

HOW BIG IS CHINA’S BRI-RELATED OFDI SPENDING & WHERE IS IT GOING?

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China’s Belt and Road Initiative (BRI) is considered by some to be the largest infrastructure project in history, far surpassing the inflation-adjusted size of the U.S. Marshall Plan and other well-known infrastructure projects.¹ Official details of the size and scope of the BRI remain broadly undefined, however, and estimates by researchers have varied widely from \$272 billion to \$8 trillion. These studies measured different aspects of the BRI, which have ranged from overseas foreign direct investment (OFDI), to exports, loans, grants, infrastructure development, construction services, and combinations. Even when estimates used comparable concepts, such as OFDI, they often used official data which reflects declared, not realized, values. Finally, the studies also considered different sets of BRI member countries, and have been hampered by round-tripping problems (which returns OFDI to the donor country) and distortions from temporary offshoring to tax havens. To advance our understanding of the size and composition of China’s BRI, we focus on the largest outlay, OFDI, and aggregate transaction data collected from the American Enterprise Institute’s GIT database to circumvent data limitations. We also standardize membership to include all countries with signed BRI-related Memoranda of Understanding with China. We find that China’s incremental OFDI spending to BRI countries amounted to \$235 billion since 2014.² Also, most OFDI went to Asian transport and energy sectors, and the largest country-sector investments have been in Pakistan and Russia’s energy sectors, and Nigeria’s transportation sector.

Definition China’s BRI was introduced by President Xi Jinping in 2013 under its original name of “One Belt One Road”. Its initial concept was to “connect Asian, European and African countries more closely” along the ancient Silk Road, using land and maritime channels.³ When its name changed to the BRI in 2016, official objectives were broadened vis-à-vis its expanding network of country partners. These objectives have included (1) unimpeded trade and investment; (2) better connectivity (through road, rail, ship, cyber, oil pipelines, and other channels); (3) infrastructure development in ports and other facilities; (4) monetary policy coordination; and (5) improved cultural exchanges.⁴ Researchers have found that these efforts have made an impact, generating gains from trade that have been particularly strong along global supply chains, where expedited transfers of time-sensitive inputs are highly valued.⁵

Table 1. Estimates of the Size of China’s BRI (by Various Institutions)

	American Enterprise Institute (AEI)	William & Mary TradeAid	UNCTAD	Shahid Yusuf (Growth Dialogue)	Morgan Stanley	Chinese Gov
Estimate	\$272 Bil	\$354.4 Bil	\$448 Bil	\$1.2 Trillion	\$1.2-\$1.3 Trillion	\$4-\$8 Trillion
Background	Uses transaction data	Mostly to transport & power sectors	Financing of 68 Partner Countries	Includes past and planned projects.	Slow start, but will accelerate in 2018-2027	About 1/3 realized, 2/3s projected
Date Range	2014-17	2000-2014	2014-18	2013-2016	2012-2027	2014+
Considered Variables	OFDI & Construction Services	Development Assistance Lending	FDI and Construction Services	Mostly Loans & Credit	Infrastructure, Investment, and Trade	Unspecified

Data Limitations Details regarding the scope of the BRI have remained elusive. The Chinese government’s official BRI portal provides insight, as it identifies examples of BRI sponsored infrastructure projects, showcases an evolving list of participating countries (132 by July 2020), and provides some data on investment and other flows. But the criteria for determining what a BRI partner country is (beyond a subset of MOUs), how much “realized” investment has transpired, and what the true scope of OFDI and other flows has been given roundtripping, offshoring, and other data issues, remains unclear.⁶

¹ The Marshall Plan cost about \$115 billion in current prices. See Kozuk-Wright & Poon (UNCTAD), “China’s BRI Isn’t Like the Marshall Plan,” SCMP, Jan 2019. Note that the motivation for the BRI has been different from the Marshall Plan (*Financial Times*, “Beijing Insists BRI is No Marshall Plan,” Sep 25, 2018).

² Incremental OFDI defined as China’s OFDI stock in the 6 years after BRI implementation minus the corresponding OFDI in the 6 years prior to the BRI.

³ The reference of “belt” in the BRI refers to overland routes for road and rail transportation, while the “roads” reference ironically refers to modern sea routes. China State Council, “Action Plan on the Belt & Road Initiative,” Mar 20, 2015; and information provided on the China’s Official Belt and Road Information Portal.

⁴ China State Council, “Action Plan on the Belt & Road Initiative,” Mar 20, 2015; Hong Kong Trade & Development Council, “Belt & Road Initiative,” 2020.

⁵ Baniya, Rocha, and Ruta, “Trade Effects of the New Silk Road: A Gravity Analysis,” World Bank’s Policy Research Working Paper Series, Jan 2019.

