AIDDATA
A Research Lab at William & Mary

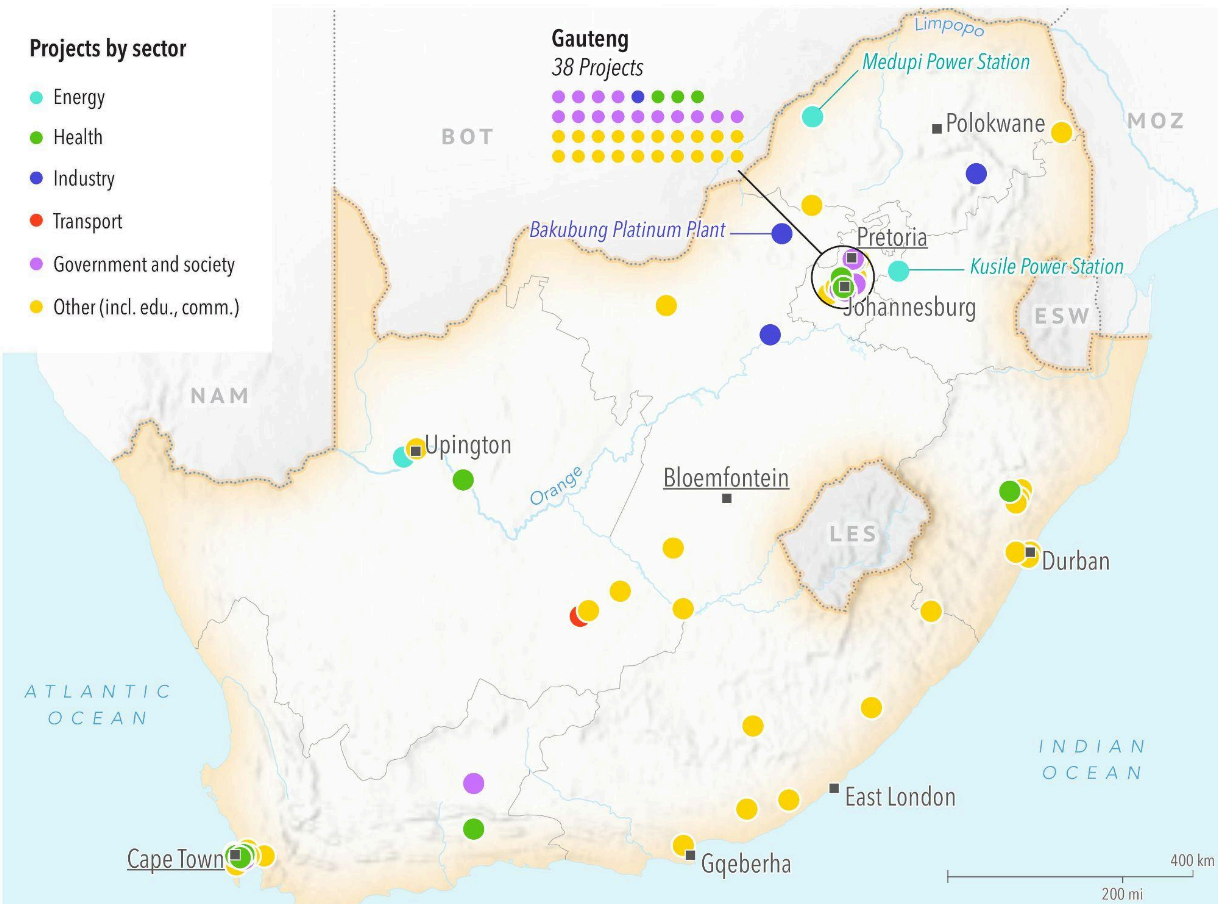
Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development and Cooperation SDC

