

The “hidden debt” (US\$ 309 billion) and “underreported debt” (US\$ 385 billion)

problem with Chinese loans is not as serious as the numbers suggested in a recently published AidData report.

The **median figure for “underreported debt” is 1.8 percent of GDP**, however AidData reports that the “average” country is underreporting its Chinese debt by 5.8 percent of GDP, failing to note that this average is subject to large outliers.

AidData’s methodology overestimates host government liabilities

by including the entire Chinese loan to a joint venture as a host country debt (against World Bank Debtor Reporting System guidelines), even when the host country owns as little as 10 percent of the investment.

Three countries account for \$US 235 billion, or 61 percent of the “underreported” debt not disclosed to the World Bank: Russia, Venezuela, and Kazakhstan. Venezuela is not a World Bank borrower and is therefore not required to report its borrowing.

What is the Real Story of China’s “Hidden Debt”?

Deborah Brautigam and Yufan Huang*

ON SEPTEMBER 29, AIDDATA, A RESEARCH LAB at William & Mary, released a detailed overview of their new data on China’s global lending, *Banking on the Belt and Road*.¹ The report has generated much commentary. Yet most people will likely read only the headlines: that US\$ 385 billion of a purported US\$ 676 billion in Chinese loans made to developing countries between 2000 and 2017 was not being reported to the World Bank.² “The average government,” the authors contend, “is underreporting its actual and potential repayment obligations to China by an amount that is equivalent to 5.8% of its GDP.”

How worried should observers be about this claim? The AidData team has released their data publicly, allowing others to examine the underlying data. In this briefing paper, we examine the data underpinning the AidData conclusions. While we agree with many of the points in their paper, our own analysis of the data puts a very different spin on their headline conclusions. By providing averages, not discussing outliers, and allocating the entire Chinese loan for joint ventures to only the host government partner, the report is unduly alarmist.

Three countries account for 61 percent of the debt not disclosed to the World Bank. Out of the US\$ 385 billion that AidData calculated as Chinese loans not being disclosed to the World Bank, 61 percent -- US\$ 235 billion -- was committed to just three countries: Venezuela, Russia, and Kazakhstan.³ Venezuela is not a World Bank borrower and is therefore not required to report its borrowing.

AidData’s methodology includes the full value of a Chinese loan to a joint venture investment as the host government’s “underreported debt” contrary to World Bank guidelines. Approximately US\$ 153 billion was loaned to joint ventures (JVs) and special purpose vehicles (SPVs), limited liability companies set up for specific projects.⁴ Some of these are majority owned by host governments, but in several significant cases they are controlled by private companies -- ExxonMobil, for example -- with modest shareholdings by host governments. The World Bank does

not classify these latter loans as public debt (unless it has a government guarantee), and does not require borrowing governments to report it.

Finally, the median figure for “underreported debt” is 1.8 percent of GDP. AidData reports, instead, the average figure of 5.8 percent of GDP. This is distorted by several very large outliers such as 49.7 percent for Equatorial Guinea, 30.6 percent for the Republic of Congo, and 21.1 percent for Venezuela.

THE NEW DATA

A LOAN-BY-LOAN DATASET ON Chinese global lending like the one compiled by AidData is a major contribution. The data (for Africa, at least), appears to be very high quality, reflecting the four years it took to collect and clean it. This data release follows the decision by the World Bank in July 2020 to publish, for the first time, information detailing what each of its borrowers owes to official and private creditors, by creditor country. This means that the World Bank’s International Debt Statistics (IDS), an online repository and annual publication of information about debt held by all the World Bank’s borrower countries, now contains data on loan commitments, outstanding debt, and debt service by creditor country.⁵ Yet the World Bank’s aggregated data gives no details about how the loans are used, which banks issued them, or which entity borrowed them.

The AidData report includes these details for 165 borrowing countries and territories, and is an important boost to much needed transparency about Chinese development finance.⁶ We at the China-Africa Research Initiative (CARI) at Johns Hopkins University and researchers at Boston University maintain two similar loan-level public databases of Chinese lending, but each with a narrower focus than AidData.⁷

WHAT ARE “UNDERREPORTED” AND “HIDDEN” LOANS?

