

Is China's Silk Road Belt a Path to Prosperity?

Shahid Yusuf*

Introduction

The Belt and Road Initiative (BRI) announced in 2013 by President Xi Jinping has been widely acclaimed. However, in some quarters the support has been tempered by worries as to China's underlying geostrategic ambitions, uncertainty regarding longerterm economic benefits, and a concern that BRI would burden participating countries with debt. Five years later with many billions of dollars committed, the initial euphoria has partially dissipated. Several participating countries are taking a closer look at the potential gains from BRI projects and weighing them against the financial, political, and social costs that are becoming more apparent.

While few Asian policy makers doubt that additions to transport, telecommunications, and energy infrastructures could enhance economic performance and social welfare, there is an increasing realization that not all projects generate a positive return. In order to service loans from Chinese institutions, infrastructure services must give rise to tradable activities that stimulate growth and enlarge export earnings. As BRI-related spending gathers momentum, a much closer scrutiny is warranted both of projects entering the pipeline and of projects that have been completed to determine how they can contribute to sustainable growth. The purpose of this paper is to identify the factors that will affect outcomes from BRI for China and participating countries and suggest how the overall benefits from infrastructure could be maximized. The paper focuses on the Central Asian countries that lie along the Silk Road Belt connecting China with the European Union to explore the spillovers from BRI and to illustrate how additional spending on infrastructure can be most advantageously woven into development strategies.

East Asia's Infrastructure Gap

Economists and policy makers have been worrying over Asia's infrastructure gap for almost two decades. A 2005 report cosponsored by the Asian Development Bank (ADB), the World Bank, and the Japan Bank for International Cooperation (2005) called for spending in East Asia alone of \$200 billion annually through 2010. According to a more recent ADB (2017) report, Asia should invest \$1.7 trillion in infrastructure each year through 2030 if growth is to remain on track. Power and transport could absorb 52 percent and 35 percent respectively (Chan 2018). This amount is more than twice the estimate that ADB announced in 2009 (\$750 billion) and also far in excess of the \$881 billion that Asian countries are currently investing. Presumably the numbers will

*Chief Economist, The Growth Dialogue, George Washington University School of Business. Send comments to shahid_yusuf@hotmail.com, copied to info@growthdialogue.org.

keep rising in reports to come. While these are ballpark figures and may be pitched a little too high, there can be little doubt that the demand for infrastructure services in many Asian countries exceeds supply. With incomes, urbanization, and trade all trending upwards, demand can only increase. Moreover, climate change calls for the building of more resilient infrastructures that will undoubtedly be more costly.

Enter BRI

With so much talk of infrastructure in the air, China's BRI is seen by many as adding to the pool of resources available to narrow the infrastructure gap in some areas—mainly transport and power generation. The scale of BRI-related spending proposed by the Chinese has contributed to the buzz about the initiative. A trillion dollars, much of it from Chinese sources, is a number that has been frequently aired—although according to some, the actual spending might exceed \$4 trillion. Even the lower figure would be far in excess of the Marshal Plan, which in current dollars amounted to about \$130 billion.

The intention to create a Land bridge through Central Asia has generated high expectations both in China and in the close to 70 participating countries. By helping to reduce the infrastructure shortfall in the economies along the envisaged routes,¹ the Silk Road Economic Belt could significantly reduce shipping time costs, enhance connectivity, and, over time, spur economic growth. Sea-borne freight from China that takes 30 or more days to reach a Northern European port could be sent by rail to destinations in Germany and beyond within 15 to 20 days. The cost per container would be much higher, but with time-sensitive goods, shortening the time to market confers competitive advantage.

Substantial sums have already been committed by the Chinese government, by policy banks such as the China Development Bank (CDB), by China's provincial entities, and by the state enterprise sector. Altogether, more than \$400 billion might have been committed, although how much is specifically for BRI projects launched since 2014 is unclear. Unlike the monies disbursed by the Marshal Plan, which took the form of grants and required recipients to undertake reforms, BRI projects are financed through loans, usually backed by sovereign guarantees (Makocki 2017), with few if any strings attached. The absence of explicit conditionality (including the awarding of contracts to Chinese firms that make use of Chinese labor and support for China in international fora) is attractive to borrowers. However, the obligation to service the loans could easily become burdensome if projects generate low returns-and not only for borrowers.

Starting with an initial shipment by Foxconn from Shenzhen to Europe in 2008, rail services have increased in frequency. A weekly service from Shanghai to Duisburg that commenced in 2009 was followed in 2011 by another weekly service from Chongqing transporting container loads of laptops, printers, and auto parts (Hillman 2018b). Since then the rail traffic along the Belt has boomed, with a number of routes being tested. By the end of last year, the Land bridge connected 35 cities in China with 34 European cities, with daily service between Chongqing and Duisburg. In 2017, there were 1,470 direct freight services between China and Europe and 730 going in the opposite direction. Along with increased frequency of rail shipments, there has been growth in the volume and variety of goods transported in heated or refrigerated wagons.

Growth in traffic can be traced to a number of factors. One is the emergence

of Eurasian value chains for electronic products, transport equipment, and others. High-value parts continue to be air shipped but there is an intermediate range of products that can be cost-effectively transported overland. The relocation of some manufacturing from China's coastal region to its central provinces has encouraged producers to seek alternative transport corridors to China's principal trading partner, the EU. Once the viability of the land route was established, costs have been whittled down by the rising number of scheduled rail services and the volume of shipments. Chinese subsidies ranging from \$1,000 to \$7,000 per container have cut costs even more. Trade facilitation by countries all along the Land bridge have brought down delays at border crossings, although there remains room for improvement as reflected in the low Logistics Performance rankings of countries along the Silk Belt.

