

Understanding Chinese Foreign Aid: A Look at a Global Development Finance Dataset

By Salma Ahmed, Peter Sheehan and Bruce Rasmussen

Project Paper

China's Development Finance, Growth Models and Sustainable Development in
Recipient Countries 2020–2021

Ford Foundation

Victoria Institute of Strategic Economic Studies (VISES)
Institute for Sustainable Industries and Living Cities
Victoria University, Melbourne
May 2021

Overview

Once an aid recipient itself,¹ China has become the leading global economic development financier in the last three decades. China appears to be at the forefront of promoting South-South Cooperation (SSC), a development cooperation aimed at exchanging resources, technology, and knowledge for sustainable development, and eradicating poverty within developing countries. Although China is active in five major world regions, it invests significantly across the African continent since the 1960s to support its recognition as the legitimate representative of the Chinese people and the Chinese seat in the United Nations. The scale and scope of China's financial engagement in the developing world in recent decades have drawn the academic community and policymakers' attention. Since China is not a member of the Development Assistance Committee (DAC), the country does not entirely conform to the Organisation for Economic Cooperation and Development (OECD) standards on matters related to foreign aid (see Table A.1 in the Appendix). Consequently, there has been a growing interest among the international community to track China's development finance activities and motives.

Aid proponents suggest that China's state financing is primarily motivated by a desire to further their own political interest, secure commercial advantages for their domestic firms, and support corrupt and authoritarian regimes rich in natural resources (Naím, 2007). However, there are arguments that China's investment in economic and social infrastructure building throughout the developing world, an area where Western donors have the least interest, might have broader economic growth impacts than aid from other bilateral and multilateral donors (Dreher et al., 2021). The intuition of Chinese engagement through production capacity building, in reality, reflects its strategic response to the changing domestic (e.g., overcapacity in the manufacturing industry, rapid deterioration of ecosystem, increasing cost of labour, among others) and international (e.g., global financial crisis) challenges—which are ultimately driving the Belt and Road Initiative (BRI).² Joining less developed countries (mainly BRI countries)³ through infrastructure construction will provide greater market potentials for China. This will eventually address China's chronic excess capacity⁴ and other challenges, such as narrowing income inequality between eastern coastal regions, and regions in the north and west, through more cost-effective international market access. This process of developing cooperation through production capacity building in less developed nations fosters China's evolution as a global superpower.

This research report uses a comparatively new dataset, known as AidData, on Chinese government financing to explore China's development financing's nature, scope, and intention. AidData is a project between the College of William and Mary, Brigham Young University, and the non-profit organisation Development Gateway. Knowing more about Chinese development finance's nature and purposes is crucial for understanding Chinese foreign policy and critical for more accurate comparisons between Chinese practices and other finance donors, especially OECD-DAC donors. This can be done only for 2000 and 2014: no data on Chinese official finance, except for on the African continent, are published

¹ Foreign aid and foreign assistance are interchangeable terms in this report.

² Also known as One Belt, One Road (OBOR) initiative that the Chinese government proposed in 2013. It aims to connect Asia, Africa, and Europe, based on and beyond the old and historical Silk Road routes. BRI basically has unleashed Chinese companies to build roads, railways, fiber-optic cables, and other hard infrastructure across the Eurasian supercontinent and beyond. BRI became national strategy in The Third Plenary Session of the 18th Constitution of the Communist Party of China (CPC) Central Committee in November 2013 and was incorporated in the CPC Constitution at the 19th National Congress of the CPC in 2017.

³ See Table A.2 in the Appendix for the list of BRI countries.

⁴ Cai (2017) notes that it is more about migrating surplus industries than dumping excess products.

for recent years. Before 2000, Chinese finance was limited in scale and content, as was China’s role in the global economy (Wolf et al., 2013).

AidData is a cross-country panel dataset that comprises annual data on foreign aid and other forms of concessional loans with low interest, long grace periods until first payments are due or extended repayment terms and non-concessional loans (provided by central, state, and local government institutions) from China to 139 developing countries between 2000 and 2014.⁵ The dataset primarily defines foreign assistance in terms of official development assistance (ODA), other official flows (OOF) and vague official finance (OF) from China to developing nations and territories in five regions of the world: Africa (AF), the Middle East (MEA), Asia and the Pacific (PAC), Latin America and the Caribbean (LAC), and Central and Eastern Europe (CEE).⁶ It includes 4314 Chinese development projects that were officially committed, in implementation, or completed between 2000 and 2014.⁷ Strange et al. (2017b) emphasise that this measure provides a reasonable approximation for official *commitments* from the Chinese Government. In addition to providing aggregate statistics, AidData report Chinese development finance by sector, project status, and a multitude of other variables. Total Chinese official finance commitments have been deflated to US\$2014. This dataset was constructed with the Tracking Underreported Financial Flows (TUFF) methodology developed by Strange et al. (2017a).

Next, we explore the scale and scope of Chinese aid commitments between 2000 and 2014. Only projects with completed financial values are included in the analysis. The study sample focuses on China’s official financial flows (ODA, OOF and OF) from 2654 projects in 139 developing nations. The final section includes three cases to illustrate Chinese development finance in the BRI countries. The Appendix provides a more detailed over view of the different aggregate outputs in AidData.

Table 1. Chinese official finance by regions and the nature of flows, in 2014 US\$ billions, 2000–14

Region	Total official finance		ODA-like	
	US\$	%	US\$	%
Africa	118.074	34	46.052	58
Central and Eastern Europe	56.718	16	2.751	3
Latin America and the Caribbean	53.389	15	9.877	12
South Asia	48.763	14	7.987	10
Southeast Asia	39.237	11	5.951	7
Central and North Asia	28.491	8	4.391	6
Middle East	3.140	1	0.466	1
The Pacific	2.813	1	2.157	3
Total	350.6		79.6	

Source: Authors’ estimates from Strange et al. (2017b).

⁵ Note that the AidData covers varying subsets of all countries in selective years, so that the resulting dataset comprises an unbalanced panel with gaps.

⁶ The full dataset includes 140 countries and territories and 4373 projects. However, we exclude territories from our analysis and further subdivide the world region into Central and North Asia (CNA), South Asia (SA), and Southeast Asia (SEA). Total Chinese official financing to North Korea should be treated with significant caution since both the Chinese government and the North Korean government barely published information on this foreign assistance.

⁷ By doing so, we ensure that: (1) financial values of all selected projects in the dataset are not double counted; (2) all selected projects have moved beyond the pledge stage; and (3) all suspended or cancelled projects are excluded.

Global Trends

The Chinese government committed around US\$351 billion in finance to 139 countries in Africa, Asia, and the Pacific, Latin America and the Caribbean, the Middle East, and Central and Eastern Europe (Table 1). The vast majority of Chinese official finance flows more to Africa than elsewhere, intervening to solve African infrastructure bottlenecks and providing access to Chinese export markets. This trend is verified by press reports (Poplak, 2016) and academic literature (Dreher et al., 2018; Dreher et al., 2021). There are criticisms, however, that the African continent interests China due to its mineral wealth. Chinese companies are engaged in the extraction of natural resources to export to China and sell to international markets. Studies also indicate that China's relation to Africa has passed through three distinct phases. The most recent stage is dominated by Chinese small- and medium-sized enterprises moving to Africa and elsewhere (Kaplinsky, 2010). China's aid to African countries consists of kind, zero-interest loans and concessional loans, all of which resemble ODA-like finance (Brautigam, 2011; Kiala, 2010). Indeed, Table 1 also shows that African nations received 58% of ODA-like projects financed by China between 2000 and 2014.

Central and Eastern Europe is second on the list in terms of aid received, followed by Latin America and the Caribbean, and South Asia. Russia primarily drives Chinese cooperation with Central and Eastern Europe through OOF-like finance in the energy sector (see below). In Latin America, much of Chinese investment is focused on natural-resource projects, especially in Argentina, Brazil, Cuba, Ecuador, and Venezuela. On the other end, Chinese investment in South Asia has been unique in focusing on infrastructure development. There have been two significant initiatives in South Asia: an economic development package signed in 2006 that includes building a seaport, oil refineries, and agricultural advancement and an agreement signed in 2010 for constructing two hydropower projects. The Middle East and the Pacific received relatively little aid over the study period. Middle East countries have received aid aimed at financing oil and gas projects, constructing a railway, and debt forgiveness. Most large projects in this region aligned with China's global resource strategy, to search and explore for oil in the Middle East. Most of the *other* forms of assistance have gone to debt forgiveness or cancellation, especially for Iraq.