South Africa

The Scale, Scope, and Composition of Chinese Development Finance

October 2025

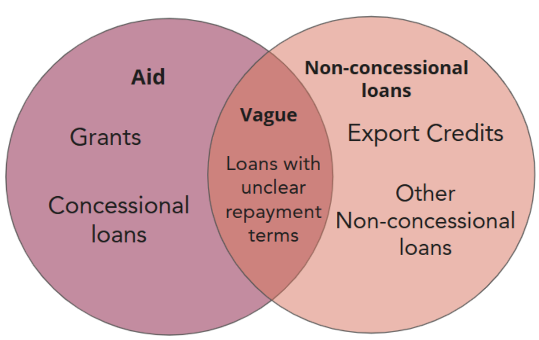


Lea Thome, Brooke Escobar

Table of Contents

Key concepts: aid, non-concessional loans, and vague flows

In this profile, China's official development finance portfolio is represented across three main categories: aid, non-concessional loans, and vague. Loans from Chinese state-owned entities can either qualify as aid or non-concessional loans, based on how their borrowing terms compare to regular market terms (i.e., the level of financial concessionality) and whether or not they have development intent (i.e., if the primary purpose of the financed project/activity is to improve economic development and welfare in the recipient country). Aid from Chinese state-owned entities includes grants, in-kind donations, and concessional loans with development intent. The "non-concessional loans" category captures loans from Chinese state-owned entities that are provided at or near market rates and those that primarily seek to promote the commercial interests of the country from which the financial transfer originated. An export credit is a specific type of loan issued by a Chinese state-owned bank or company that requires an overseas borrower to use the proceeds of a loan to acquire goods or services from a Chinese supplier. Export credits are not considered aid since they have a commercial rather than a development purpose. See Appendix B for more details.



Key concept: What is concessionality?

Concessionality is a measure of the generosity of a loan or the extent to which it is priced below-market rates. It varies from 0% to 100%, with higher values representing more concessional loans. Non-concessional loans are those provided at or near market rates. The Organisation for Economic Co-operation and Development (OECD) determines which official sector financial flows constitute "aid" based on a grant element threshold for concessionality. Given that China does not report its loans or lending terms to the OECD, some of its official sector financial flows cannot be classified as "aid" or "non-concessional." In this report, such loans are assigned to the "vague" category.

African countries that have joined the BRI

South Africa and China's Belt and Road

South Africa, located on the southernmost tip of the continent with access to both the Indian and Atlantic Oceans, holds a uniquely strategic position in Africa's trade and transport networks. In 2015, it became the first African country to formally join China's Belt and Road Initiative (BRI) by signing a Memorandum of Understanding (MOU). As Africa's most industrialized economy, South Africa's participation lent early legitimacy to the BRI on the continent.[1]

Historic relationship

The Republic of South Africa and the People's Republic of China have maintained a diplomatic bilateral relationship since 1998. China-South Africa relations have prospered since South Africa's accession to the intergovernmental organization known as BRIC (Brazil, Russia, China, and India) in 2010, turning it into the present-day BRICS. Under the reigning African National Congress (ANC), China and South Africa have grown increasingly closer through trade and political ties, especially under President Cyril Ramaphosa.

Present-day relationship

The present-day relationship between China and South Africa is defined by close political and economic cooperation and partnership. At the Forum on China-Africa Cooperation in September 2024, China and South Africa jointly established a "comprehensive strategic partnership for cooperation in the new era."[2]

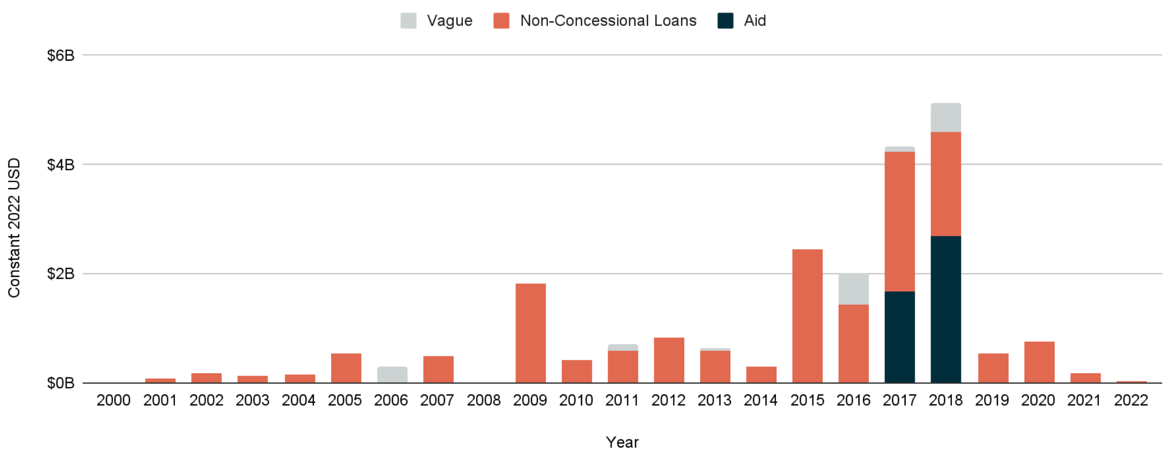
While a large part of China's development finance portfolio in South Africa is dedicated towards projects in the energy and banking sectors, China and South Africa have also enjoyed tightening technological and space cooperation, first with South Africa's agreement to use BeiDou Navigation Satellite system services from 2021 onward and then with the linking of South Africa and China through a quantum-secure satellite link in March 2025.