Intermediaries such as freight forwarders and couriers have contributed to the efficiency of shipping services by arranging partial container loads and multi modal connections to destinations throughout Europe. This has vastly expanded the catchment area served by the Land bridge (Pomfret 2018).

There is a body of research that broadly endorses a positive relationship between transport infrastructure and growth. Improvements in transport can enable regions to tap global growth opportunities. For landlocked countries, transport takes on an even greater importance. However, such investment has not always delivered, as is evident from the experience of southern Italy, other parts of southern Europe, and China. As the development of the Land bridge proceeds, it is clearly vital for both China and its Asian partners to carefully identify the benefits over the short term and the long haul and also weigh the costs.

BRI through China's Lens

From China's perspective, BRI is attractive on several counts. It enables China to utilize surplus capacity in its construction sector, including industries that produce construction materials, transport, telecommunications, and power-generating equipment. By one count, 89 percent of all Chinese-funded contracts have gone to Chinese companies (Hillman 2008a). This production and increased exports to Central Asia can help sustain growth at levels targeted by the Chinese government. Moreover, some of these investments will generate demand for services, parts, and upgrades far into the future.

BRI enables China to diversify and secure its supplies of petroleum products. Newly built transport infrastructure shaves the time required to ship goods to markets in the Middle East and Europe, which enhances the competitiveness of China's exports. It could also facilitate the industrialization of China's Western Provinces and multiply the number of better-paid jobs for the potentially restive Uighur local population.²

By tightening connectivity and trading links with countries participating in the initiative, China builds reputational capital, brands its investments throughout the Eurasian region, and promotes the internationalization of the renminbi. Down the road, BRI can be a valuable means of accumulating 'soft power' by way of cultural and educational exchanges³ and multimedia cooperation. BRI in conjunction with China's many bilateral and multilateral engagements—including the creation of two multilateral banks—can further raise China's profile on the global stage.

There are longer-term strategic gains to be derived from BRI as well. The linkages, alliances, and transport corridors created by BRI could erase China's sense of encirclement and enlarge its sphere of influence. A string of port facilities⁴ leased by Chinese companies will permit the Chinese navy to maintain a presence in the Indian Ocean, safeguard the passage of maritime traffic bound for China,⁵ and extend its reach to East Africa and the Middle East.

These are some of the benefits that China could realize from BRI. But some downsides are becoming apparent as projects proceed in several countries. These include regulatory bottlenecks, rising costs, problems of land acquisition, the slow disbursement of funds, issues with project execution, uneven observance of environmental safeguards, workforce issues related to wages and work environment, a change in the political receptivity to Chinese investment (Voices on Central Asia 2018), and local resistance to Chinese presence (Economic Times 2018).⁶ Rising external indebtedness is already a worry for some Asian countries. The Lao People's Democratic Republic, Sri Lanka, Pakistan,⁷ Myanmar, the Maldives, and even Malaysia could struggle to service their loans from Chinese institutions a few years hence.8 In other words, the up-front cost of BRI is large and the long-term payoff is uncertain, both economic and political.9 From China's perspective, as Doig (2018, p. 59) observes, "Strategic projects aren't necessarily designed to turn a profit—they may be written off as loss leaders in service of a longer-term goal. For China, these losses are baked into the budget. But for the poorer countries partnering with China to build them, the debt amassed when big dreams become white elephants can be ruinous."

Through its widening involvement in so many countries, China might be risking overreach and underestimating the associated economic and political costs (Chellaney 2017; Chang 2018). It is a middle-income country with an aging workforce that is transitioning towards a slower-growing,

services-centered economy. Although high domestic savings plus trade and current account surpluses provide China with the resources to finance its overseas activities, there are a few worrisome clouds on the horizon. Rapid growth of credit fueled in part by shadow banks, a high level of domestic indebtedness (Lan 2017), and an overheated housing market are contributing to the fragility of the banking sector (Bloomberg News 2017). Growth of global trade that partially underpins China's economic performance has slowed and could slow further were trade barriers to rise. Under these circumstances, an accumulation of nonperforming external assets could tip the financial system into crisis (Chan 2018). Chinese foreign investment and deepening overseas presence has political and social implications as well. It can give rise to pressures and expectations that China's firms and government will have to cope with. The frictions that can arise are already apparent from the disputes with regard to trade, FDI, acquisition of agricultural land in Central Asia, real estate, and labor practices.

How BRI Could Impact Central Asia: External Factors

Ultimately the success of BRI will depend upon the gains accruing to participating countries. Infrastructure development that pulls in domestic and foreign investment could lead to higher and sustainable levels of growth plus increased export earnings. If so, China's loans to BRI participants will be repaid and its reputation will soar. If returns are meager and many projects are delayed or prove to be costly failures, all parties could suffer both economic losses and high political costs. The outcome will depend upon external developments and others that are internal to Central Asian economies and to Pakistan, which is a focus of a large volume of BRI-linked investment.¹⁰

One external development of consequence will be the volume of merchandise trade between Central and East Asia and the EU. This will hinge upon the growth of European demand for the sort of goods that can be cost effectively shipped by rail. The rapid aging of populations in European countries and stagnating factor productivity suspends a question over future rates of GDP growth, and of material consumption that could support rising imports from Asia.