Table 2. Top 20 recipients of Chinese official finance, in 2014 US\$ billions, 2000–14

Country	Region	Total official finance US\$
Russia	Central and Eastern Europe	36.623
Pakistan	South Asia	24.325
Angola	Africa	16.556
Ethiopia	Africa	14.834
Sri Lanka	South Asia	12.680
Laos	Southeast Asia	12.016
Venezuela	Latin America and the Caribbean	11.219
Turkmenistan	Central and North Asia	10.676
Sudan	Africa	10.237
Ecuador	Latin America and the Caribbean	9.953
Indonesia	Southeast Asia	9.338
Cambodia	Southeast Asia	8.715
Brazil	Latin America and the Caribbean	8.528
Kazakhstan	Central and North Asia	8.267
Belarus	Central and Eastern Europe	7.654
Nigeria	Africa	7.239
Cuba	Latin America and the Caribbean	6.778
Zimbabwe	Africa	6.089
Kenya	Africa	5.702
India	South Asia	5.569

Source: Authors' estimates from Strange et al. (2017b).

Table 2 shows the top-twenty recipients of total Chinese official finance, as a whole, aggregating flows from 2000–2014. We list the highest-ranked country in each region regarding the total amount of Chinese official finance allocated to that country. The most important Chinese official finance recipient is Russia, followed by Pakistan and Angola. Western sanctions and eagerness in improving weak infrastructure forced Russia to look toward China for investment opportunities (Hillman, 2020). In the new millennium, post-conflict Angola sought financial assistance from the donor community for reconstruction. However, failure to comply with the International Monetary Fund’s poverty reduction strategies paved the way for China’s entry as a donor. Moreover, both Russia and Angola are oil-rich countries, which address China’s chronic need for petroleum.⁸ Pakistan shares a border with China and is an important economic partner that provides geographic access to more countries in the Middle East and Asia (more details below).

Table 3 shows the top-twenty recipients of Chinese official finance according to the nature of the financial flow, as a whole, aggregating flows from 2000–2014. There are three distinct features of Chinese official finance: ODA-like, OOF-like and “Vague Official Finance” (OF). “ODA-like” projects are comparable to ODA as they are nominally intended to promote economic or social development, and they are provided at levels of concessionality (a 25% or higher grant element) that are consistent with the ODA criteria established by the OECD-DAC. “OOF-like” projects either have a non-developmental purpose or are insufficiently concessional to qualify as ODA. “Vague OF” projects represent official financial flows where there is insufficient open-source information to make a clear determination as to whether the flows are more similar to ODA or OOF. Dreher et al. (2017) note that most Vague OF is OOF since many of the observable attributes of projects coded as Vague OF [e.g., projects in the infrastructure and economic production sectors, projects financed with loans, projects funded by China Development Bank (CDB) and China Export-Import (EXIM) Bank] resemble the attributes of OOF projects more so than ODA projects (see Figure A.1 in the Appendix). See Table A.3 in the Appendix for examples of projects classified as Vague OF.

In terms of ODA-like finance, Cuba received the most aid (US\$6.7 billion), followed by Cote d’Ivoire (US\$3.10 billion) and Ethiopia (US\$3.7 billion). Cuba is China’s second-largest trading partner in the Latin American continent. China-Cuba bilateral cooperation achieved new heights in 2006 and recovered somewhat after the global financial crisis in 2011 (Xianglin et al., 2015). During the same period, China invested significantly in Cuban agriculture, tourism, education, and other social sectors (e.g., social research, performing arts, sports). The intensity of bilateral cooperation between China and Cote d’Ivoire has considerably risen since 2000. However, the Chinese aid, which several development projects in infrastructure building have illustrated, is mainly granted between 2002 and 2010—a period of significant crisis experienced by Cote d’Ivoire.⁹ In Ethiopia, Chinese ODA-like finance is modest but growing. China invests in Ethiopia’s technical and vocational education and training programs, provides food aid in drought-affected areas, and builds malaria prevention and agricultural demonstration centres (Shinn, 2014). Regarding OOF-like finance, Russia, Pakistan, and Angola are the top three recipients.

⁸ By 2009, China began a shift from being a petroleum exporting country to a net importer of petroleum consuming 5.46 million barrels a day (The New Atlantis, 2004). Angola agreed to provide China with 10,000 barrels of oil per day from its oil exports (Kiala, 2010).

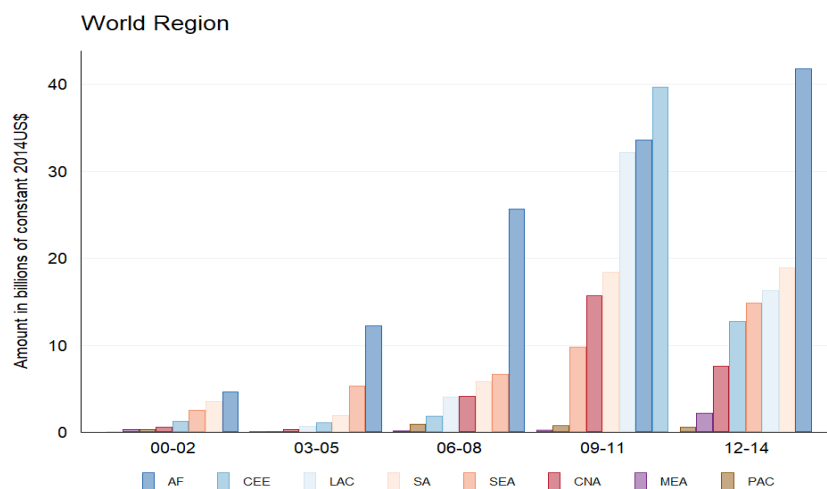
⁹ Cote d’Ivoire experienced civil war and conflict that began in September 2002.

Table 3. Top 20 recipients of Chinese official finance by the nature of flows, in 2014 US\$ billions, 2000–14

<u>Country</u>	<u>ODA-like</u> US\$	<u>Country</u>	<u>OOE-like</u> US\$
Cuba	6.681	Russia	36.620
Cote D'Ivoire	3.967	Pakistan	16.266
Ethiopia	3.659	Angola	13.375
Zimbabwe	3.606	Laos	10.969
Cameroon	3.403	Venezuela	10.769
Nigeria	3.084	Turkmenistan	10.055
Tanzania	3.024	Ecuador	9.681
Cambodia	3.013	Brazil	8.528
Sri Lanka	2.792	Sri Lanka	8.222
Ghana	2.527	Kazakhstan	6.733
Mozambique	2.430	Belarus	6.562
Pakistan	2.413	Sudan	6.292
Congo	2.095	India	5.569
Kenya	1.600	Indonesia	5.503
Kyrgyzstan	1.549	Cambodia	4.961
Sudan	1.487	Argentina	4.637
Bangladesh	1.439	South Africa	4.315
Zambia	1.423	Ukraine	3.689
Niger	1.406	Kenya	3.519
Uganda	1.291	Nigeria	2.952

Source: Authors' estimates from Strange et al. (2017b).

Figure 1. Chinese official finance over time by regions, 2000–14

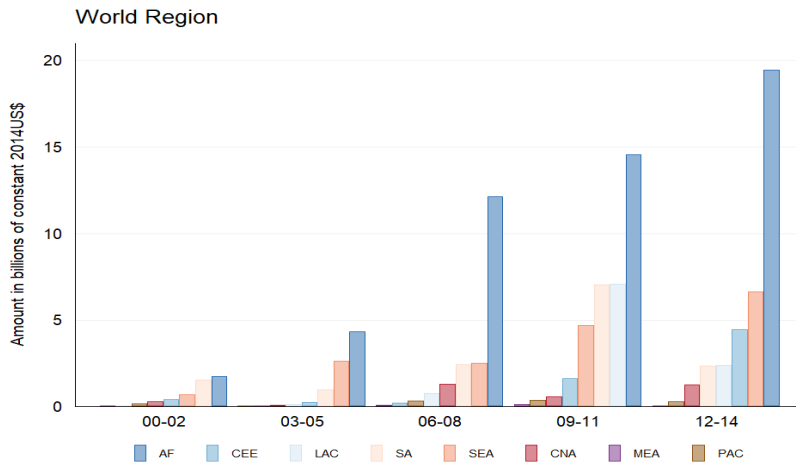


Note: AF = Africa, CEE = Central and Eastern Europe, LAC = Latin America and the Caribbean, SA = South Asia, SEA = South East Asia, CNA = Central and North Asia, MEA = Middle East, and PAC = Asia and the Pacific.