AidData has introduced two separate concepts in this paper. The first, “underreported” loans, refers to loans that are not reported to the World Bank’s Debtor Reporting System, the source of the data in the IDS. Most of the headline takeaways from the report refer

to these “underreported” loans. The second, “hidden” loans, refers to the entire set of loans to host country state-owned enterprises (SOEs) and state-owned banks and SPVs with some degree of host government ownership but without state guarantees.⁸ We discuss these separately below.

It is important to emphasize that despite its reputation for secrecy, it is not the Chinese government that is “underreporting” or “hiding” these loans. There is no global creditor reporting system for China to use. While members of the Paris-based OECD, an organization of 38 wealthy democracies, are required to report their lending to the OECD’s Creditor Reporting System, China is not an OECD member.

“Underreported” Loans. AidData counted US\$ 385 billion in “underreported” debt. “Underreported” means that the loans are, by AidData’s assessment, not properly reported *by the borrowers* to the only global repository for debt information, the World Bank’s IDS. Since 1951, all of the World Bank’s borrowers have been required to provide loan-by-loan data on all loans acquired by public agencies or by the private sector, if guaranteed by a public agency. In turn, countries that do not borrow from the World Bank have no obligation to disclose their debt statistics to the IDS repository.

The World Bank has specific rules about the debt data that should be reported.¹⁰ For example, public sector debt includes the central government and all its departments, and regional and municipal governments, and also *all borrowing by SOEs* (emphasis added) including railways, utilities, and so on.

In some cases, host governments have set up SPVs that limit their legal liability for repayment, and take the debt off the central government balance sheet. This mode is increasingly used for public private partnership (PPP) projects that bring private sector investors to partner with the public sector to build and manage large infrastructure projects. The World Bank has cautioned that, “current account practice permits governments to keep the costs and liabilities associated with PPPs off-balance sheet, thus circumventing budgetary constraints and obfuscating scrutiny by the national legislature.”¹¹

Nevertheless, the World Bank specifies that JV debt or SPV debt should still be reported to the IDS repository, where “the government owns more than 50% of the voting stock” [or] “if, in case of default, the state would become liable for the debt of the institution”.¹² In other words, if the government is the major shareholder or if there is a public guarantee, it should be reported as public debt. Otherwise, it is considered private sector debt.

Underreporting can be significant for some countries. Our own work on Zambia describes how the Zambian government has not reported to the World Bank the Chinese debts of its SOEs like ZESCO, the state electricity company, or SPVs like the Kafue Gorge Lower hydropower project, even though the Zambian public sector is the sole shareholder.¹³

Yet AidData’s methodology (“Whenever an official sector loan from China is issued to a joint venture, AidData records the entire face value of the loan”) overcounts by including the entire Chinese loan to a JV as a host country debt, even when the host country owns as little as 10 percent of the investment.¹⁴ Since AidData compares their data on Chinese loan commitments to the World Bank’s data, it is important that apples be compared with apples.

“Hidden” Loans. AidData’s “hidden” loan definition includes all Chinese lending into SOEs, JVs, and SPVs that are “wholly or partially owned by the host government with implicit host government repayment guarantees”.¹⁵ In other words, this category (US\$ 309 billion) captures borrowing with some degree of host government involvement, but *without a formal guarantee*. AidData has grouped all Chinese lending to this category of borrower as “hidden”, without regard as to whether the borrowing government is required to report this borrowing to the Debtor Reporting System or not. This leads to some problematic conclusions.

For example, referring to Chinese loans mostly to Angola’s state-owned oil company Sonangol, AidData reports that Angola has significant “hidden debt” exposure to China: 11.8 percent of GDP, or US\$ 12.4 billion.¹⁶ However, the World Bank’s data suggest that Angola has included all of the Chinese Sonangol

loans as part of the US\$ 59.8 billion in Chinese loan commitments reported to the World Bank.¹⁷ This suggests Angola has not been “underreporting” its significant Chinese borrowing, and it seems inappropriate to call this “hidden” lending simply by definition.