Second, some of the evidence coming to light suggests that global value chains (GVCs) are likely to shrink as both China and the European countries localize the production of some intermediate manufactures aided by advances in factory automation. China's 2025 Plan envisages the increasing localization of a range of hi-tech and medium-tech products, which will reduce its imports. Quite possibly this development will be paralleled by similar import-substituting measures in other countries. Under a worst-case scenario, this and other international tensions could very well lead to a reversal of globalization with East-West trade stagnating or even entering a decline. Other scenarios based on recent trends project a continuing rapid increase in freight volumes.

A third development is the likely transformation of automobility once autonomous vehicles come into widespread use and car ownership becomes less desirable or necessary. The era of autonomous, largely electric vehicles and the commodification of the auto sector could result in the entry of new producers and greater localization of auto production. Electric vehicles use a third as many parts as do cars that rely on combustion engines. Many of these parts, the storage systems, and the software can all be produced locally, in western countries or China, and would depend less upon transcontinental value chains.

A fourth development that could affect the traffic of goods across the Land bridge-albeit modestly-is the opening of the Northern Arctic Route. Year-round traffic along this route will be feasible once the polar ice thins and melts, more icebreakers are put to work, and ships certified for the Northern passage are brought into service. This route cuts the time required for a ship sailing from Shanghai to Rotterdam to less than 10 days. The shallow bathymetry of this route and few ports along the way means that the volume of freight traffic is likely to be limited, but it will emerge as a competitor to the Land bridge (Maritime Holland 2018).

Fifth, the spread of digital technology is impinging on international trade as well. More business is being conducted online and digital platforms enable small and medium enterprises (SMEs) to offer a widening array of products and services to customers abroad.¹¹ These include the digital transfer of books, games, magazines, and music, as well as the marketing of other products. Numerous services are also offered online: payment, financial, IT, educational, medical, and engineering services. Advances in data collection and analysis are allowing services providers to add more value to tradable manufactures. For instance, post-sale predictive monitoring, troubleshooting, and software patches that enhance efficiency can now be delivered online.

Finally, digitization is improving the logistics and resilience of GVCs (Meltzer 2017). Cross-border digital trade¹² has risen by orders of magnitude since 2010. McKinsey estimates that about 12 percent of global trade in goods is conducted via e-commerce (Manyika et al. 2016). Assuming that restrictions on Internet access and cross-border data flows can be contained,¹³ digitization should boost the trade of both goods and services and facilitate the entry of firms.

In short, external developments could have both positive and negative effects on the flow of trade along the Land bridge and the nature of this trade.

BRI Seen from the Inside

Factors internal to Central (and South) Asian countries, along with external developments described above, will determine the benefits from BRI investments. Experience has repeatedly demonstrated that the bankability of transport and energy projects is often difficult to assess ex ante, which is why attracting private investment in the absence of government guarantees and subsidies is so difficult. Forecasting demand and revenue streams far into the future is tricky, and past experience is not a reliable guide especially when there is so much technological change in the offing. During the construction phase projects can lift growth, but this can fade soon after. Research shows that the average infrastructure project is unlikely to deliver a positive risk-adjusted return (Ansar et al. 2016).

China's own experience is instructive. Counties and cities along historical trade routes have higher levels of GDP. Massive investment in surface transport starting in the 1990s has helped to integrate the domestic economy, decentralize manufacturing,¹⁴ and reduce the cost of transport and logistics from over 20 percent of GDP to under 15 percent. But the impact of additions to transport infrastructure on GDP has been small and hard to disentangle from other factors (Banerjee, Duflo, and Qian 2010).

In the Chinese case, transport supported the manufacturing economy and exports. But few if any countries are likely to grow their manufacturing industries the way that China did. It would seem from the several recent reports and academic publications that the heyday of manufacturing has passed. While it can contribute to economic performance, manufacturing will play a modest role as a share of GDP and a source of growth. At its peak in 1980, manufacturing accounted for close to 40 percent of China's GDP. It is currently 29 percent and gradually declining. The share of manufacturing in Kazakhstan is 12 percent, 16 percent in Kyrgyzstan, and 13 percent in Pakistan and the Russian Federation.¹⁵ The downward trend is global. Few countries and in particular mineral-rich countries are likely to imitate the export-led performance of East Asian economies and ship large volumes of manufactures to their neighbors and advanced countries.

Extracting Value from BRI

In light of these trends four questions come to mind. First, how might the Land bridge created by BRI linking China with Europe and the Middle East benefit Central Asian countries? Second what sort of spillover effects could one expect from the new rail, road, and pipeline infrastructure that connects Central Asia with many cities in Europe and China? Third, what sort of activities could be clustered at hubs along a transport corridor? And fourth, how might policy actions facilitate the emergence and growth of firms producing tradables that would exploit the opportunities created by the Land bridge? These questions are key because the real payoff from BRI would be the emergence of new tradable activities that add substantial value and give rise to export revenue streams.

There is no doubt that the faster movement of goods and a decline in costs resulting from improved rail infrastructure would be a plus when supplemented by facilitation at border crossings that cuts delays.¹⁶ This is already happening in Kazakhstan, which moved up the Logistics Performance Index (LPI) from 88th position in 2013 to 77th in 2016.¹⁷ Parallel improvements in countries along the BRI corridor would further reduce shipping delays.

The extent to which BRI-linked investment expedites shipments from Central Asia is unclear. However, a payoff becomes more likely as the network connections in Europe, the China-Pakistan Economic Corridor (CPEC), the Middle East, and eventually Southeast Asia multiply (Pomfret 2018). About a quarter of world trade is between countries sharing a land border and one half of all trade is between countries within a 3,000 km radius (Li and Schmerer 2017). The one catch that raises costs is the imbalance in trade between China and European countries, which results in a backhaul problem as one half of the containers return empty. Chinese subsidies of up to \$7,000 per container offset the additional cost to the shippers. This problem will not recede soon and it undermines the competitiveness of rail transport. Once the Northern Arctic route is available for shipping for most or all of the year, the advantages of using the rail corridor will diminish for Chinese firms along the coastal belt.