Source: Authors' estimates from Strange et al. (2017b).

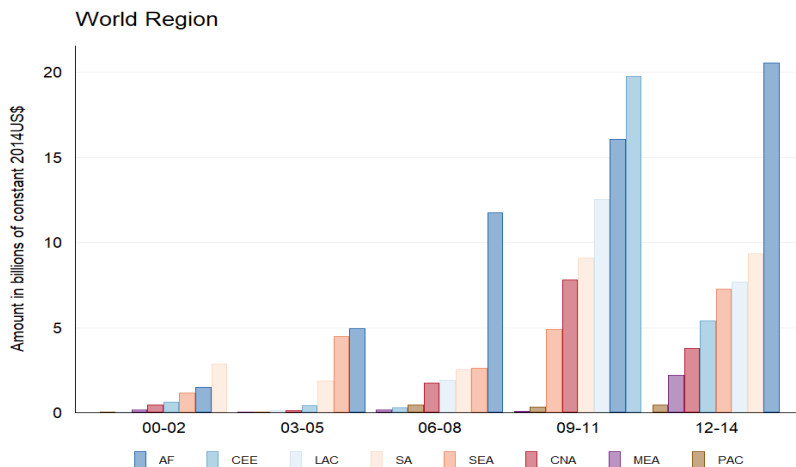
Figure 1 shows the global allocation of China's official finance over time by region. The monetary amounts committed by the Chinese government have risen steadily since 2000. African countries are the top recipients since China's official finance in Africa consists of grants, zero-interest loans, and concessional loans (see Figures 2–3). China's official finance in Africa is US\$5 billion in 2000–02, and it has increased to US\$34 billion in 2006–08. While China is not a major provider of foreign assistance

Figure 2. Chinese official grants over time by regions, 2000–14



Note: AF = Africa, CEE = Central and Eastern Europe, LAC = Latin America and the Caribbean, SA = South Asia, SEA = South East Asia, CNA = Central and North Asia, MEA = Middle East, and PAC = Asia and the Pacific.
Source: Authors' estimates from Strange et al. (2017b).

Figure 3. Chinese official loans over time by regions, 2000–14



Note: AF = Africa, CEE = Central and Eastern Europe, LAC = Latin America and the Caribbean, SA = South Asia, SEA = South East Asia, CNA = Central and North Asia, MEA = Middle East, and PAC = Asia and the Pacific.
Source: Authors' estimates from Strange et al. (2017b).

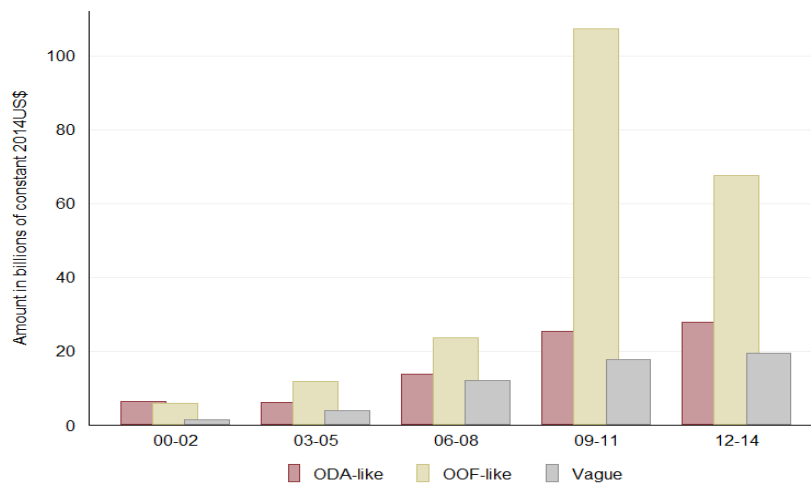
in Latin America and the Caribbean, Beijing has strengthened economic engagement with the region since 2003. China's growing interest in this region appears to be primarily linked to its desire of establishing diplomatic ties with the region. Other goals include gaining access to markets and opportunities for Chinese goods and investment. On the other hand, the cooperation between China and Central and Eastern European countries has taken a new turn since 2011. As part of this cooperation, around US\$19 billion of Chinese loan was granted to Central and Eastern European countries during 2009–11 (Figure 3). This situation changed over the 2012–14 period, when both sides met a series of obstacles; especially, a discrepancy between official declarations and reality, among others. Against this backdrop, China has significantly increased its contributions to Africa, Southeast Asia, and South Asian countries over the same period. Figures 2 and 3 show that the grants and loan components of

finance steadily increased in these regions after 2011, reaching their highest level of US\$20 billion over 2012–14. This rising trend is attributable to the accelerated implementation of projects in these regions under the BRI.

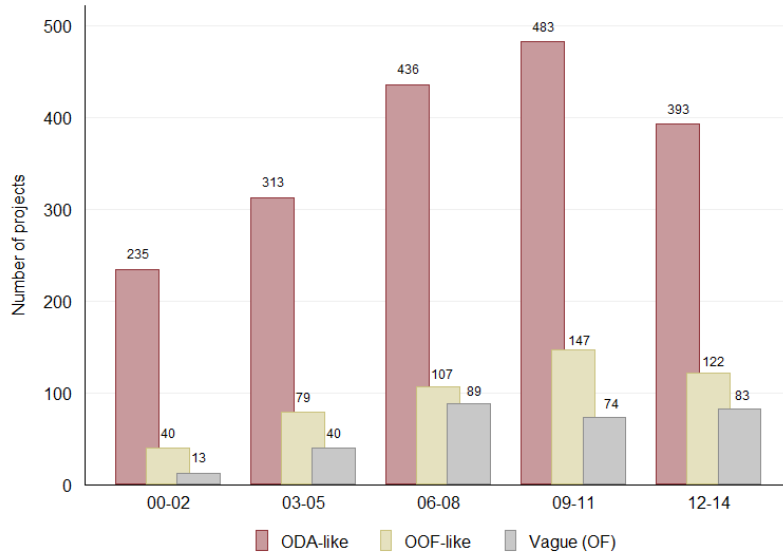
Nature of Financial Flows

Figure 4 shows the distribution of Chinese projects and official finance flows over time, separating ODA-like, OOF-like and Vague OF-like finance projects. The figure shows an increasing trend in monetary values in ODA-like and Vague OF-like finance projects. The projects that can be identified as OOF-like do not show a clear upward trend in both project numbers and monetary values. This is most likely due to the lack of accurate information to identify a project as OOF-like. Much of the increase in Vague OF-like finance should be due to OOF-like flows (Strange et al., 2017a). In terms of monetary amounts, ODA-like projects represent only a small percentage of total official finance. China’s State Council Report (2011) notes that only 40% of China’s aid has been financed through grants, which qualify as ODA. OOF-like projects appear to be given in more significant amounts in financial terms during 2009–11. The dramatic spike in 2009–11 can be related to the rapid expansion of Chinese projects in the energy, transportation, and construction sectors in countries like Russia, Turkmenistan, Angola, Venezuela, Brazil and Pakistan (see Table A.4 in the Appendix). The bottom panel of Figure 4 shows that there are a significant number of projects that can be classified as either ODA-like or OOF-like. Over the entire 2009–11 period, 483 projects were coded as ODA-like, the corresponding number of OOF-like projects was 147.¹⁰ This discrepancy is primarily attributable to the sectoral distribution of Chinese official finance (more details below).

