China’s Belt and Road Is Full of Holes

By Jonathan Hillman

THE ISSUE

Five years since it was announced, China’s massive Belt and Road Initiative (BRI) has yet to materialize on the ground as promised. According to Chinese officials, the BRI includes six economic corridors that will carry goods, people, and data across the Eurasian supercontinent. But a statistical analysis of 173 infrastructure projects finds that Chinese investment is just as likely to go outside those corridors as within them. The BRI appears to be less coordinated than Beijing hopes and some critics fear.

HIGH ROAD, LOW ROAD: INCOMPLETE VIEWS OF THE BELT AND ROAD INITIATIVE

Since President Xi Jinping announced it five years ago, China’s BRI has been equally captivating and frustrating for analysts. Its sheer scale demands attention. Spanning roughly 80 countries, it can claim to cover more than two-thirds of the world’s population. It could include Chinese investments approaching $1 trillion, seven times what the United States spent under the Marshall Plan. It intends to strengthen hard infrastructure with new roads and railways, soft infrastructure with trade and transportation agreements, and even cultural ties with university scholarships and other people-to-people exchanges. In all these ways, when much of the West is looking inward, China is connecting with the world.

The BRI is also breathtakingly ambiguous. There is no official definition for what qualifies as a BRI project. There are Chinese-funded projects in countries not participating in the BRI that share many of the same characteristics. The BRI was officially launched in 2013, but projects started years earlier are often counted. The BRI brand has been extended to fashion shows, art exhibits, marathons, domestic flights, dentistry, and other unrelated activities. The BRI’s loose, ever-expanding nature, and a lack of project transparency, have led many observers to exaggerate its size. When assessing the BRI, there is always a risk of imposing order where, by design, it does not exist.

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Given these challenges, most scholars trying to make sense of the BRI have taken one of two approaches. The most common approach has been to examine the BRI at a relatively high level, evaluating Chinese official statements and documents and often underscoring how the BRI serves China’s broader economic and foreign policy objectives. A second and smaller group has taken a more granular approach that evaluates drivers and implications of individual projects. With few exceptions, there has been a dearth of mid-level analysis that links developments on the ground with larger economic and strategic
considerations. As a result, there is no consensus about whether the BRI is achieving its objectives.

This study begins to fill that gap by evaluating Chinese infrastructure investment in the BRI’s six economic corridors. Although the framing is conceptual, and the method is technical, the goal is practical. Investment patterns are an important indicator of whether actual activities are following official priorities. The findings should interest BRI supporters and critics alike. Supporters often underscore the BRI’s ability to link countries for mutual gain, and corridors are an often-cited vehicle for achieving those connections. Critics often assume, implicitly or explicitly, that Chinese officials have a high degree of control over the BRI. If these views are correct, Beijing’s priorities should be reflected in its project activities on the ground.

**CORRIDORS: A MIDDLE VIEW**

Chinese officials have proposed six economic corridors, summarized in Figure 2 below, which provide a mid-level window into the BRI. These corridors are outlined in the BRI’s foundational policy documents, comments by individual officials, maps, and articles publicized by Chinese state media. As President Xi underscored at the Belt and Road Forum in May 2017, “Infrastructure connectivity is the foundation of development through cooperation. We should promote land, maritime, air and cyberspace connectivity, concentrate our efforts on key passageways, cities and projects and connect networks of highways, railways and seaports. The goal of building six major economic corridors under the Belt and Road Initiative has been set, and we should endeavor to meet it.”

Economic corridors are hardly unique to the BRI. As a concept, they gained popularity in the 1980s and 1990s, most notably through an Asian Development Bank (ADB) project to develop the Greater Mekong Subregion (GMS) in Southeast Asia. This geographically-targeted approach to development often begins by connecting cities, industrial centers, and other economic hubs with transportation infrastructure. Complimentary policies, including improvements to “soft” infrastructure, aim to help transportation corridors develop into economic corridors over time.
If the BRI is following Beijing’s priorities on the ground, it is reasonable to expect that a higher level of activity will be occurring inside the corridors than outside them. Chinese officials have not provided the exact coordinates for these corridors, which would allow for a more finely-tuned geospatial analysis. But the official statements, documents, and maps referenced earlier make it possible to approximate the countries in each corridor, as Figure 3 summarizes below. With these definitions and project-level data, it is possible to compare project activity levels in countries that fall in a corridor with those falling outside the corridors.