Logistics Hubs with Industrial Clusters

For Central Asian economies and Pakistan, larger gains would accrue from spillovers that lead to cluster formation at hubs. For example, in the EU, every job in the rail transport sector gives rise to more than one job in other activities such as manufacturing, finance, food, wholesale, and construction.

Successful logistics clusters can play an important role in local economic development. Examples are the cluster in Zaragoza, Spain and the cluster that has grown around FedEx's hub in Memphis, Tennessee (Sheffi 2012). Thriving clusters have emerged in these locations for a variety of reason, including a central geographic location. Zaragoza is equidistant from Spain's four largest cities and close to Spain's Atlantic and Mediterranean ports. Memphis likewise is strategically located in close proximity to major population centers along the east coast of the United States. Moreover, both Zaragoza and Memphis enjoy good weather year-round.

Both hubs stand at the intersection of major transport routes that confer the advantages of multimodal options for shippers. Thanks to FedEx (and UPS), Memphis Airport now handles more cargo than any other U.S. airport. Memphis is also a rail, truck, and barge hub, the latter because of its flood resistant central location. Zaragoza is likewise well served by major highways and rail lines that connect with pan-European networks.

Neither city would have become a hub without the initiatives taken by local authorities to work with logistics companies to build physical infrastructure, make available land for warehouses and businesses, and offer incentives for major anchor firms to locate near the airport. Zaragoza was able to attract the garment giant Zara and Memphis has pulled in companies such as Flextronics. Collaboration among firms that can gravitate to a logistics hub has the making of a virtuous spiral because so many activities are common to many firms. Such activities go beyond the moving of boxes and include the picking, sorting, and loading of goods, as well as transporting, tracking, unloading, and delivery.

Manufacturing and trade are becoming more services intensive. As a result, logistics hubs have begun attracting many value-adding activities beyond freight forwarding, courier, and related services. For example, hubs can stage the assembly, repair, or refurbishment of equipment. Retailers can get their products tagged, packed, and prepared for display at the hub. Garments manufacturers can undertake post-production operations following bulk delivery, including kitting, labeling, and packaging. Food products can receive specialized packaging and labeling at hubs; concentrating such operations in a central location can be a draw for firms that manufacture packaging material.

Once a logistics cluster takes off, the impact on the local economy can be large. For example, the airport contributes \$24 billion or more to the Memphis economy and directly or indirectly is responsible for a quarter of the jobs.¹⁸ And as a cluster grows, the variety of jobs increases and there are greater opportunities for career mobility.

Harnessing BRI's Potential

How might Central Asian countries use BRI to diversify their economies and evade the resource curse? Consider the example of Kazakhstan, the largest country in the region in terms of land area. As noted above, the gains could arise from the emergence and growth of value-adding tradable activities, whether at logistics hubs or elsewhere in the country. The Khorgos Dry Port¹⁹ on Kazakhstan's border with China (close to the Khorgas in China) and its adjacent industrial park is a start at creating a logistics cluster. Rapidly increasing rail traffic through Altynkol station is encouraging as is the prospect of greater truck traffic. But currently much of the activity at Khorgos involves the transfer of containers between Chinese and Kazakh railcars.²⁰ These need to be complemented by higher-value services and more diverse exports. When Kazakhstan begins exporting a variety of non-resource-based products, it will maximize the time-saving gains from the Land bridge.

The challenge for Kazakhstan and other Central and South Asian countries is to exploit the opportunities presented by BRI to diversify into higher-value tradable products and services. Currently, the freight containers heading westwards carry electronic equipment, auto parts, garments, and other consumer items largely from China. Some fraction of these are destined for markets in Central Asia and Iran. Looking ahead, it is the traffic in high-value, time-sensitive goods for European markets that will determine the growth and profitability of trade along the Land bridge.

Actions taken to maximize the spillovers from BRI investments will be critical. Transport infrastructure can crowd in new activities but generally this requires complementary measures by governments that make it easier for firms to enter and existing firms to grow.

The Land bridge is creating opportunities for Central Asian economies to diversify their tradable activities and lessen their reliance on the export of resource-based products. Exploiting these opportunities calls for a coordinated, strategic, and hardnosed approach to developing transport and other infrastructures. This should factor in the likely future trends in urbanization, in particular with reference to the major cities where most of the economic activity will be concentrated. A clear division of responsibility between the public and private sectors that enlarges private participation can stimulate entrepreneurship and mobilize capital as well as expertise.

The state can improve planning, governance, project execution, and delivery of infrastructure services by making full use of new tools to gather and analyze data. Digital technology can strengthen government's capacity to extract the maximum domestic value from opportunities presented by BRI. It can also minimize the likelihood that resources will be wasted by building infrastructure in the wrong places—e.g. in areas that will be depopulating for example.

SMEs as Growth Enablers

The real measure of success at exploiting investment in transport and logistics will be the entry and growth of firms producing tradables, be they goods or services. In this context, the SME sector has rightly attracted attention. It has potential but development has lagged, particularly of SMEs producing for export. For example, in both Russia and Kazakhstan, SMEs account for about a fifth of GDP with a focus on retail trade, services, and agriculture-mostly low-value-adding, low-risk activities (Ministry of Economic Development of the Russian Federation 2015). There appear to be few so-called gazelle firms that are fast growing, have entered the international market, are innovative, and generate net employment.