Figure 4. Chinese official finance over time by the nature of flows, 2000–14



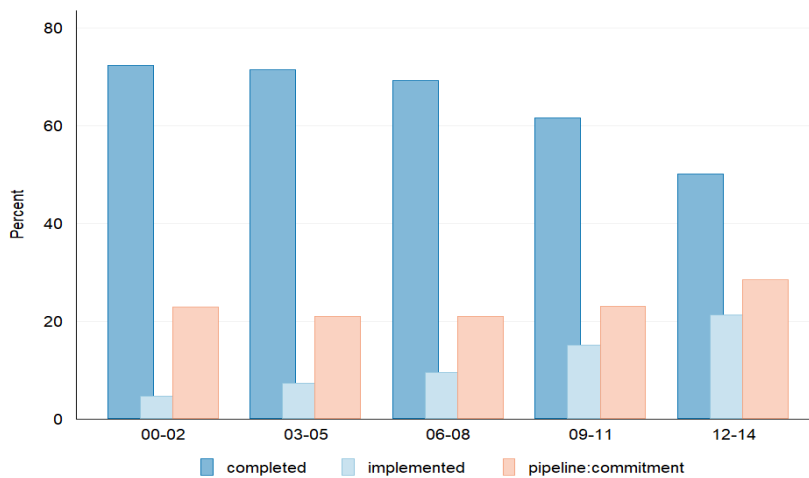
¹⁰ Figure A.2 in the Appendix shows Chinese finance by the type of financial flows.



Source: Authors' estimates from Strange et al. (2017b).

Figure 5 shows the distribution of ODA-like projects over time, separating projects currently being implemented and completed projects, from commitment projects. Projects that are implemented or completed can be classified as disbursements of Chinese official financing. Projects that require multiple financial transactions or the provision of goods and services should be treated as “pipeline”. The pipeline category with a commitment status indicates a written and formal binding contract. Projects are more likely to have reached the completion stage over time than those that are implemented or committed. Projects that have reached at least commitment or implemented stage show an increasing trend over time.

Figure 5. Chinese (ODA-like) finance over time by project status, 2000–14



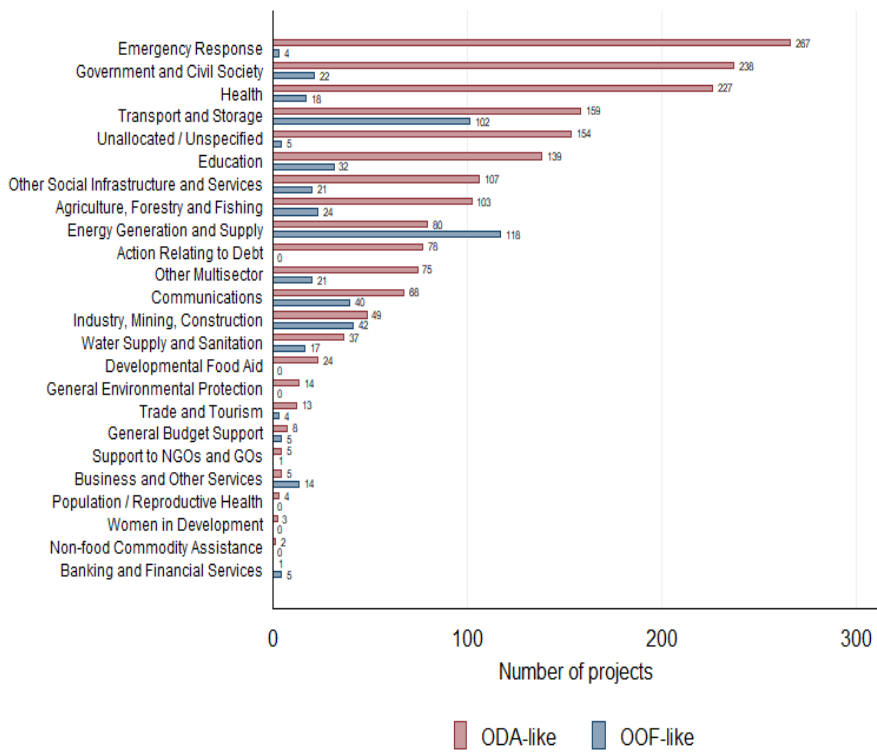
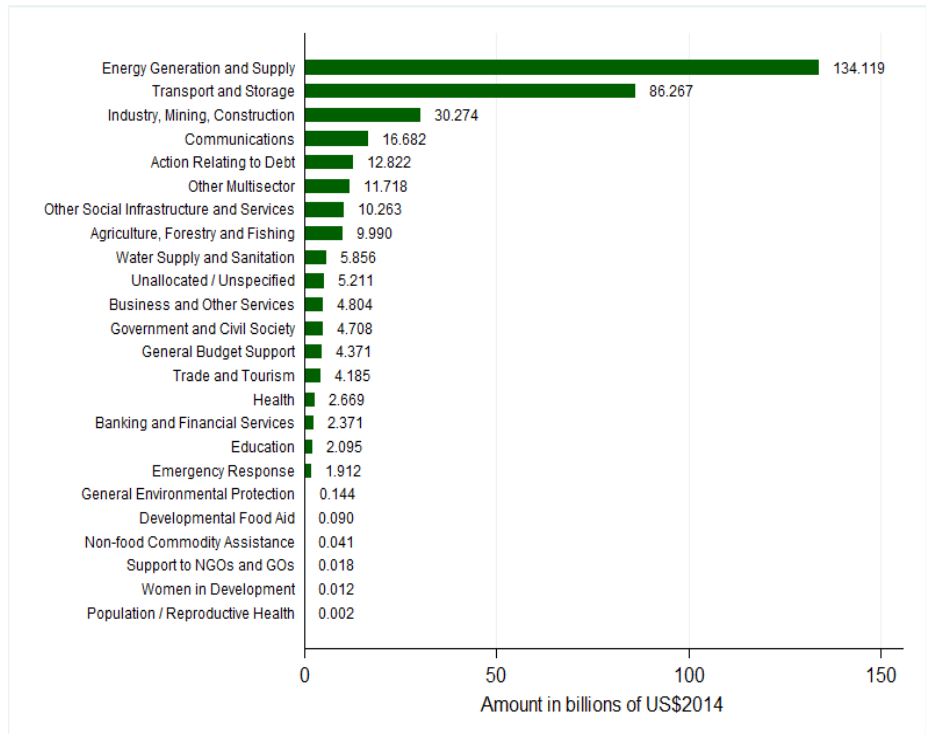
Source: Authors' estimates from Strange et al. (2017b).

Sectoral Distribution

Figure 6 shows sectoral allocation of Chinese official finance. The top panel of Figure 6 shows that, in monetary terms, China invests significantly more in Energy Generation (US\$13 billion), Transportation (US\$86 billion), and Industry, Mining, and Construction (US\$30 billion) than in other sectors. This is also highlighted by Hwang et al. (2016) and in the 2014 White Paper (State Council, 2014) that China intends to provide finance for building infrastructure in the Transport and Energy sectors. At the bottom of the list, sectors like “Non-food Commodity Assistance” “Support to NGOs and GOs”, “Women in Development” and “Population and Reproductive Health” are trivial in terms of monetary values, and AidData could track only a few projects in these sectors.

The graph in the bottom panel shows the sectoral allocation of Chinese projects. The vast majority of Chinese projects are in the Humanitarian, Governance and Civil Society, and Health sectors, with an overall number of 271,260 and 245 projects, respectively. This discrepancy is attributable to what is being counted (ODA or OOF flows) across sectors. Given the explicit economic interest of China in specific sectors, such as the Energy or the Transportation sectors, OOF allocation is more likely to be affected (Guillon and Mathonnat, 2020). OOF flows are usually non-concessional; and thus, play a major role in the volume of aid allocation. On the other hand, pure altruism motivates China to target ODA allocation for the social sector (Health, Humanitarian, or Governance), where economic returns of ODA are lower than in the economic or production sectors. ODA allocation in the social sector might also be used by China as a soft power to extend its international support and visibility (Guillon and Mathonnat, 2020). Indeed, Bräutigam (2009) notes that China is becoming a major global power in the Health sector, and since 2000, China has been one of the top five humanitarian aid providers among non-DAC countries.

Figure 6. Number and total value of projects by sectors, 2000–14



Source: Authors' estimates from Strange et al. (2017b).