[1] For more information on South Africa's membership in the BRI, see the PRC Embassy in South Africa (2024) at http://za.china-embassy.gov.cn/eng/sghdxwfb/202401/t20240117_11227639.htm#:~:text=SA%20was%20the%20first%20African,has%20greatly%20benefited%20both%20nations.
[2] China's MFA (2024). "China and South Africa." https://www.fmprc.gov.cn/eng/gjhdq_665435/2913_665441/3094_664214/.

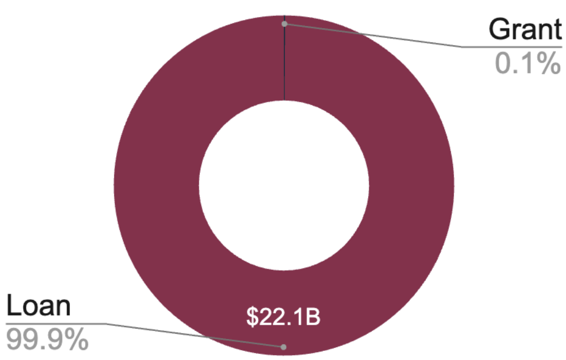
Overview: Chinese development finance in South Africa from 2000-2022

$22.1 billion	99.9%	146	4th	53%
in loans and grants provided by official sector donors from China.	of Chinese development finance is provided via loans.	grants, technical assistance, and training activities offered.	largest recipient of Chinese aid and credit in Africa.	of China's infrastructure portfolio has significant ESG risk exposure.

Official sector financial commitments from China to South Africa, 2000-2022[3]

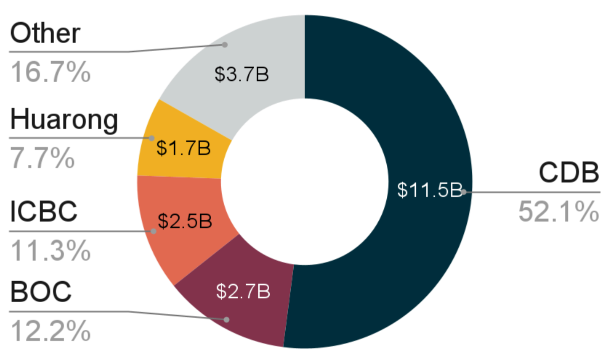


Portfolio by type of finance



Loans include concessional and non-concessional loans.

Portfolio by funder



CDB: China Development Bank; BOC: Bank of China; ICBC: Industrial and Commercial Bank of China; Huarong: Huarong Energy Africa Co. Ltd.

[3]For definitions of the categories of *aid*, *non-concessional loans*, and *vague*, please see Key Concepts on page 2 or Appendix B.

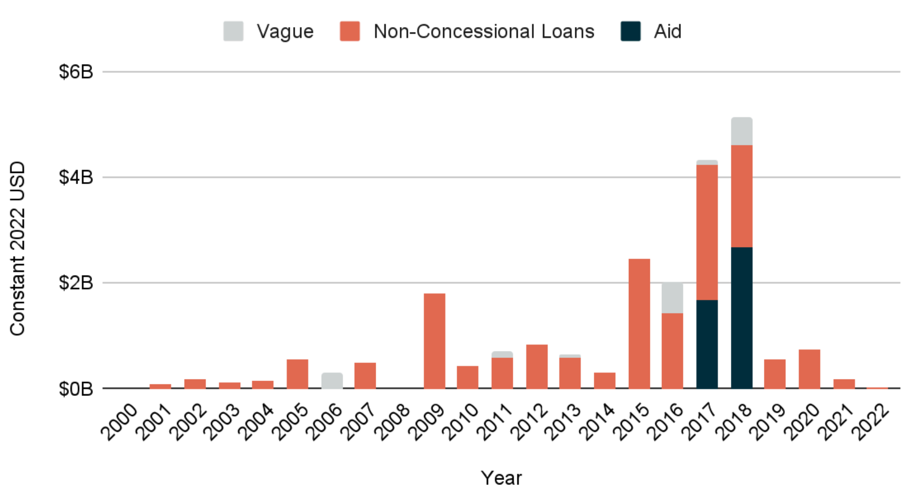
Section 1: China's development finance portfolio