Because SMEs account for the majority of firms and can serve as the drivers of growth as infrastructure bottlenecks are eased, it is vital to enhance their dynamism. The slow growth of Southern Europe²¹ is in part due to the low and stagnant productivity of SMEs.²² Encouraging new entry and raising productivity and innovativeness of SMEs should be the priority. Improved infrastructure services including broadband can boost productivity. Digital technologies and access to cloud computing has already lowered barriers to entry and enabled more start-up activity with the minimum of capital investment. Online retailing and the collection of data from countries along the Belt will also confer advantages.

Greater access to financing is another key enabler. Financing receives a lot of attention in reports by multilateral agencies and others. It is a problem that is common to many if not all countries almost irrespective of the state of the business environment. Small firms in the U.S. complain of access to financing as they do in European countries. Most SMEs rely on own resources and those of family and friends. The spread of Fintech suitably incentivized (and regulated) and the ability of lenders to assess risk using Big Data will ease constraints, as it is doing in China.

SME competitiveness and the growth of firms into regional or global players is also hampered by three other factors: management, skills, and innovation capacity. A great deal of research suggests that firm-level productivity is closely linked with managerial capability. A McKinsey study of firms in Europe, India, and China concludes that a single-point improvement in management is equivalent to a 25 percent increase in a firm's workforce or a 65 percent increase in invested capital (Bloom et al. 2005). Management quality also explains 25 percent of the differences in firm-level productivity between the United States and European countries (Bloom 2014). Increasing managerial professionalism would seem to be one way of making SMEs more competitive and better prepared to pursue opportunities abroad.²³

Managerial professionalism needs to go hand-in-hand with the upgrading of in-house skills and the use of specialists drawn from consulting firms and universities to efficiently assimilate technology. Most SMEs do little or no in-house training. The wages, benefits, and career prospects they offer frequently do not suffice to attract skilled workers. As a consequence, productivity suffers; so also does the ability to utilize superior production methods and digital technologies. Subsidies and publicly funded vocational training programs offer partial solutions. And of course, professional management can enable SMEs to escape low-level traps.

Deliberate efforts to cultivate innovation may be needed in order to create a subset of SMEs that are export oriented, and that could grow into gazelles or even unicorns similar to the German Mittelstand. The essential ingredients of a system that can nurture an innovation culture are reasonably well understood. These include an internationally connected, large urban center with a deep labor market, research universities, supportive local governments providing good-quality public services, the presence of an industrial base that can serve as a foundation for the emergence of other activities, a financial network that can be a source of risk capital, an open and diverse social environment, and the presence of one or more anchor firms, domestic or foreign. The list is long, and not all of these conditions need to be satisfied simultaneously. Even when most of them are met, it is not inevitable that an innovation spiral will ensue. Yet looking ahead, Kazakhstan's long-term growth performance will rest on the innovativeness of its firms, the ones exporting digital products and services via the Internet and others exporting goods both East and West along the Silk Road Belt.

Concluding Observations

The correlation between transport infrastructure and economic growth, at least during the construction phase, raises expectations for growth from the Silk Route Land bridge. By connecting a host of cities in Europe and Asia, the Belt promises to support the growth of trade and the development of urban hubs along the way. These hubs could become the focus of clusters producing exportable goods and services. How much development takes place will be a determined by external factors that will influence the demand for exports from Central, South, and East Asia. Although the growth rate of trade projected by several commentators is optimistic, some of the trends and the likely evolution of GVCs point in the other direction. But I could be wrong.

Irrespective of whether export prospects are bright or only average, the Land bridge will deliver the desired growth outcomes only if projects are carefully selected and complementary measures are taken that stimulate private investment in productive activities. One important source of growth will be a subset of trade-oriented SMEs that are well managed, relatively skill intensive, and innovative. There is no foolproof policy formula to create dynamic SMEs, some of which can mature into gazelle firms. Fortunately, international experience has identified a number of policy directions. With the help of transport infrastructure, these policies could enable countries along the Silk Road Belt to diversify industry and sustain a higher growth rate.

Whether such traffic does indeed grow will depend on developments that could transform key manufacturing industries such as autos, electronics, medical devices and implants, garments, and aerospace. Automation, 3D printing, and the industrial Internet of things could lead to much more localization of production in European countries, an emphasis on just-in-time delivery, and a sharp decline in inventories as a result of advances in additive manufacturing. Competition from the Northern route and air transport could also intensify.

Longer-range thinking is needed about which industries to incentivize. The best choices would help fill the containers traveling in either direction along the transport corridors created by BRI and provide supporting services. When it was announced five years ago, BRI promised a welcome boost to growth and trade. But the enthusiasm for globalization is beginning to ebb and new technologies are transforming both production and distribution. It is therefore desirable to take a harder look at BRI projects to ensure that they generate a high-enough return.

