partner countries' chances of benefiting from the investments on a sustained basis. Second, the collateral provided for the loans – usually the projects financed with them – creates the risk of dependencies (see also the next but one point). A further difference between the BRI and 'classic' financial cooperation consists in the fact that the BRI has so far concentrated on investments in transport, energy and communications infrastructure. FC areas such as the education or health sector are not being addressed with any priority. In individual cases, China is undertaking first steps here as well but this does nothing to change the fact that the BRI is so far an initiative focused on infrastructure projects. Despite the differences, there is definitely potential that the BRI and Western FC may enter into competition with each other, for example in the energy sector.

• High credit and realisation risks: China is definitely making a deliberate decision to take high risks in order to achieve its economic and geopolitical objectives. What is striking is that the spread of China's financial influence can be felt particularly in those countries that are already regarded as highly indebted or highly vulnerable to debt crises (Figure 6).[9] China seeks to manage these risks by collateralising the loans, among other things. The question arises, however, whether the value of the collateral can ultimately cover loan defaults in such countries. This question is closely linked to the aspect of project selection mentioned above. If there is no long-term need for an infrastructure measure there is little likelihood that the object of investment can be realised as collateral.

Figure 6: Donor structure of public and publicly guaranteed external debt in low-income countries

Per cent of GDP



* HIPC: Heavily Indebted Poor Countries

Multi: Multilateral donors such as the IMF, the World Bank, IDB and others, PC: Paris Club, CN: China, Market: commercial market financing, especially through bonds

Source: IMF (2018)

• Risk of indebtedness and creation of dependencies: The flipside of the point mentioned above is a growing risk of indebtedness and crisis for the participating countries. It is not uncommon for emerging and developing economies to take high financial risks in exchange for the prospect of realising (presumably) important infrastructure projects. A striking example of this is Montenegro. The country borrowed EUR 809 million from China to finance the first section of a motorway from the Montenegrin port city of Bar to the Serbian border town of Boljarea. In 2014, when the agreement was concluded, that sum was just under one fourth of Montenegro's nominal GDP. That is a gigantic quota for a single infrastructure project that is not even fully financed by this loan. At the same time, these developments also make the affected countries more dependent on China. The much-cited example of Sri Lanka illustrates what can happen should a country fail to service these loans. In 2017 the island republic in the Indian Ocean defaulted on USD 6 billion in debt owed under an infrastructure investment, the port of Hambantota, which was financed by China. Sri Lanka was subsequently forced to lease out the ports and a neighbouring industrial zone to a Chinese government holding for 99 years.

• Environmental protection: In many places, areas in which BRI projects are being realised overlap with biotopes worthy of protection that are classified as key biodiversity areas, for example.[10] This creates significant environmental risks and environmental standards are still not being adequately respected. It is true that awareness of environmental aspects has grown much in China as a result of own experience and this plays a role for China under the BRI as well. Ultimately, however, environmental protection aspects continue to rank below economic progress, which is deemed more important. This can be assumed all the more for countries in which BRI projects are being implemented where environmental protection often ranks even lower than it does now in China.[11]

- Absorption of domestic capacity: One motive of the BRI is that of utilising production capacities which are no longer fully required to meet domestic demand alone (see Figure 1 again). But this is actually in conflict with China's strategy of transitioning its economic model. The long-term aim is for its economic growth to consume fewer resources and be sustained by more private consumption and demand for services and less by investment and exports. This process would be significantly delayed if the BRI were to be seen as a way of reducing excess capacity through production expansion instead of cutbacks in capacity. The production of crude steel and steel products are examples that illustrate this. After periods of production declines and stagnation, production picked up here again in 2017/2018.

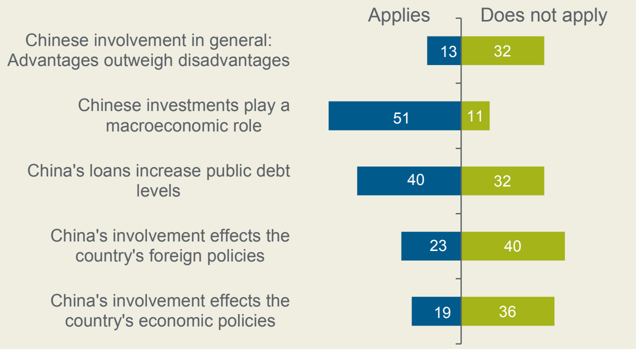
KfW's developing and emerging economies trend monitor: How do KfW experts view China's involvement in KfW's partner countries?