Project data was drawn from the CSIS Reconnecting Asia database. The research team maintaining that database uses an open-source methodology, drawing from statements by government agencies, regional development banks, project contracts, news articles, and other public information. BMI Research also shares quarterly updates, which are based on open sources and offered in its Key Projects database. Approximately 380 Chinese-funded projects with varying levels of information were identified. After dropping projects without sufficient information, the analysis included 173 Chinese-funded infrastructure projects initiated between 2013 and 2017 across 45 countries on the Eurasian supercontinent. Western Europe was omitted from the analysis because its transport networks are already developed, and geographically, the region acts as an origin and destination rather than an intermediary linkage. Most of the projects included were transportation projects, which is consistent with the development strategies of past and current economic corridors, as described earlier.

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<th>China-Pakistan Economic Corridor (CPEC)</th>
<th>Bangladesh-China-India-Myanmar Economic Corridor (BCIMEC)</th>
<th>China-Central Asia-West Asia Economic Corridor (CCWAEC)</th>
<th>China-Indochina Peninsula Economic Corridor (CICPEC)</th>
<th>China-Mongolia-Russia Economic Corridor (CMREC)</th>
<th>New Eurasia Land Bridge Economic Corridor (NELB)</th>
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*Not included within the geographic scope of the analysis
Linear regressions were used to analyze the relationship between project activity and the BRI’s six economic corridors. The total funding and number of projects per country were initially examined as indicators of activity. Due to transparency challenges, funding information could not be confirmed for several projects. The analysis proceeded with project counts as the primary indicator of country-level activity. Several additional country-level variables were included to help control for economic, political, and social factors that may contribute to investment differences: GDP, GDP per capita, land area, population, distance from China, and governance indicators. A variable was also included to help control for having a coastline, which could make a country more likely to receive investment as part of the BRI’s maritime dimension.

This analysis is an “easy” test of the BRI’s corridors in two respects. First, if Chinese officials defined each corridor as a specific geographic area within the countries it passes through, then not every project within the country would necessarily be considered part of the corridor. This analysis assumes that all projects in a country are part of the corridors that pass through it. Second, the geographic scope for the analysis is limited to countries on the Eurasian supercontinent. For example, African and Latin American countries were not included in the analysis, even though both areas have Chinese-funded infrastructure projects. Neither region is formally part of the six economic corridors, so leaving them out decreases the relative amounts of funding in non-corridor countries. Sri Lanka, Indonesia, and other maritime-based countries were also excluded for the same reason. These decisions made it more likely that Chinese projects included in the analysis would fall within the corridors.

Yet the results suggest that project activity on the ground is not adhering to China’s grand vision. For five of the six corridors, there appears to be no significant relationship between corridor participation and project activity, as summarized in Figure 4 below. The China-Pakistan Economic Corridor (CPEC) is an outlier in at least two respects. First, CPEC is the only corridor that is significantly correlated with higher levels of project activity. That is logical given that it has often been viewed as the BRI’s flagship corridor. However, it is also the only corridor that connects China with a single country. As the next section explains, rather than serving as a model for the BRI’s other corridors, CPEC could underscore the coordination challenges that China faces in overseeing and implementing the BRI.

**DETOUR: BEIJING’S CONTROL PROBLEM**

What explains the gap between China’s official plans for the BRI and actual project activities on the ground? The statistical analysis above does not provide an answer, but it opens the door to speculation and further research. Of course, it is possible that Beijing has a private plan for the BRI, and that resources are in fact going toward those priorities. But other than CPEC, the results above do not provide evidence for any set of priorities, geographic (e.g., countries closer to China) or otherwise (e.g., better business environments). Moreover, if such a plan did exist, it would likely encounter many of the same coordination challenges that Beijing’s publicly-articulated priorities appear to be facing, if not more.

A more compelling explanation is that interest groups within and outside China are skewing President Xi’s signature foreign policy vision. Within China, interest groups at the regional, local, and firm level are incentivized to repackage their existing work as supporting the BRI and pursue new activities under the same banner. China’s 32 provinces and regions are jockeying not only for economic gains but also the political spoils that come with advancing President Xi’s initiative. By signaling that the BRI is likely to remain a focal point for years to come, adding the BRI to the Chinese Party Constitution last year made it more likely that “legitimate” activities and rent-seeking will continue under the BRI banner.