References

- Ansar, Atif, Bent Flyvbjerg, Alexander Budzier, and Daniel Lunn. 2016. "Does Infrastructure Investment Lead to Economic Growth or Economic Fragility? Evidence from China." Oxford Review of Economic Policy 32(3): 360–390. https://arxiv.org/ftp/arxiv/papers/ 1609/1609.00415.pdf.
- Asian Development Bank (ADB). 2017. *Meeting Asia's Infrastructure Needs*. Manila: ADB. Accessed July 6, 2018. https://www.adb.org/ publications/asia-infrastructure-needs.
- Asian Development Bank (ADB), World Bank, and Japan Bank for International Cooperation (JICA). 2005. Connecting East Asia: A New Framework for Infrastructure. Launch edition, March 2005. Accessed July 6, 2018. http://siteresources. worldbank.org/INTEASTASIAPACIFIC/ Resources/Connecting-East-Asia.pdf.
- Banerjee, Abhijit, Esther Duflo, and Nancy Qian. 2010. "Transport Infrastructure and Economic Growth in China." Policy brief 1006, International Growth Center. Accessed July 9, 2018. https://www.theigc.org/wpcontent/uploads/2015/07/Banerjee-Et-Al-2010-Policy-Brief.pdf.
- Baum-Snow, Nathaniel, J. Vernon Henderson, Matthew Turner, Loren Brandt, and Qinghua Zhang. 2015. "Transport Infrastructure, Urban Growth and Market Access in China." ERSA conference papers ersa15p1177, European Regional Science Association. Accessed July 9, 2018. https://ideas.repec. org/p/wiw/wiwrsa/ersa15p1177.html.
- Baum-Snow, Nathaniel, and Matthew A. Turner. 2017. "Transportation Infrastructure and the Decentralization of Chinese Cities." Unpublished paper. Accessed July 9, 2018. http://www.brown.edu/Departments/ Economics/Faculty/Matthew_Turner/papers/ unpublished/BaumSnow_Turner_unp_2017.pdf.
- Bloom, Nicholas. 2014. "Interview: Nicholas Bloom." Econ Focus, Second Quarter. Accessed July 9, 2018. https://www.richmondfed.org/~/ media/richmondfedorg/publications/ research/econ_focus/2014/q2/pdf/interview.pdf.
- Bloom, Nick, Stephen Dorgan, John Dowdy, and John Van Reenen. 2007. "Management Practice & Productivity: Why They Matter." *Management Matters*, July. McKinsey and Company and Centre for Economic Performance. Accessed July 9, 2018. http://

worldmanagementsurvey.org/ wp-content/ images/2010/07/ Management-Practice-and-Productivity-Why-They-Matter-Bloom-Dorgan-Dowdy-and-Van-Reenen.pdf.

- Bloomberg News. 2017. "How China's Going to Try to Control Its Massive Housing Bubble." November 27. Accessed July 8, 2018. https://www.bloomberg.com/news/ articles/2018-07-05/trump-s-trade-warthreat-to-turn-reality-as-china-tariffs-begin.
- Bokhari, Farhan, and Kiran Stacey. 2018. "Pakistan Appeals for More China Lending." Financial Times, July 6. Accessed July 12, 2018. https://www.ft.com/content/1256ceaa-802c-11e8-bc55-50daf11b720d.
- Boston Consulting Group (BCG). 2018. "Digital Transformation in the Logistics Industry." Web page, accessed July 8, 2018. https://www. bcg.com/en-us/industries/transportationtravel-tourism/ center-digital-transportation/logistics.aspx.
- Bugamelli, Matteo, Francesca Lotti, Monica Amici, Emanuela Ciapanna, Fabrizio Colonna, Francesco D'Amuri, Silvia Giacomelli, Andrea Linarello, Francesco Manaresi, Giuliana Palumbo, Filippo Scoccianti, and Enrico Sette. 2018. "Productivity Growth in Italy: A Tale of a Slow-Motion Change." Questioni di Economia e Finanza (Occasional Papers) 422, Bank of Italy, Economic Research and International Relations Area. Accessed July 9, 2018. https://www. bancaditalia.it/pubblicazioni/qef/2018-0422/ QEF_422_18.pdf.
- Chan, Sarah. 2018. "The Belt and Road Initiative: Implications for China and East Asian Economies." The Copenhagen Journal of Asian Studies [S.l.] 35(2): 52–78. Accessed on July 6, 2018. https://rauli. cbs.dk/index.php/cjas/ article/view/5446.
- Chang, Gordon G. 2018. "The Real China Challenge: Imperial Overstretch." The National Interest, February 24. Accessed July 8, 2018. http://nationalinterest.org/ feature/the-real-china-challenge-imperialoverstretch-24635.
- Chellaney, Brahma. 2017. "China's Imperial Overreach." Project Syndicate, May 24. Accessed July 8, 2018. https://www.projectsyndicate.org/commentary/one-belt-oneroad-china-imperialism-by-brahmachellaney-2017-05?barrier=accesspaylog.