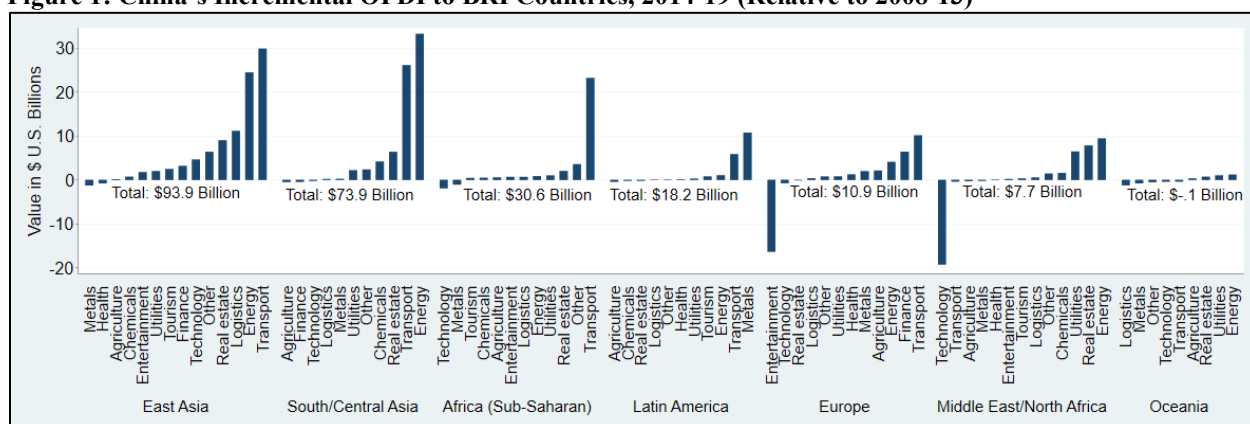
⁶ Significant OFDI distortions result from round-tripping and offshoring (70% of China’s OFDI temporarily goes through Hong Kong, the Cayman Islands, and the Virgin Islands) often for tax benefits. See Garcia-Herrero et al., “Chinese OFDI: How Much Goes Where After Roundtripping and Offshoring?” BBRA, Jun 2015.

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Independent Estimates. Given the data limitations, researchers have developed their own estimates of the size of China’s BRI spending, which have ranged from \$272 billion⁷ to \$8 trillion (Table 1). The wide range is explained, in part, by differences in the considered channels, which have included OFDI, exports, construction and energy services, infrastructure development, development financing, lending, grants, internet connectivity projects, and various combinations. Many studies have also used different sets of considered BRI member countries (the list is growing) and have relied on official OFDI data, which can be distortive since much of it is temporarily sent the Cayman Island, Virgin Islands, as well as Hong Kong.

Methodology. Using only realized, transaction-level data⁸ collected from the American Enterprise Institution’s (AEI) [Global Investment Tracker](#) (GIT) database, we aggregate China’s OFDI spending across all sectors in all BRI countries worldwide to derive new OFDI estimates. As the concept of the BRI was announced in late 2013, we compare OFDI patterns in member countries in the six years before the implementation of the BRI (2008-2013) to the six years period after the implementation of the BRI (2014-2019), to see if any noticeable trends appear. Aggregated transaction-level data is particularly useful to measure such flows, since investments from Chinese firms can be traced directly to their eventual recipients as opposed to their temporary offshored destinations. Also, the emphasis on additional (not total) OFDI flows helps isolate what additional investment has been sent since the implementation of the BRI. As can be seen in Figure 1, for most sectors and regions, China’s OFDI has increased in the post-BRI initiation period, though there are exceptions exhibiting decreases.⁹

Figure 1: China’s Incremental OFDI to BRI Countries, 2014-19 (Relative to 2008-13)



Findings Our findings provide insight into the magnitude and composition of China’s BRI investments. First, the size of only the OFDI component of the BRI appears to have amounted to at least \$235 billion, as this represents China’s incremental OFDI to BRI partners since the initiation of the initiative. Second, as shown in Figure 1, most of China’s OFDI spending has been in East and South/Central Asia, and to a lesser degree, Sub-Saharan Africa. Third, most of China’s BRI investment has been in the transportation and energy sectors. Fourth, the largest country-sector pairings of investment have been in Pakistan and Russia’s¹⁰ energy sectors, and Nigeria’s transportation sector. Finally, there appears to be a redistributive element associated with China’s OFDI to BRI countries, as China’s investments in the entertainment and technology sectors in the Middle East/Northern Africa (MENA) and Europe, have dropped precipitously.

Other References American Enterprise Institute, [China Global Investment Tracker database](#); Caijing, “China Development Bank Builds OBOR Project Bank and the Total Amount is Approaching \$1 Trillion,” May 2015; CRS, “[Tracking China’s Global Activities](#)”, Apr 2020; The Economist, “[Our Bulldozers, Our Rules](#),” Jul 2016; Morgan Stanley, “[Inside China’s Plan to Create a Modern Silk Road](#),” Mar 2018; USCC, [Hearing on China’s BRI: 5 Years Later](#), Jan 2018; William and Mary’s [AidData](#); Wo-Lap, “[Getting Lost in ‘One Belt, One Road](#),” HK Economic Journal, Apr 2016; Yusuf, “[China’s B&R Gamble: Can it Deliver?](#)” SAIS Review of International Affairs, Jan 2018.

⁷ The AEI estimate of \$272 in Table 1 which also used transaction level OFDI data was higher than our estimate of \$235 as theirs included construction services.
⁸ The AEI database provides an option for analyzing OFDI trends interpedently from construction services, which we have done.
⁹ Like other approaches, our estimates have limitations. The OFDI trends may be slightly underestimated since not all transactions are covered (the AEI database only tracks transactions exceeding \$100 million). Also, the fact that countries became BRI members in different years in the 2014-2019 timespan may slightly overrepresent changes relative to pre-BRI years (a problem most studies have). These issues are assumed to be minor and have offsetting effects.
¹⁰ Russia has been classified in the South/Central (Eurasia) region in this breakdown, to allow for comparability with other analyses.

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