As of 2010, China has become South Africa's largest trading partner and its top bilateral donor. China and South Africa's relationship has grown increasingly closer in recent years, due to South Africa's accession to the BRI and to BRICS. For a list of bilateral diplomatic visits between China and South Africa in the BRI era, see Appendix A. China's development finance portfolio in South Africa is almost entirely loan-based, with loans accounting for 99.9% of the total and grants making up just 0.1%. While China provided $4.4 billion in aid between 2017 and 2018, the lion's share of its portfolio—around $15.9 billion—comes in the form of non-concessional financing. These funds primarily support the commercial activities of South African corporations. This distinctive focus sets South Africa apart from other African recipients of Chinese development finance.

How much development finance has China provided South Africa since 2000?

Between 2000 and 2022, official sector lenders and donors from China provided grant and loan commitments worth $21.1 billion for 332 projects and activities in South Africa. This makes South Africa, a country with a large economy (GDP: $406.9 billion) and population (62.3 million residents), the fourth largest recipient of Chinese aid and credit in Africa and the 17th largest in the developing world. Between 2001 and 2004, South Africa received nine syndicated emergency rescue loans from Chinese banks to shore up foreign exchange reserves, representing some of China's earliest emergency rescue loans. South Africa's accession to BRI in 2015 marked a turning point for China's development finance portfolio in the country, demonstrated by annual commitment amounts over $2.5 billion between 2015 and 2018. However, since 2019, there has been a marked decrease in official sector financial commitments from China to South Africa, with only $40.2 million in aid and non-concessional loans committed in 2022.

Figure 1.1: Official sector financial commitments from China to South Africa



Types of funding:[4]

Aid: any grants, concessional loans, or in-kind donations.

Non-concessional loans: commercial lending, export credits, and non-concessional loans.

Vague: funding that cannot be easily classified—usually loans with unknown borrowing terms.

[4]For more information on these categories, please see Appendix B.

How does China compare to other development partners?

China is South Africa's largest development partner (see Figure 1.2), providing more than twice as much development finance as any other bilateral source. During this time period, China provided $1.9 billion in export credits, accounting for 8.6% of its portfolio.

The United States is the country's second-largest development partner, having provided $10.7 billion between 2000 and 2022, primarily focused on aid provision combating HIV/AIDS. The largest multilateral development partner is the African Development Bank, providing $6.5 billion focused on energy, transport and banking service support—followed by the World Bank Group. Development finance from these two multilateral banks exclusively features non-concessional lending.

However, South Africa's aid landscape is poised for change. In February 2025, the U.S. significantly downsized its international aid agency, USAID, and cut back support to South Africa. This will directly affect PEPFAR, the flagship U.S. program supporting the fight against HIV/AIDS.