HOW SIGNIFICANT IS THE “UNDERREPORTED” LOANS PROBLEM?

FIRST, WE NOTE THAT THE REPORT emphasized the average “underreporting” without noting how this is affected by outliers. “The average government,” the researchers contend, “is underreporting its actual and potential repayment obligations to China by an amount that is equivalent to 5.8% of its GDP.”¹⁸ However, the median for the same index of countries in the sample is only 1.8 percent. This shows that the sample is skewed by cases like the Republic of Congo (30.6 percent) and Equatorial Guinea (49.7 percent).

Second, because the AidData researchers have chosen to use a different methodology from the World Bank, their data on “underreported loans” naturally includes significant numbers of loans that the World Bank’s own guidelines rule out as public and publicly guaranteed lending. Many of these are hard to characterize as cases where the host government will feel pressured to take over the loan, i.e., significant contingent liabilities for the host government, as the cases below make clear.

The Coral South Liquid Natural Gas Project in Mozambique. Take the case of a US\$ 4.66 billion syndicated loan to the US\$ 8.89 billion Coral South floating liquid natural gas (LNG) project in Mozambican waters. The project is a JV led by the American oil giant Exxon Mobil and the Italian multinational energy company Eni.¹⁹ Mozambique’s national energy company owns just 10 percent.²⁰ In 2017, a syndicate of 15 international banks and five export credit agencies provided a US\$ 4.66 billion loan for the Coral South LNG project. The Chinese portion of this was US\$ 1.55 billion. AidData includes this figure of US\$ 1.55 billion in their totals for Mozambique’s Chinese loans.²¹ Since Mozambique has not reported this to the World Bank

(following World Bank rules), it becomes, in AidData's analysis, "underreported debt".

In this case, there is no evidence that the Mozambique government guaranteed any part of this loan, so by definition it also becomes "hidden" debt. If the government didn't provide any sovereign guarantee for the loan, then none of it should be captured by the World Bank database since the state's equity is less than 50 percent.

The Husab Uranium Mine in Namibia. In 2012, China Development Bank provided a US\$ 1.175 billion loan to Taurus Mineral Ltd., a Chinese company, which Taurus used to buy the Husab Uranium Mine in Namibia from an Australian firm.²³ The Namibian government later bought 10 percent of the Husab Uranium Mine. It is unclear why AidData included this loan as a liability of Namibia since the borrower was clearly a Chinese entity, but that individual loan made up 69 percent of what AidData claimed as the Namibian government's "underreported" debt exposure to China.²⁴

The Democratic Republic of the Congo: Sicomin. In 2008, the Democratic Republic of the Congo's state-owned mining company Gécamines and a consortium of Chinese companies set up a jointly owned mining venture, Sicomin. The Chinese hold 68 percent of the Sicomin shares, while Gécamines and other Congolese interests hold 32 percent. China Eximbank and the Chinese company consortium provided US\$ 2.9 billion in loans to Sicomin to bring an abandoned copper mine back into production. There is no DRC government guarantee for these investment loans. For that reason, the DRC wouldn't need to report this loan to the World Bank as its liability. However, AidData included US\$ 2.83 billion of these loans as "underreported" Chinese commitments for the Democratic Republic of Congo.²⁵

Kazakhstan-China Gas and Oil Pipelines. In Kazakhstan a JV, Asia Gas Pipeline LLP, owned 50 percent by China National Petroleum Corporation (CNPC) and 50 percent by the Kazakhstan SOE borrowed US\$ 12.2 billion from China Development Bank and Bank of

China to build sections of the Turkmenistan-China Gas Pipeline.²⁶ According to the World Bank's rules, since Kazakhstan does not have a controlling share of this JV (the shares are split evenly, at 50:50), and the state didn't provide a sovereign guarantee for these loans, they are not required to report this debt to the IDS.²⁷ Yet AidData included this as a large portion of Kazakhstan's "underreported" debt.