Donor Intention and Project Status

Table 4 shows Chinese projects by donor intention and status between 2000 and 2014. There are basically four distinct purposes of Chinese finance: development in the recipient country, commercial interest in the donor country, a donor-recipient relationship (i.e., representative) and a combination of two or more donor motivations (i.e., mixed). Globally, China intends to invest in projects that promote economic development and welfare within the recipient country; however, there are downward development finance trends in almost all regions during 2000–14. Interestingly, this is more marked in South Asia than elsewhere: from 100% in 2000 to about 57% in 2014. It may be because China does not intend to receive a future monetary reward or profit from this assistance. Humanitarian assistance or emergency management, capacity building within the recipient country to sustain social programs long term fall into this category. It seems like China is likely to invest in projects that have both commercial and development intent or in projects that have both symbolic and development intent in recent years. This is more marked in Central and Eastern Europe than elsewhere. Interestingly, there is a noticeable trend in Chinese finance that represents a symbolic gesture of *goodwill* or can advance an official relationship, especially in Asia and Central and East Europe between 2011 and 2014. These projects do not necessarily directly promote China’s commercial interests in recipient countries. Some analyses appear to suggest that China aims to promote its image and legitimacy abroad in recent years, so that they can be easily distinguishable from traditional or multilateral donors particularly in the development sector (Albert, 2018; Shambaugh, 2015; Zhang, 2017). African countries have been seen as a testing ground for such diplomatic experiments (Bräutigam, 2009). Examples might include transferring information about China’s own experience with urbanisation, economic growth, and poverty alleviation. Other important components of Chinese assistance include scholarships for university study in China, and more recently the introduction of a Chinese youth volunteer corps, which aims to assist in various development projects in recipient countries.

Table 4 also shows the trend in project status over time. Globally, projects announced between 2011 and 2014 are less likely to have reached the completion stage than those announced in earlier years. These are more marked in Southeast Asian countries than elsewhere. On the contrary, the scale and scope of pipeline projects are increased over time, particularly in South Asia, Central and North Asia, and Central and Eastern Europe. This is probably due to China’s flagship BRI programs that create an infrastructure corridor from China to Central Asia and Europe, and a “Maritime Silk Road” that links China to South Asia through a series of deep-water ports along the Indian Ocean.

Table 4. Chinese projects by donor intention and project status, 2000–14

Region	2000	2002	2005	2008	2011	2014
				Commercial (%)		
Africa	0.0	0.0	0.0	0.0	2.2	0.0
Central and Eastern Europe	0.0	20.0	20.0	20.0	0.0	0.0
Latin America and the Caribbean	0.0	0.0	12.5	0.0	5.56	0.0
South Asia	0.0	0.0	0.0	0.0	0.0	0.0
Southeast Asia	0.0	0.0	0.0	0.0	0.0	0.0
Central and North Asia	0.0	0.0	0.0	0.0	14.3	0.0
Middle East	0.0	0.0	0.0	0.0	0.0	0.0
The Pacific	0.0	0.0	0.0	0.0	0.0	0.0

Region	2000	2002	2005	2008	2011	2014
			<u>Development (%)</u>			
Africa	100.0	88.9	87.5	71.7	78.2	85.7
Central and Eastern Europe	75.0	80.0	60.0	60.0	50.0	33.3
Latin America and the Caribbean	75.0	100.0	37.5	60.0	38.9	46.2
South Asia	100.0	80.0	50.0	85.7	50.0	57.1
Southeast Asia	66.67	85.7	60.0	50.0	25.0	57.1
Central and North Asia	83.33	75.0	83.3	80.0	28.6	66.7
Middle East	100.0	100.0	100.0	100.0	100.0	85.7
The Pacific	66.67	100.0	100.0	100.0	66.7	83.3
			<u>Representative (%)</u>			
Africa	0.0	5.6	2.5	19.6	10.9	2.4
Central and Eastern Europe	0.0	0.0	20.0	0.0	25.0	33.3
Latin America and the Caribbean	0.0	0.0	25.0	20.0	16.7	23.1
South Asia	0.0	20.0	0.0	14.3	16.7	28.6
Southeast Asia	16.67	14.3	10.0	16.7	12.5	28.6
Central and North Asia	0.0	0.0	0.0	0.0	28.5	16.7
Middle East	0.0	0.0	0.0	0.0	0.0	14.3
The Pacific	33.30	0.0	0.0	0.0	16.7	16.7
			<u>Mixed (%)</u>			
Africa	0.0	5.6	10.0	8.9	8.7	11.9
Central and Eastern Europe	25.0	0.0	0.0	20.0	25.0	33.3
Latin America and the Caribbean	25.0	0.0	25.0	20.0	38.9	30.7
South Asia	0.0	0.0	50.0	0.0	33.3	14.3
Southeast Asia	16.67	0.0	30.0	33.0	62.5	14.3
Central and North Asia	16.67	25.0	16.7	20.0	28.5	16.7
Middle East	0.0	0.0	0.0	0.0	0.0	0.0
The Pacific	0.0	0.0	0.0	0.0	16.7	0.0
			<u>Completed projects (%)</u>			
Africa	62.1	52.8	52.5	65.0	21.7	21.4
Central and Eastern Europe	75.0	80.0	80.0	60.0	37.5	22.2
Latin America and the Caribbean	50.0	66.7	37.5	50.0	55.6	53.9
South Asia	75.0	100.0	100.0	28.6	33.3	0.0
Southeast Asia	83.3	42.9	70.0	100.0	62.5	42.9
Central and North Asia	66.7	25.0	33.3	60.0	28.6	16.7
Middle East	75.0	0.0	0.0	33.3	57.1	57.1
The Pacific	66.7	25.0	0.0	42.9	50.0	50.0
			<u>Implemented projects (%)</u>			
Africa	13.8	11.1	12.5	19.6	23.9	23.8
Central and Eastern Europe	0.0	0.0	0.0	0.0	25.0	11.1
Latin America and the Caribbean	0.0	0.0	0.0	10.0	5.6	0.0
South Asia	0.0	0.0	0.0	28.6	16.7	14.3
Southeast Asia	0.0	0.0	0.0	0.0	37.5	14.3
Central and North Asia	0.0	0.0	0.0	20.0	28.6	16.7
Middle East	0.0	33.3	0.0	0.0	0.0	42.9
The Pacific	0.0	25.0	50.0	14.3	33.3	33.3
			<u>Pipeline: commitment projects (%)</u>			
Africa	24.1	36.1	35.0	34.8	54.4	54.8
Central and Eastern Europe	25.0	20.0	20.0	40.0	37.5	66.7
Latin America and the Caribbean	50.0	33.3	62.5	40.0	38.9	46.2
South Asia	25.0	0.0	0.0	42.9	50.0	85.2
Southeast Asia	16.7	57.1	30.0	0.0	0.0	42.9
Central and North Asia	33.3	75.0	66.6	20.0	42.9	66.7
Middle East	25.0	66.7	100.0	60.7	42.9	0.0
The Pacific	33.3	50.0	50.0	42.9	16.7	16.7

Source: Authors' estimates from Strange et al. (2017b).

Case Studies

This section illustrates Chinese official finance in selected BRI countries.