- ChinaFile. 2014. "The Debate Over Confucius Institutes." A ChinaFile Conversation. Accessed July 8, 2018. http://www.chinafile.com/ conversation/debate-over-confucius-institutes.
- Doig, Will. 2018. *High-Speed Chinese Expansion and the Future of Southeast Asia*. New York. Columbia Global Reports.
- Economic Times. 2018. "China's BRI Initiative Hits Roadblock in 7 Countries: Report." April 15. Accessed July 8, 2018. https://economictimes. indiatimes.com/news/international/worldnews/chinas-bri-initiative-hits-roadblock-in-7-countries-report/articleshow/63771550.cms.
- Giordano, Raffaela, Sergi Lanau, Pietro Tommasino, and Petia Topalova. 2015. "Is the Public Sector Holding Back Italy's Productivity?" Vox, August 4. Accessed July 9, 2018. https://voxeu.org/article/public-sectorinefficiency-and-firm-productivity-italy.
- Global Construction Review (GCR). 2016. "China Developing 400km/h Bullet Train That Can Run on Any Gauge Track." CGR staff, June 9. Accessed July 9, 2018. http://www. globalconstructionreview. com/news/chinadevel10ping-400kmh-bu5llet-tra4in-can-run/.
- Hillman, Jonathan E. 2018a. "China's Belt and Road Initiative: Five Years Later." Report, January 25. Center for Strategic and International Studies (CSIS). Accessed July 6, 2018. https://www.csis.org/ analysis/chinasbelt-and-road-initiative-five-years-later-0.
- Hillman, Jonathan E. 2018b. "The Rise of China-Europe Railways." Report, March 6. Center for Strategic and International Studies (CSIS). Accessed July 6, 2018. https://www.csis.org/ analysis/rise-china-europe-railways.
- Hurst, Erik, and Benjamin Wild Pugsley. 2011. "What Do Small Businesses Do?" NBER Working Paper No. 17041. National Bureau of Economic Research, Cambridge, MA. Accessed July 9, 2018. http://www.nber.org/ papers/w17041.
- Japan Times. 2018. "China's \$7.5 billion Myanmar Port 'Crazy,' Suu Kyi Adviser Says." Japan Times, May 25. Accessed July 8, 2018. https:// www.japantimes.co.jp/news/2018/05/25/asiapacific/chinas-7-5-billion-myanmar-portcrazy-suu-kyi-adviser-says/#.W0JiV7gnauB.
- Kaplan, Robert. 2017. "Grand Strategy and the Return of Marco Polo's World." CNAS Stories, May. Accessed July 12, 2018. http://stories. cnas.org/the-return-of-marco-polos-worldand-the-u-s-military-response.

- Kohli, Harinder. 2017. "Looking at China's Belt and Road Initiative from the Central Asian Perspective." *Global Journal of Emerging Market Economies* 9(1-3): 3–11.
- Lan, Peiyuan. 2017. "Scary Statistic: China's Debt to GDP Ratio Reached 257 Percent in 2017." The National Interest, October 20. Accessed July 8, 2018. http://nationalinterest.org/blog/ the-buzz/scary-statistic- chinas-debt-gdpratio-reached-257-percent-22824.
- Lewis, Chris. 2016. "Top 10 U.S. Cargo Airports." Inbound Logistics, November 14. Accessed July 9, 2018. http://www.inboundlogistics. com/cms/article/top-10-us-cargo-airports/.
- Makocki, Michal. 2017. "China's Road: into Eastern Europe." *Briefs*, Issue 4 (February). European Union Institute for Security Studies (EUISS). Accessed on July 6, 2018. https://www.iss. europa.eu/sites/ default/files/EUISSFiles/ Brief 4_China_Eastern_Europe_0.pdf.
- Manning, Robert A., and Bharath Gopalaswamy. 2018. "Is Abdulla Yameen Handing Over the Maldives to China?" Foreign Policy, March 21. Accessed July 8, 2018. https://foreignpolicy. com/ 2018/03/21/is-abdulla-yameen-handingover-the-maldives-to-china/.
- Manyika, James, Susan Lund, Jacques Bughin, Jonathan Woetzel, Kalin Stamenov, and Dhruv Dhingra. 2016. "Digital Globalization: The New Era of Global Flows." McKinsey Global Institute. Accessed July 8, 2018. https:// www.mckinsey.com/business-functions/ digital-mckinsey/our-insights/digitalglobalization-the-new-era-of-global-flows.
- Maritime Holland. 2018. "No Longer Sailing South? Alternative Trading Routes Between East and West." Blog post, March 6. Accessed July 8, 2018. http://news.maritimeholland.com/2018/03/06/ no-longer-sailing-south-alternative-tradingroutes-between-east-and-west/.
- Meltzer, Joshua P. 2017. Written statement presented before the United States International Trade Commission investigation on Global Digital Trade 1: Market Opportunities and Key Foreign Trade Restrictions, April 12. Accessed July 8, 2018. https://www.brookings.edu/testimonies/ global-digital-trade-1-market-opportunitiesand-key-foreign-trade-restrictions/.
- Ming, Cheang, and Huileng Tan. 2018. "The Shocking Malaysian Election Result Could Hit Chinese Investments." CNBC, May 10. Accessed July 8, 2018. https://www.cnbc.com/2018/05/10/ malaysia-election-may-hit-china-belt-androad-infrastructure-projects.html.

- Ministry of Economic Development of the Russian Federation. 2015. "The Government Decided to Double the SMEs Share in Russia by 2030." Federal Web Portal for SMEs, July http://en.smb.gov.ru/sme/ news/292.html 31. Accessed July 9, 2018.
- Nicolae, P., Plescan Costel, I. Szentes, M. Bolânu, C. Sima, D. Mitu, and G. Dumitru. 2015. "New Technologies of Gauge Variation for Wheelset Vehicles Crossing." *Bulletin of the Transilvania University of Brasov* 8(57): 245.
- Pearcey, Laurie. 2013. "Xi Jinping's New Silk Road: Chinese Foreign Policy, Energy Security and Ideology." The Conversation, September 16. Accessed July 8, 2018. https:// theconversation.com/ xi-jinpings-new-silkroad-chinese-foreign-policy-energy-securityand-ideology-17994.
- Pellegrino, Bruno, and Luigi Zingales. 2017. "Diagnosing the Italian Disease." NBER Working Paper No. 23964. National Bureau of Economic Research, Cambridge, MA. Accessed July 9, 2018. http://faculty. chicagobooth.edu/luigi.zingales/papers/ research/Diagnosing.pdf.
- Pomfret, Richard. 2018. "The Eurasian Landbridge: Linking Regional Value Chains." Vox, May 1. https://voxeu.org/article/eurasianlandbridge-linking-regional-value-chains.
- Li, Yuan, and Hans-Jörg Schmerer. 2017. "Trade and the New Silk Road: Opportunities, Challenges, and Solutions." *Journal of Chinese Economic and Business Studies* 15: 205–213. 10.1080/14765284.2017. 1347473.