The China-Laos Railway Project. AidData's rationale for these decisions is clear from their detailed discussion of the US\$ 5.9 billion China-Laos Railway Project. A JV between the Laos government, which holds 30 percent of the equity, and three Chinese companies, the railway borrowed US\$ 3.54 billion from China Eximbank to build one of the flagship Belt and Road Initiative projects: a railway that is planned to extend from China's Yunnan Province through Southeast Asia. Again, the Laos government is not required to report this loan to the World Bank since it did not provide a guarantee for it, but AidData included the whole US\$ 3.54 billion as Laos' liability and therefore part of its "hidden" and "underreported" debt.

The AidData researchers argue that they included the whole JV loan as Laos' liability because if the railway is unable to repay the loan, the Laos government will likely face pressure to cover all of the losses, despite the majority ownership by the three Chinese firms and its significant role as a transport link between China's southern provinces and Southeast Asia. This strikes us as an unreasonable assumption.

WHAT IS DRIVING "UNDERREPORTED DEBT"?

THERE ARE SEVERAL REASONS why countries have not reported debts to the World Bank: they are not a World Bank borrower, geopolitics, weaknesses in capacity, and local accounting rules. Understanding these factors helps provide important context for the discussion of "underreported" debt.

First, the World Bank rules for the Debtor Reporting System **only apply to countries that are actually borrowing from the World Bank.** Under leftist President Hugo Chavez, Venezuela pulled out

of the Washington-based World Bank for ideological and political reasons in 2007, after paying off its loans early.²⁸ AidData has identified US\$ 90 billion in underreported Chinese lending to Venezuela, or 21.1 percent of its GDP. Yet because it is not a borrower, Venezuela is not required to report its Chinese loans to the World Bank. This is also probably why Equatorial Guinea, which is not borrowing from the World Bank and was recorded by AidData as having 49.7 percent of its GDP in “underreported” debt, does not report its loans to the World Bank.

Among the 154 mid- and low-income countries and territories that AidData included in the “underreported debt” calculation, 36 apparently do not report any borrowing from any source to the World Bank.²⁹ Their Chinese loans, all labeled as “underreported” by AidData, amount to US\$ 31 billion.

Second, **geopolitics** may also affect whether countries report to the World Bank. This clearly affected the Venezuela decision under the Chavez government to withdraw from the World Bank. For unknown reasons, Russia also does not report fully to the World Bank (this was the case both before Russia’s annexation of Crimea, which, given sanctions, would have affected its ability to borrow from the World Bank, and afterwards). In 2021, the World Bank’s IDS noted that World Bank staff had to estimate Russia’s debt obligations.³⁰

Third, countries with **weak government capacities** or beset by civil wars are often unable to report their borrowing in a timely and accurate fashion. For example Sudan, which ranked near the bottom of the World Bank’s “debt policy index,” a measure of a government’s capacity to manage its debt, stopped reporting loan commitments by China after 2010.³¹

Fourth, some countries, Mozambique most notoriously, have deliberately hidden foreign borrowing, in this case guaranteed loans to SOEs from Swiss and Russian banks.³² However, other countries may not report their SOE loans because their own **domestic accounting systems keep SOE debt distinct** from central government public debt, and their debt management offices may not even have access to SOE borrowing data. As the World Bank noted:

[I]n most instances any omission in reporting does not signal any unwillingness to report, but rather, reflects the legal framework that governs contracting, measuring and monitoring public debt at the national level, and the mandate of the public debt office.³³

For example, in relatively well-governed Botswana, the Ministry of Finance and Economic Development does not report borrowing by its state-owned Botswana Power Corporation to the World Bank.