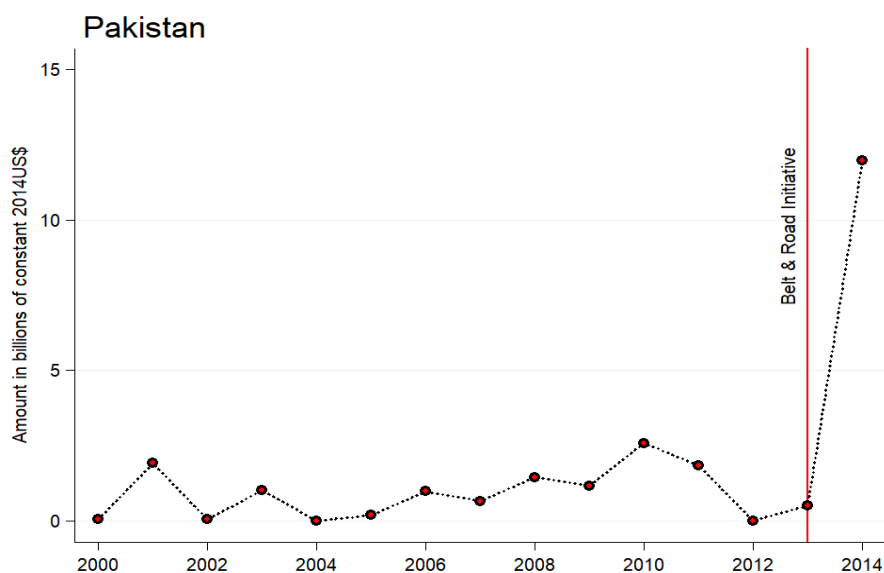
Pakistan

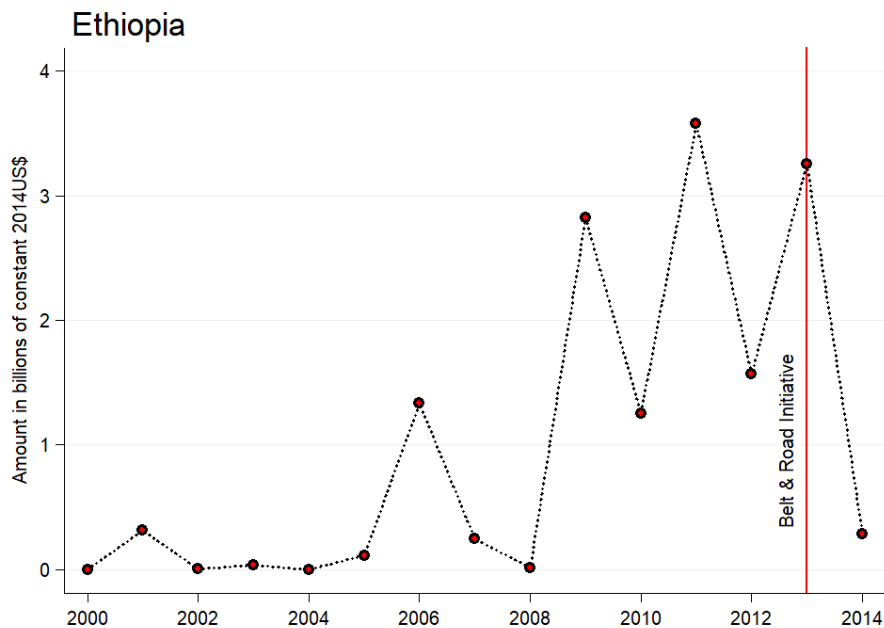
Pakistan has deep political and security ties with China and is one of China's BRI key countries in the South Asia region. Despite this, bilateral cooperation in terms of trade and investment has not considerably risen until 2013. Wolf (2013), for example, notes that only 6% of Chinese investment was realised between 2001 and 2011. However, there has been a welcome change since the China-Pakistan Economic Corridor (CPEC) was announced in 2013. The CPEC consists of infrastructure projects linking the province of Xinjiang with Gwadar port in Baluchistan in Pakistan. Although the CPEC was launched in 2015, some of China's investment projects that started in earlier years were also brought under the CPEC umbrella, including the Gwadar port development project—the largest BRI project. This is evident in Figure 7. In 2014, the Chinese government announced its intention to finance energy and infrastructure projects in Pakistan as part of CPEC (see Table A.5).

Indonesia

Indonesia is not the largest recipient of Chinese aid. Still, Chinese engagement and assistance under the BRI umbrella converge neatly with Indonesia's national policy priorities predicated upon development, prosperity, defence self-reliance and the pursuit of global diplomatic stature. The momentum for enhanced cooperation between Indonesia and China gathered pace during 2000–14 with the signing of the *Strategic Partnership* in 2005, which was then elevated to a *Comprehensive Strategic Partnership* in 2013. This bilateral relationship has increasingly cemented Indonesia's importance in the Association of South-East Asian Nations (ASEAN)-centred region. On the other hand, China increasingly seeks to win over Southeast Asia's largest nation for its energy security (e.g., coal, palm oil and liquefied natural gas) and access to Indonesia's 242 million-strong consumer market.

Figure 7. Total Chinese official finance in selected countries over time, 2000–14





Note: The vertical straight line shows China's Belt and Road Initiative in 2013.
 Source: Authors' estimates from Strange et al. (2017b).

Indonesia received on an average 2.4% of total Chinese aid during 2000–14 (Strange et al., 2017b). Still, this amounted to US\$17 billion for 86 projects (Strange et al., 2017b), or an average of US\$1.0 to US\$2.5 billion in aid per year (see Figure 7). China's financial assistance to Indonesia primarily consists of concessional loans towards infrastructure development projects. For example, China's aid to

Indonesia has financed bridges, roads, power plants and a limited number of railway projects—all designed and constructed by Chinese firms.

Figure 7 shows that the value of China's cumulative investments in Indonesia, including those in the gas and oil sectors, reached its peak in 2003 but then dropped sharply by 2007. During the same year, China made a loan commitment for various projects in Indonesia, especially in the health, government and civil society and humanitarian sectors. In recent years, Indonesia has become the prime location for China to invest in power plants. As a result, Indonesia received a large amount of committed funding from Chinese banks during 2008–09 (see Table A.5), and the new plants were scheduled to become operational by either 2009 or 2010. By 2013, Indonesia received significant funding for the completion of a dam and a power plant construction. The Indonesian government, for example, signed a contract with the Chinese firm on the construction of the Jatigede dam in Cirebon, West Java. The EXIM Bank of China would bear 90% of the projects' financing, and the dam has started to function since 2015.

Ethiopia

China is actively engaged in Ethiopia's economic development as elsewhere in Africa. This bilateral relationship entered a new phase in 2006, when the Ethiopian government signed a significant agreement on financing with the China EXIM bank, which led to a rapid rise in the number of Chinese infrastructure projects (e.g., building highways and bridges, dams and power stations, cell phone networks, schools, and pharmaceutical factories). In 2010, China and Ethiopia announced loans to cover the cost of a light rail system in Addis Ababa, the purchase of nine vessels for Ethiopian Shipping Lines, and the construction of 200 buildings for the Ethiopian Housing Corporation (Shinn, 2014). In the following year, the China Railway Group and Ethiopian Railway Corporation signed a US\$1.1 billion agreement for the construction of the first phase of the Ethio-Djibouti railway project (Shinn, 2014). By the end of 2011, China's lending to Ethiopia reached around US\$ 3.5 billion (Figure 7). The most important investment was China's loan for the Ethiopian rail line from Sebeta to Adama (see Table A.5). By 2013, loans from China reached a little above US\$3 billion, of which US\$2.8 billion was for the Ethio-Djibouti railway project.

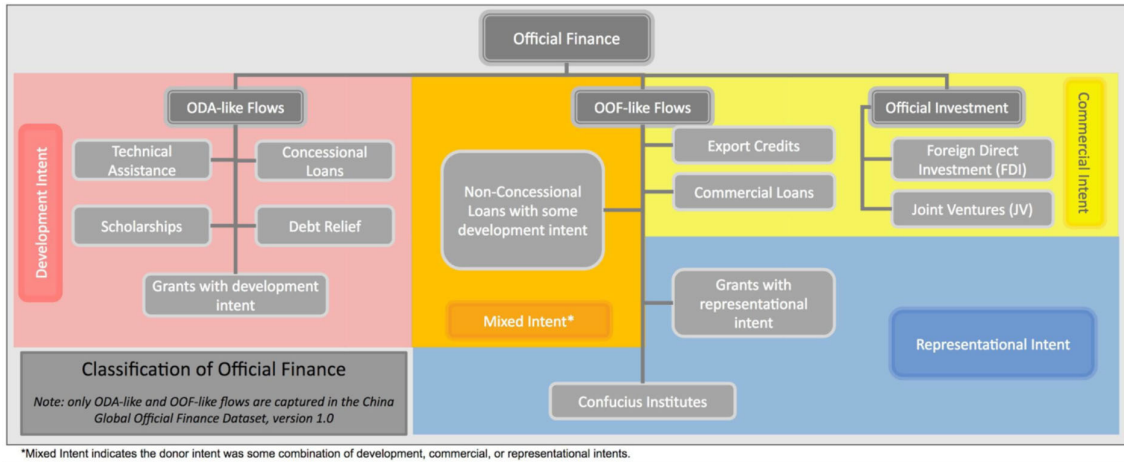
References

- Albert E (2018) *China's Big Bet on Soft Power*. Available at: <https://www.cfr.org/backgrounder/chinas-big-bet-soft-power> (accessed Accessed on 3 March 2020).
- Brautigam D (2011) Chinese Development Aid in Africa: What, Where, Why, and How Much? <https://deborahbrautigam.files.wordpress.com/2013/04/2011-brautigam-chinese-aid-in-africa.pdf>.
- Bräutigam D (2009) *The Dragon's Gift: The Real Story of China in Africa*. New York: Oxford University Press.
- Cai P (2017) *Understanding China's Belt and Road Initiative*. Australia: Lowy Institute.
- Davies P (2007) China and the End of Poverty in Africa - Towards Mutual Benefit? , Diakonia and Eurodad Report, Sundbyberg, Sweden. <https://gsdrc.org/document-library/china-and-the-end-of-poverty-in-africa-towards-mutual-benefit/>
- Dreher A, Fuchs A, Parks B, et al. (2018) Apples and Dragon Fruits: The Determinants of Aid and Other Forms of State Financing from China to Africa. *International Studies Quarterly* 62(1): 182-194.