The KfW trend monitor is a structured survey conducted among the office directors, the 'antenna offices' and the country managers of KfW and its subsidiary DEG. The focus of the survey is on the experts' views of economic, institutional and social conditions. The survey covers 87 partner countries overall. The results of a pilot survey wave are now available, which also contains a separate question regarding China's involvement in the partner countries.

The respondents are generally sceptical of China's involvement. Only 13% consider the benefits of China's involvement to be higher than the drawbacks, whereas 32% see more disadvantages than advantages. Specifically, however, they definitely see the Chinese projects as having an impact. An absolute majority of respondents (51%) is of the view that the Chinese investments play a role for investment activity across the economy. Moreover, a relative majority of the survey participants believes that China does not influence the foreign and economic policies of the affected countries through its activities. The main critique relates to public finances. A relative majority of 40% responded that China's loans increase public debt levels.

Figure 7: Trend monitor questions on China's role

Number of relevant answers in per cent of all answers



Conclusion

The BRI is a gigantic programme that has the potential to address existing infrastructure needs in developing countries in particular and stimulate development in the participating countries. Whether this will actually be the case in the end cannot yet be ascertained, even if the initiative has already been running for six years. Some studies have identified impressive impacts but ultimately on the condition that not just the investments themselves have an impact but have mutually influencing follow-on effects. Even if BRI projects exist in many regions of the world, Asian regions are likely to benefit most.

The potentially positive effects of the BRI contrast with a number of criticisms, imponderables and challenges. This can be expected with projects of a magnitude such as the BRI. Nevertheless, criticisms and difficulties cannot be downplayed or even suppressed. The points raised in this context range from the questionable nature of project selection through governance problems and debt risks to environmental problems. Put simply, it is too early to tell whether the BRI will create regions characterised by vibrant trade and growth or by investment ruins and environmental degradation. Both are conceivable. ■

[1] Quotation from SPIEGEL ONLINE, our translation (https://www.spiegel.de/wirtschaft/soziales/seidenstrasse-angela-merkel-und-emmanuel-macron-treffen-xi-jinping-a-1259659.html, last retrieved on 19 June 2019)

[2] Strictly speaking, it is unclear what countries are involved in the BRI. According to an official website specifically run to advertise the BRI (https://eng.yidaiyilu.gov.cn), 137 countries are currently participating (as at 13 June 2019), although the impression arises that this includes every country with which merely a declaration of intent of some form has been signed.

[3] Figure 2 focuses on what we regard as the core regions of the BRI: Asia, Europe and Africa.

[4] See e.g. Council on Foreign Relations (2019), China's Massive Belt and Road Initiative (https://www.cfr.org/backgrounder/chinas-massive-belt-and-road-initiative, last retrieved on 19 June 2019) or The Guardian, What is China's Belt and Road Initiative? (https://www.theguardian.com/cities/ng-interactive/2018/jul/30/what-china-belt-road-initiative-silk-road-explainer, last accessed on 19 June 2019).

[5] According to Morgan Stanley (2018), the BRI is to reach a volume of USD 1.2 - 1.3 trillion in total. Morgan Stanley, Inside China's Plan to Create a Modern Silk Road (https://www.morganstanley.com/ideas/china-belt-and-road, last accessed on 19 June 2019).

[6] Zhai, F. (2018), China's belt and road initiative: A preliminary quantitative assessment, Journal of Asian Economics, Vol. 55, p. 84–92.

[7] Baniya, S., Rocha, N. and Ruta, M. (2019), Trade Effects of the New Silk Road. A Gravity Analysis, World Bank Group Policy Research Working Paper No. 8694.

[8] MERICS, the Mercator Institute for China Studies, provides an interactive overview of the most important BRI projects (www.merics.org).

[9] IMF (2018), Macroeconomic developments and prospects in low-income developing countries (file:///C:/Users/rehb/Downloads/pp021518-macroeconomic-developments-and-prospects-in-low-income-developing-countries%20(1).pdf, last accessed on 19 June 2019).

[10] Cf. Li, N. and Shvarts, E. (2017), The Belt and Road Initiative: WWF Recommendations and Spatial Analysis.WWF Briefing Paper (http://awsassets.panda.org/downloads/the_belt_and_road_initiative___wwf_recommendations_and_spatial_analysis___may_2017.pdf, last accessed on 19 June 2019).

[11] Ascensão, F. et al (2018), Environmental challenges for the Belt and Road Initiative (https://www.nature.com/articles/s41893-018-0059-3.pdf?origin=ppub, last accessed on 19 June 2019).