Finally, a recent paper by a group of researchers from AidData, the Center for Global Development, and elsewhere concluded that confidentiality clauses in Chinese loan contracts could prevent borrower governments from “revealing the terms or even the existence of the debt.”³⁴ But we need more evidence for that claim. For instance, 45 of the 83 loan contracts containing confidentiality clauses were from Cameroon. That doesn’t seem to have prevented Cameroon from reporting its Chinese loan commitments fully to the World Bank.³⁵

CONCLUSION

SO-CALLED “UNDERREPORTED” or “hidden” debt (as noted, AidData defines the two terms differently) is a complex issue that involves borrower governments’ capacities, their relations with the World Bank, and concern about potential liabilities that may not be included in the Bank’s reporting guidelines. “Hidden debt” or “underreported debt” isn’t necessarily hidden from the public in the borrower country or even from the IMF. After all, researchers at AidData, CARI, and Boston University have been able to identify these loans using government websites, IMF country reports, and other sources.

At the end of the day, what drives “underreported debt” is the general failure of borrowing countries to report consistently to the World Bank, and the World Bank’s lack of power to force them to do so, particularly if they are not borrowing from the World Bank. However, a significant amount of what AidData calls “underreported debt” is due to the researchers’ decision to include the entire amount of a Chinese loan

to a JV where the host government is not a controlling shareholder, in AidData's totals for Chinese loans to that government. This goes against the World Bank's own rules.

"Hidden debt" is another matter. As a World Bank blog post noted in 2017, political leaders around the world, including in wealthy countries, "are jumping on the PPP bandwagon and pressuring public sector servants to launch PPPs."³⁶ AidData is right to be concerned about cases where critical public infrastructure is being built as a PPP and financed through an SPV company *without* a public guarantee but with the strong expectation that the host government will bail out the company if it is in trouble. These contingent liabilities are challenges for accountability. However, defining any debt held by a company with some government ownership but that has no government guarantee as "hidden" on the assumption that the government could still be pressured to pay may be pushing the notion of contingent liability too far. In Mozambique, it is unlikely that Mozambique's state-owned oil company will be required to bail out Exxonmobil and Italy's ENI if the Coral South LNG project fails.

For transparency to be a global norm, perhaps a different data repository system is required. The World Bank's data has a serious flaw in that only low and middle-income World Bank borrowers are obliged to report. At present some 128 countries are included, compared with 193 United Nations member countries. Furthermore, if a country is not a borrower, or goes for long periods without borrowing, the World Bank has little leverage to compel transparency. An alternative could be to evolve a norm of transparency by requiring all 190 members of the International Monetary Fund, as a uniform condition of membership, to transparently report all external borrowing, perhaps as part of their annual Article IV consultations.

The Chinese government should publicly encourage countries to report all their Chinese borrowing to the World Bank's Debtor Reporting System, and make it clear that the confidentiality clauses in some loan contracts do not prohibit borrowers from doing so. Having Beijing come down firmly in favor of debt

transparency at least at an aggregate level, as reported in the IDS, will help all lenders, including Chinese banks, to better assess the debt risks.

AidData has produced a rich source of data on China's overseas development finance that can be mined for a host of analytical purposes. We applaud their hard work and the high quality of this year's release. Yet their presentation of their data without important context, using averages without highlighting outliers, and choosing to include Chinese loans to JVs as full liabilities of the host government, despite those government's minority shares, and against World Bank rules, were unfortunate choices that could hamper greater understanding of this important issue. ★

ENDNOTES:

1. AidData, "Banking on the Belt and Road: Insights from a new global dataset of 13,427 Chinese development projects," <https://www.aiddata.org/publications/banking-on-the-belt-and-road>.
2. The US\$ 676 billion value here is the total of "sovereign and hidden debt exposure to China" in Table A-27 of AidData's report, which accounts for all Chinese overseas loans collected by AidData. The analysis excluded 11 high-income countries and territories. Both US\$ 676 billion and US\$ 385 billion are constant 2017 US\$. See AidData, "Banking on the Belt and Road."
3. Russia US\$ 118 billion, Venezuela US\$ 90 billion, Kazakhstan US\$ 27 billion, constant 2017 US\$. See Table A-27 of the AidData report.
4. The value is in 2017 constant dollar and the US\$ 153 billion excluded the 11 high-income countries and territories.
5. See World Bank's International Debt Statistics, <https://data.worldbank.org/products/ids>.
6. Several years ago, researchers at the Kiel Institute built a similar loan-level dataset of Chinese overseas lending. After comparing their dataset with the commitment figures in the World Bank's IDS, the authors concluded that 50 percent of China's committed lending, or about US\$ 200 billion, was "hidden" from the World Bank. See Sebastian Horn, Carmen M. Reinhart, and Christoph Trebesch, "China's Overseas Lending", 2021 forthcoming in the *Journal of International Economics*.
7. The CARI database, <http://www.sais-cari.org/data>, tracks