- Dreher A, Fuchs A, Parks BC, et al. (2017) Aid, China, and Growth: Evidence from a New Global Development Finance Dataset. AidData Working Paper #46: Williamsburg, VA: AidData.
- Dreher A, Fuchs A, Parks BC, et al. (2021) Aid, China, and Growth: Evidence from a New Global Development Finance Dataset. *American Economic Journal: Economic Policy* 13(3): 1-40.
- Guillon M and Mathonnat J (2020) What can we learn on Chinese aid allocation motivations from available data? A sectorial analysis of Chinese aid to African countries. *China Economic Review* 60: 101265.
- Hillman EJ (2020) China and Russia: Economic Unequals. <https://www.csis.org/analysis/china-and-russia-economic-unequals>.
- Hwang J, Bräutigam D and Eom J (2016) How Chinese Money is Transforming Africa: It's Not What You Think. China Africa Research Initiative (CARI). Washington D.C.: The John Hopkins University School of Advanced International Studies (SAIS). <https://www.pairault.fr/sinaf/index.php/15-references/826-how-chinese-money-is-transforming-africa-it-s-not-what-you-think>
- Kaplinsky RD (2010) China and Sub-Saharan Africa: Impacts and Challenges of a Growing Relationship. In: Padayachee V (ed) *The Political Economy of Africa*. London: Routledge, pp.389–409.
- Kiala C (2010) China–Angola aid relations: strategic cooperation for development? *South African Journal of International Affairs* 17(3): 313-331.
- Naím M (2007) Missing Links: Rogue Aid. *Foreign Policy*.(159): 96-95.
- Poplak R (2016) The new scramble for Africa: how China became the partner of choice. 22 December. Accessed at <https://www.theguardian.com/global-development-professionals-network/2016/dec/22/the-new-scramble-for-africa-how-china-became-the-partner-of-choice>.
- Shambaugh D (2015) *China's Soft-Power Push*. Available at: <https://www.foreignaffairs.com/articles/china/2015-06-16/chinas-soft-power-push> (accessed on 3 March 2020).
- Shinn DH (2014) Ethiopia and China. *International Journal of Ethiopian Studies* 8(1 & 2): 149-164.
- State Council (2011) China's Foreign Aid. People's Republic of China, Beijing: Information Office of the State Council.
- State Council (2014) White Paper on China's Foreign Aid. Beijing, China: Xinhua/Information Office of the State Council. http://english.www.gov.cn/archive/white_paper/2014/08/23/content_281474982986592.htm
- Strange A, Mengfan C, Brooke R, et al. (2017a) Tracking Underreported Financial Flows (TUFF) Methodology, Version 1.3. Williamsburg, VA: AidData.
- Strange AM, Dreher A, Fuchs A, et al. (2017b) Tracking Underreported Financial Flows: China's Development Finance and the Aid–Conflict Nexus Revisited. *Journal of Conflict Resolution* 61(5): 935-963.
- The New Atlantis (2004) Power Hungry China. Session No. 4, 114-116.
- Wolf C, Jr., Wang X and Warner E (2013) *China's Foreign Aid and Government-Sponsored Investment Activities: Scale, Content, Destinations, and Implications*. RAND Corporation.
- Xianglin M, Hearn AH and Weiguang L (2015) China and Cuba: 160 Years and Looking Ahead. *Latin American Perspectives* 42(6): 140-152.
- Zhang D (2017) Why cooperate with others? Demystifying China's trilateral aid cooperation. *The Pacific Review* 30(5): 750-768.

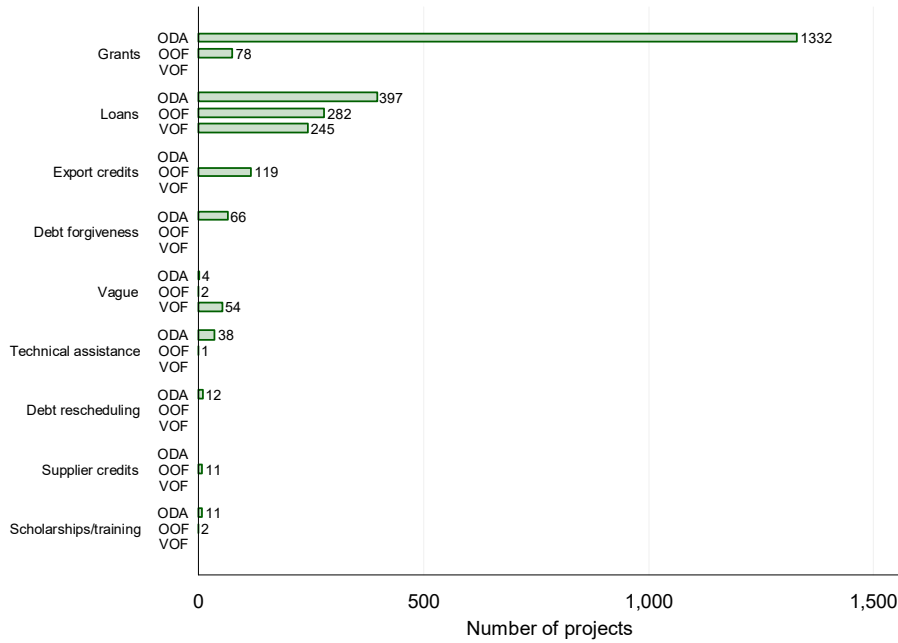
Appendix

Figure A.1 Classification of China's official finance



Source: Strange et al. (2017a).

Figure A.2 Number of Chinese projects by the type of flows, 2000–14



Source: Strange et al. (2017b).

Table A.1 Similarities and differences between OECD-defined ODA and “Chinese Aid”

	Government to government	Financing to development agency	Strong links to donor country economy	Concessional or favourable linking terms	Receive payment or debt in kind	Grant element of at least 25%	Private or corporate financing
OECD aid donor	Yes ^a	Yes	No	Yes	No	Yes	No
China	Yes	No ^b	Yes ^c	Yes	Yes ^d	No	No

Notes:

a. Grants may be awarded to NGOs based in either the donor country or recipient country.

b. Chinese aid is mainly provided in the form of concessional loans administered by the China EXIM bank. Also, export credits and investment are part of Chinese aid, and unlike other donors, China does not consider debt relief as foreign aid.

c. Aid projects facilitate the export of natural resources and commodities to China and utilise Chinese companies, materials, and labour.

d. In some cases, aid recipients make payments on loans from China with oil or minerals.

Source: Bräutigam (2009) and Davies (2007).

Table A.2 List of BRI countries with the membership year

Country	Year	Country	Year
Afghanistan	2014	Latvia	2016
Albania	2017	Moldova	2015
United Arab Emirates	2015	Maldives	2014
Armenia	2015	Macedonia	2015
Azerbaijan	2015	Myanmar	2014
Bangladesh	2016	Montenegro	2017
Bulgaria	2015	Mongolia	2014
Bahrain	2016	Malaysia	2015
Bosnia and Herzegovina	2017	Nepal	2014
Belarus	2014	Oman	2014
Brunei	2014	Pakistan	2014
Bhutan	2015	Philippines	2017
Cyprus	2015	Poland	2015
Czech Republic	2015	Palestine	2017
Egypt	2016	Qatar	2014
Estonia	2017	Romania	2015
Georgia	2015	Russia	2015
Croatia	2017	Saudi Arabia	2014
Hungary	2015	Singapore	2015
Indonesia	2015	Serbia	2015
India	2014	Slovakia	2015
Iran	2016	Slovenia	2017
Iraq	2015	Syria	2017
Israel	2017	Thailand	2017
Jordan	2015	Tajikistan	2014
Kazakhstan	2013	Turkmenistan	2014
Kyrgyzstan	2014	Timor-Leste	2014
Cambodia	2016	Turkey	2015
Kuwait	2014	Ukraine	2016
Laos	2016	Uzbekistan	2014
Lebanon	2017	Vietnam	2015
Sri Lanka	2014	Yemen	2016
Lithuania	2017		