**Figure 4: China’s Struggling Economic Corridors**
This competition has led to duplication and waste instead of promoting market efficiencies. From 2011 to 2016, for example, China’s provincial governments collectively spent over $300 million subsidizing China-Europe block trains. Provincial governments were so eager to announce new train services that they were undercutting each other with subsidies. Each new service was named after its local champion, creating a long list of services and confusion among prospective customers. In 2016, the China Railway Company stepped in and announced that all China-Europe trains would be referred to as “China Railway Express.”

The BRI’s political economy within China drives its opportunistic expansion beyond China. Without specific criteria for what qualifies as a BRI project, the initiative has grown to encompass an endless list of unrelated activities. Chinese officials have not only allowed this expansion but actively participate in it. In official statements, the BRI has expanded since it was announced to include the Arctic, cyberspace, and even outer space. As the list of functions and geographies grows, more interest groups enter the battle for BRI spoils. Without more rigorous oversight by Chinese officials, there is no reason to expect this competition to converge upon the BRI’s six economic corridors. If anything, the opposite is true. In a larger arena, geographic priorities will be more difficult to pursue.

Chinese officials have even less control in partner countries. To be sure, there have been plenty of unsolicited BRI projects, which are proposed by China rather than the recipient countries. But Beijing cannot command other countries to accept projects that fit into the corridors it has outlined. Moreover, each country has its own set of domestic groups that jockey to attract, block, and shape projects to fit its own interests. Those concerns are likely local in nature and are not likely to center around making an economic corridor proposed by Beijing viable. Each national government has its own plans for connectivity, which do not always fit neatly with Beijing’s vision.

Coordination challenges grow with the number of countries involved in each corridor. For example, the China-Central Asia-West Asia Corridor (CCWAEC) requires Chinese officials to coordinate with seven countries. Each country has its own customs processes, procurement regulations, convoluted land rights, and other challenges to navigate. In comparison, CPEC requires Chinese officials to coordinate with Pakistan alone (although Indian officials would surely appreciate greater input, given that CPEC runs through disputed territory).

These constraints limit the number of projects available for Chinese participants to pursue. This poses a dilemma for Chinese state-owned construction firms, which are among the BRI’s strongest proponents and most active participants. China’s overcapacity challenges are so big that these firms likely cannot afford to discriminate between corridor and non-corridor locations, turning down opportunities in the latter and holding out for the former. Most likely, their guiding drive is to build, regardless of location.

**THE ROAD AHEAD**

This study will be updated as additional information becomes available. Greater specificity about each corridor’s geographic path would increase the test’s accuracy. Better information about individual projects and a greater number of projects with sufficient information would also help. Future updates will also be expanded to include the BRI’s three “blue passages,” which Chinese officials have touted as an organizing principle for the BRI’s maritime dimension. Far from being a final judgment on the BRI, this analysis is merely a report card on one aspect of its performance, five years into what has been billed as a decades-long effort.

**Beijing’s control problem could be Washington’s opportunity.**

The news is mixed for Beijing. On the one hand, the lack of correlation between corridor participation and project activity could indicate that projects are more demand-driven than supply-driven by Chinese planning, as David Dollar of Brookings found in an earlier analysis of Chinese foreign aid. On the other hand, Beijing’s struggle to implement the BRI’s economic corridors could also indicate that it has less control over other aspects of the BRI. For example, if Beijing is less able to control the BRI’s implementation, it may be less able to monitor and minimize associated risks. Greater transparency is often described as beneficial to BRI partners, but where risk management is concerned, the biggest beneficiary could be Beijing.

Finally, there is a kernel of good news in these results for China’s partners and competitors. Skeptics of the
BRI have often assumed, implicitly or explicitly, that Chinese planners have a significant degree of control over the initiative. To be sure, there are individual projects that appear less driven by economic fundamentals than China’s political and strategic concerns. But far from strictly following Beijing’s grand designs, much of the BRI’s activity to date looks more scattered and opportunistic. As the BRI continues to evolve, parts of it could be reshaped to minimize costs for U.S. interests and maximize value for global development. Beijing’s control problem could be Washington’s opportunity.

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