only loans to African governments and their SOEs while the BU database, <https://www.bu.edu/gdp/chinas-overseas-development-finance/>, includes only loan commitments by China Eximbank and China Development Bank, the two Chinese policy banks.

8. AidData, “Banking of the Belt and Road,” p. 49-50.
9. We do not know which loans specifically are “underreported” because the World Bank dataset gives us only the country-year data on Chinese loan commitment. AidData calculated the “underreported” debt by comparing their data with the World Bank data, and generated a total for each country for discrepancy between the two datasets. The total of the discrepancies for mid- and low-income countries are US\$ 385 billion.
10. These are laid out in World Bank, Debtor Reporting System Manual: https://databank.worldbank.org/data/download/site-content/kb/debt/DRS_Manual_English.pdf.
11. World Bank, “Debt Bulletin 7th Edition”, January 2019, <https://www.worldbank.org/en/programs/debt-statistics/quarterly-bulletin-january-2019>.
12. World Bank, Debtor Reporting System Manual, p. 3.
13. Deborah Brautigam, “How Zambia and China Co-Created a Debt ‘Tragedy of the Commons,’” <http://www.sais-cari.org/s/WP-51-Brautigam-Zambia-Tragedy-of-the-Commons.pdf>; Deborah Brautigam and Yinxuan Wang, “Zambia’s Chinese Debt in the Pandemic Era,” <https://lucid-cari.squarespace.com/s/BP-5-Brautigam-Wang-Zambia-Chinese-Debt-Pandemic-Era.pdf>.
14. AidData, “Banking of the Belt and Road,” p. 50
15. AidData, “Banking of the Belt and Road,” p. 49-50.
16. The amount is in constant 2017 US\$.
17. Angola reported US\$ 7.5 billion more in Chinese loan commitments to the World Bank than what AidData is able to identify for the period of 2000 to 2017. The numbers are in 2017 constant US\$. See Table A-27 of the AidData report, “Banking of the Belt and Road.” In a separate communication, a World Bank official told us that they record the full value of a line of credit rather than the separate loan disbursements from that line of credit. Both AidData and CARI track the individual projects under the line of credit. This explains why the World Bank’s figure is larger than either AidData’s or CARI’s Chinese loan figures for Angola.
18. AidData, “Banking of the Belt and Road,” abstract.
19. NS Energy, “Coral South FLNG Project,” <https://www.nsenergybusiness.com/projects/coral-south-flng-project-mozambique/>.
20. NS Energy, “Coral South FLNG Project.”
21. See project #57394, #57395, and #57399 in the AidData dataset, “AidData’s Global Chinese Development Finance Dataset, Version 2.0,” <https://www.aiddata.org/data/aiddatas-global-chinese-development-finance-dataset-version-2-0>.
22. The CARI methodology states that if the state guaranteed 10 percent of the entire loan then only 10 percent of the US\$ 1.55 billion of Chinese finance would be reported as Mozambique’s liability.
23. See project #61252 in the AidData dataset. The borrower is Taurus Mineral Ltd. is a subsidiary of Miraculum Mineral Limited, which is jointly owned by China General Nuclear Power Corporation Uranium Resources Company, and China Development Bank’s China-Africa Development Fund.
24. The 69 percent is calculated using the 2017 constant US\$ values provided by AidData. The constant dollar value for the loan is US\$ 1.197 billion.
25. See project #73145 and #73204 in the AidData dataset.
26. See project #54489 and #39997 in the AidData dataset.
27. In the AGP case, ironically, it was the Chinese oil company CNPC that provided a guarantee for the loans. See project #54489 and #39997 in the AidData dataset.