Source: Authors' estimates from <https://eng.yidaiyilu.gov.cn/dsjym.htm>

Table A.3 Largest project size by financial amounts (in 2014 US\$ millions), 2000–14

Country	Year	US\$ million	Sector	Flow class	Flow type	Title	Purpose
Russia	2009	20356	Energy Generation and Supply	OOF	Loan	Part 1: CDB to offer loans to Russian Roseneft and Transneft	Commercial
Russia	2009	13571	Energy Generation and Supply	OOF	Loan	Part 2: CDB to offer loans to Russian Roseneft and Transneft	Commercial
Laos	2012	7625	Transport and Storage	OOF	Loan	China EXIM Bank loan for construction of Kunming-Vientiane high-speed railway link	Mixed
Cuba	2011	6660	Action Relating to Debt	ODA	Debt Forgiveness	China forgives US\$6B worth of Cuban Debt	Development
Turkmenistan	2009	5428	Industry, Mining, Construction	OOF	Loan	China Provides US\$4B for South Yolotan Osman Field Development	Mixed
Turkmenistan	2011	4551	Industry, Mining, Construction	OOF	Loan	China Provides US\$4.1 billion for Ioujno-Elotenshoie Field Development	Commercial
Venezuela	2011	4440	Other Social Infrastructure and Services	OOF	Loan	ICBC loans Venezuela oil firm US\$4B for construction of housing projects	Mixed
Brazil	2010	4402	Energy Generation and Supply	OOF	Loan	CDB extends \$3.5B loan to Petrobras from US\$5B line of credit	Commercial
Venezuela	2013	4087	Energy Generation and Supply	OOF	Loan	CDB funds US\$4B PDVSA and CNPC joint venture Sinovensa in Orinoco belt	Commercial
Pakistan	2014	4001	Energy Generation and Supply	OOF	Export Credits	Part III: China's financial package loan includes preferential buyer credit of US\$4B to Pakistan for Karachi Nuclear Power Plant's K-2/K-3	Commercial
Ukraine	2012	3177	Agriculture, Forestry and Fishing	OOF	Loan	EXIM Bank agrees US\$3B for Ukraine Agricultural Projects	Mixed
Belarus	2013	3050	Business and Other Services	OOF	Loan	China EXIM Bank and CDB loan US\$3B for China-Belarus Industrial Park	Mixed
Ethiopia	2013	2847	Transport and Storage	VOF	Loan	Chinese Banks Loan US\$3.3B for Addis Ababa-Djibouti Railway Project	Development
Bahamas	2011	2719	Trade and Tourism	OOF	Loan	China EXIM Bank loans US\$2.45B to Bahamas for the Baha Mar Resort	Mixed
Ethiopia	2011	2664	Transport and Storage	VOF	Loan	China loans US\$2400M for Rail Line From Sebeta to Adama in Ethiopia	Development
Pakistan	2014	2309	Transport and Storage	VOF	Loan	China pledges loan of Rs233.4177B to Pakistan for Karachi-Lahore highway	Development
Pakistan	2014	2250	Energy Generation and Supply	OOF	Export Credits	Part II: China's financial package loan includes buyer credit of US\$2.250B to	Commercial

SouthAfrica	2013	2237	Energy Generation and Supply	VOF	Loan	Pakistan for Karachi Nuclear Power Plant's K-2/K-3	Commercial
						ICBC signs funding support agreement for South African renewable energy projects	
Angola	2011	2220	Energy Generation and Supply	VOF	Loan	CDB loans US\$2B to oil company Sonangol in Angola	Mixed
Ecuador	2011	2220	Other Multisector	VOF	Loan	Ecuador Signs US\$2B loan with CDB for renewable energy purposes	Mixed
Iran	2014	2143	Transport and Storage	VOF	Loan	CMC and SUPOWER signed agreement on the railway electrification program	Development
Cote D'Ivoire	2012	2118	Transport and Storage	ODA	Loan	Chinese company building railway in Ivory Coast from Man to San Pedro	Development
Argentina	2014	2100	Transport and Storage	VOF	Loan	China commits US\$2.1B loan for rehabilitation of Belgrano Cargas railway	Mixed
Angola	2014	2000	Energy Generation and Supply	VOF	Loan	CDB provided US\$2B loan to Sonangol	Mixed
Pakistan	2011	1831	Energy Generation and Supply	VOF	Loan	Loans from Silk Road Fund, China EXIM, and CDB for Korrak hydropower project/ Korat Dam in Pakistan	Mixed
Kazakhstan	2011	1776	Industry, Mining, Construction	VOF	Loan	CDB loans Samruk-Kazyna Fund US\$2B; allocates US\$1.6M for ENRC iron ore project	Mixed
India	2010	1761	Energy Generation and Supply	VOF	Loan	China Datang loans US\$1.4B for a thermal power project	Commercial
Ecuador	2014	1700	Energy Generation and Supply	VOF	Loan	China EXIM Bank loans Ecuador US\$1.7B for CCS hydroelectric facility	Mixed
Cambodia	2013	1698	Energy Generation and Supply	VOF	Loan	China EXIM Bank Agrees US\$1.67B Cambodia Oil Refinery	Commercial

Source: Authors' estimates from Strange et al. (2017b).

Table A.4 Average project size by country (in 2014 US\$ billions), 2000–14

Rank	Recipient country	Region	US\$ billion
1	Russia	Central and Eastern Europe	3052
2	Turkmenistan	Central and North Asia	1525
3	Cuba	Latin America and the Caribbean	1356
4	Brazil	Latin America and the Caribbean	1218
5	Venezuela	Latin America and the Caribbean	1122
6	India	South Asia	796
7	Argentina	Latin America and the Caribbean	773
8	South Africa	Africa	628
9	Ecuador	Latin America and the Caribbean	622
10	Kazakhstan	Central and North Asia	591
11	Iran	Middle East	430
12	Bahamas	Latin America and the Caribbean	360
13	Montenegro	Central and Eastern Europe	340
14	Ukraine	Central and Eastern Europe	314
15	Turkey	Central and Eastern Europe	301
16	Bosnia-Herzegovina	Central and Eastern Europe	287
17	Belarus	Central and Eastern Europe	283
18	Chile	Latin America and the Caribbean	279
19	Pakistan	South Asia	276
20	Laos	Southeast Asia	267
21	Malaysia	Southeast Asia	260
22	Ethiopia	Africa	225
23	Nigeria	Africa	219
24	Serbia	Central and Eastern Europe	216
25	Libya	Africa	205

Source: Authors' estimates from Strange et al. (2017b).

Table A.5 Largest officially financed Chinese projects in selected countries (in 2014 US\$ billions), 2000–14

Recipient	Year	Title	Status	US\$ billion
Pakistan	2014	Part III: China's financial package loan includes preferential buyer credit for Karachi Nuclear Power Plants K-2/K-3	Implemented	4.0
Pakistan	2014	China pledges loans for Karachi-Lahore highway	Implemented	2.3
Pakistan	2014	Part II: China's financial package loans for Karachi Nuclear Power Plants K-2/K-3	Implemented	2.3
Pakistan	2011	Loans from Silk Road Fund, China EXIM Bank, and CDB for Korrak hydropower project/ Korat Dam	Implemented	1.8
Pakistan	2014	China EXIM Bank commits loan for the Lahore Orange Line Metro Train project	Completed	1.6
Indonesia	2003	Bank of China loans for the construction of 2x300MW Cilacap power plant	Completed	0.90
Indonesia	2008	Chinese and International financial institutions loan for Indramayu power plant	Completed	0.82
Indonesia	2013	CDB loans for the construction of Cilacap power plant extension	Implemented	0.71
Indonesia	2009	China EXIM Bank loans for the construction of Pelabuhan Ratu power station	Completed	0.65
Indonesia	2009	BoC funded for the Banten Lontar power plant	Completed	0.62
Ethiopia	2013	Chinese Banks Loan for Addis Ababa-Djibouti Railway Project	Completed	2.8
Ethiopia	2011	China loans for Rail Line from Sebeta to Adama	Implemented	2.7
Ethiopia	2009	China to partially fund Gibe IV hydroelectric dam	Pipeline: Commitment	1.4
Ethiopia	2012	China EXIM Bank Loans for Construction of Power Lines	Implemented	1.1
Ethiopia	2006	China loans for unspecified development projects	Pipeline: Commitment	0.92

Source: Authors' estimates from Strange et al. (2017b).