Sheffi, Yossi. Logistics Clusters: Delivering Value and Driving Growth. Cambridge, MA: MIT Press.

- Shukry, Anisah, and Yudith Ho. 2018. "Malaysia's Mahathir Pledges to Review China Investment if Re-Elected." Bloomberg, April 8. Accessed July 8, 2018. https://www.bloomberg. com/news/articles/2018-04-08/mahathirpledges-to-review-china-investment-aftermalaysia-vote.
- Silk Road Briefing. 2017. "Moody's Rates Belt and Road Initiative "Overall Credit Positive" but Warns China Of Risks." September 21. Accessed July 8, 2018. https://www. silkroadbriefing.com/ news/2017/09/21/ moodys-rates-belt-road-initiative-overallcredit-positive-warns-china-risks/.
- O'Dowd, Emily. 2016. "Automatic Gauge Change Technology Enables New Moscow -Berlin Line." Smartrail World, November 14. Accessed July 9, 2018. https://www. smartrailworld.com/new-moscow-to-berlintrain-line.
- Voices on Central Asia. 2018. "China's Belt and Road Initiative and its Impact in Central Asia." January 19. Accessed July 8, 2018. http://voicesoncentralasia.org/chinas-beltand-road-initiative-and-its-impact-incentral-asia/.
- Wang, Brian. 2016. "China Developing Faster High Speed Trains with Adjustable Wheels for Different Gauges from China to Europe." NextBigFuture, June 6. Accessed July 9, 2018. https://www.nextbigfuture.com/2016/06/ china-developing-faster-high-speed.html.

Endnotes

1. Through Central Asia and via Mongolia and Russia (see Kohli 2018).

2. Robert Kaplan (2017) maintains that by cultivating closer ties with neighbors with Turkic populations, China minimizes the risk that these countries could tacitly support Uighur insurgency were it to arise.

3. China's Confucius Institutes are proliferating and the government has greatly expanded scholarship programs for Asian and African students. On the debate regarding Confucius Institutes in the United States, see ChinaFile (2014).

4. These include Hambantota in Sri Lanka, Gwadar in Pakistan, Djibouti, Kyauk Pyu in Myanmar (Rakhine state), and possibly one in the Maldives. (See Japan Times 2018; Manning and Gopalaswamy 2018).

5. The traffic in energy and raw material is the focus of China's interest as its dependence on Middle Eastern and African sources increases. Energy security is a constant in China's overseas diplomacy (Pearcy 2013).

6. More recently, the newly installed Malaysian government of Mahathir Mohamed has proposed to cancel a number of expensive transport projects and review other Chinese investments (Ming and Tan 2018; Shukry and Ho. 2018).

7. Faced with a foreign currency crisis in mid-2018, Pakistan is reluctant to turn to the IMF because it would need to divulge the terms of its

JULY 2018 NUMBER 16

CPEC contracts and the outlay involved — expenditure (and terms) that it would have difficulty justifying given the uncertain benefits and the state of the country's finances (Bokhari and Stacey 2018, p. 4).

8. Morris (2018); see also Silk Road Briefing (2017), which conveys warnings for China about significant risks in BRI-participating countries.

9. Central Asian countries also have to worry about the "resource curse"—that is, increasing dependence on resource-based exports—as well as dependence on Chinese capital.

10. The China Pakistan Economic Corridor (CPEC) calls for investment of over \$60 billion in transport and energy infrastructure.

11. Manyika et al. (2016) assert that in 2016, flows of data and information generated more economic value than the global goods trade.

12. Lund and Manyika (2016) explore how digital trade is both facilitating and transforming globalization.

13. The demand for data localization is growing as countries become increasingly wary of data breaches and how data transfer could affect privacy, law enforcement and security.

14. See Baum-Snow and Turner (2017) and Baum-Snow et al. (2015).

15. https://data.worldbank.org/indicator/ NV.IND.MANF.ZS?locations=CN-KZ-RU-UZ 16. Relative to air shipping, intercontinental railways are 40 percent cheaper.

17. https://lpi.worldbank.org/international/ global. However, the ranking for the Russian Federation has slipped from 90 in 2014 to 99 in 2016.

18. http://www.inboundlogistics.com/cms/ article/top-10-us-cargo-airports/

19. http://multimedia.scmp.com/news/china/ article/One-Belt-One-Road/khorgos.html

20. The increasing use of automatic gauge changing technology (first introduced in 1969) will mean that the transfer of containers will no longer be needed from standard gauge (1,435 mm) Chinese wagons to wide gauge (1,520 mm) Kazakh/Russian wagons (O'Dowd 2016; Nicolae et al. 2015). China is incorporating gaugechanging technology into its high-speed trains, including new models that can reach speeds of 400 kph (GCR 2016; Wang 2016.)

21. Pellegrino and Zingales (2017) blame Italy's low productivity on the slow pace of technology assimilation by SMEs, especially of ICT. See also Bugamelli et al. (2018).

22. The failings of the public sector might be another cause (Giardano et al. 2015).

23. Professional management could also lead to the growth of small businesses into larger firms (Hurst and Pugsley 2011).

The views expressed in Policy Briefs are those of the authors and do not necessarily reflect those of the Growth Dialogue or George Washington University.