28. The Associated Press, "Chavez: Venezuela to exit IMF, World Bank," *NBCNews*, April 30, 2007, <https://www.nbcnews.com/id/wbna18406119>. In 2016, Venezuela's public and publicly guaranteed debt was still being estimated by the World Bank "based on creditors data and estimates on the 2016 debt stocks." (World Bank, International Debt Statistics 2019, p. 76). In the most recent IDS (2022), Venezuela is reported as having resumed its reporting in 2016: "Country resumed reporting of long-term public and publicly guaranteed debt from 2016 onward" (p. 183)."
29. See Table A-27 of the AidData report.
30. World Bank, International Debt Statistics, p. 184.
31. For the debt policy index, see "CIPA debt policy rating" in World Bank Open Data, <https://data.worldbank.org/>. For Sudan's debt statistics reporting, see World Bank's International Debt Statistics, <https://data.worldbank.org/products/ids>.
32. "Mozambique's 'hidden debt' scandal trial begins," *AfricaNews*, <https://www.africanews.com/2021/08/23/mozambique-s-hidden-debt-scandal-trial-begins/>
33. World Bank, "Debt Bulletin 7th Edition," January 2019, <https://www.worldbank.org/en/programs/debt-statistics/quarterly-bulletin-january-2019>.
34. See Gelpern *et al.*, 2021. "How China Lends: A Rare Look into 100 Debt Contracts with Foreign Governments," Peterson Institute for International Economics Working Paper No. 21-7, p. 2. <https://www.aiddata.org/publications/how-china-lends-ppps/10-important-questions-ask-public-sector-when-pursuing-ppp-procurement>.
35. Cameroon reported US\$ 605 million more in Chinese loan commitments to the World Bank than what AidData is able to identify for the period of 2000 to 2017. See table A-27 of the AidData report, "Banking on the Belt and Road."
36. David Baxter, June 2017. "10 important questions to ask the public sector when pursuing a PPP procurement," World Bank Blogs, <https://blogs.worldbank.org/ppps/10-important-questions-ask-public-sector-when-pursuing-ppp-procurement>.

AUTHORS

DEBORAH BRAUTIGAM is the Bernard L. Schwartz Professor of International Political Economy and the Director of the International Development Program and founding director of the China Africa Research Initiative (CARI) at Johns Hopkins SAIS. Her Ph.D. is from the Fletcher School of Law and Diplomacy, Tufts University. **YUFAN HUANG** is a Ph.D. student at the Government Department of Cornell University. From 2018 to 2020, he was a researcher with CARI. Before that, he was a researcher on foreign and defense affairs at the New York Times Beijing Bureau. Yufan has an M.A. in China Studies from Johns Hopkins SAIS, and a B.A. in International Politics from Renmin University of China.

Editor: Daniela Solano-Ward

ACKNOWLEDGEMENTS: We appreciate research assistance from Yinxuan Wang, and helpful comments from Kevin Acker, Jyhjong Hwang, Jordan Link, Lauren Johnston, Vikram Nehru, and David Milhalyi.

THE SAIS CHINA-AFRICA RESEARCH INITIATIVE at the Johns Hopkins University School of Advanced International Studies (SAIS) in Washington, D.C. was launched in 2014. Our mission is to promote research, conduct evidence-based analysis, foster collaboration, and train future leaders to better understand the economic and political dimensions of China-Africa relations and their implications for human security and global development.

SAIS China-Africa Research Initiative
1717 Massachusetts Ave NW, Suite 733
Washington, DC 20036
www.sais-cari.org
Email: sais-cari@jhu.edu

Support for this policy brief was provided by a grant from Carnegie Corporation of New York. Carnegie Corporation of New York is a philanthropic foundation created by Andrew Carnegie in 1911 to do "real and permanent good in this world."