Figure 1.2: Top bilateral and multilateral development partners, 2000-2022

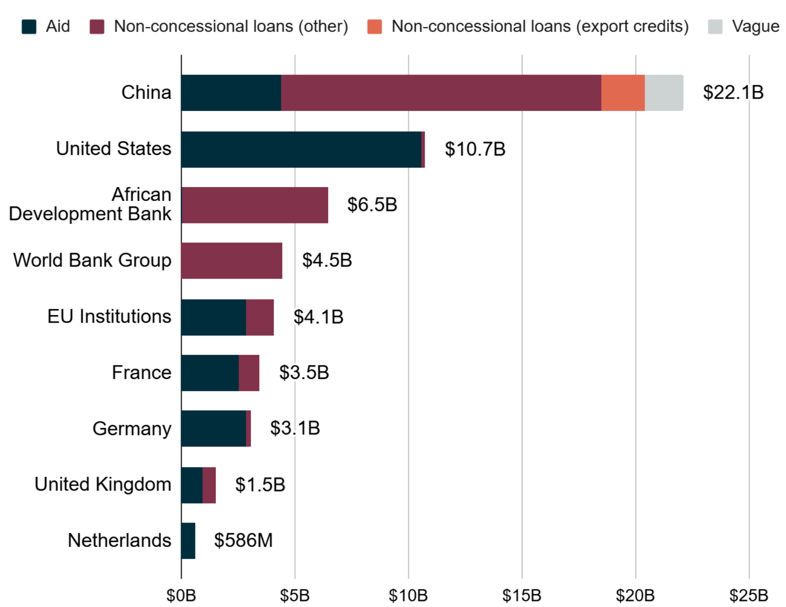


Figure 1.2 contains the top nine development partners providing aid and other financing to South Africa. However, only China has detailed bilateral export credit flows to South Africa. This level of granularity is not available for other development partners, as the OECD does not provide export credit data for bilateral relationships; it only provides data on total export credit flows by two aggregate donor groupings, G7 and DAC member countries.

Total export credits from G7 Countries: $7.6 billion.

Total export credits from DAC member countries (including G7): $8.3 billion.

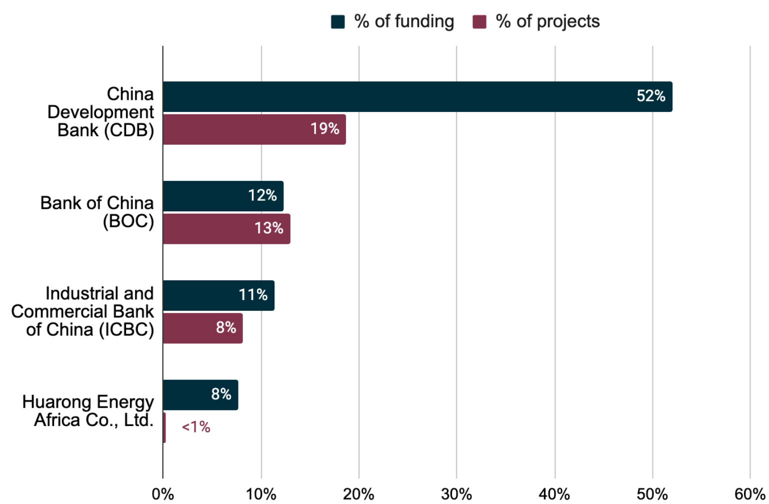
How does China use export credits?

The central role that export credits play in China's overseas lending portfolio sets it apart from other official sector creditors: Under a so-called "Gentlemen's Agreement" on Officially Supported Export Credits, OECD member countries agreed in 1978 to "tie their own hands" and voluntarily abide by a set of international rules that limit the provision of *subsidized* export credits to domestic companies with overseas operations. However, China never agreed to participate in the "Gentlemen's Agreement" and it has consistently used concessional export credit to help its firms gain a competitive edge in overseas markets.

Which donors and lenders from China are active in South Africa?

Between 2000 and 2022, 43 official sector donors and lenders from China provided aid and non-concessional loans to South Africa. This compares to the global average of 19 official sector donors and lenders from China. 83% of China's development finance portfolio is provided through four main donors and lenders (see Figure 1.3). The other 17% is provided by a diverse array of government agencies (including central, regional, or municipal government agencies), state-owned commercial banks, and state-owned companies.

Figure 1.3: Top Chinese donors and lenders



CDB: state-owned policy bank that provides less concessional lending than China Eximbank.

BOC: state-owned commercial bank that provides non-concessional loans.

ICBC: state-owned commercial bank that provides non-concessional loans.

Huarong: subsidiary of a Chinese state-owned enterprise that provides energy assistance.

The most active financier in South Africa is China Development Bank (CDB). CDB is a state-owned policy bank; it issued 62 loans worth $11.5 billion. The value of these loans represents 52% of total official sector financial flows from China to South Africa between 2000 and 2022. CDB's most recent loan commitment was in 2020, when it provided $94 million toward a syndicated loan that supported the Standard Bank of South Africa Limited for general corporate purposes.

The Bank of China (BOC) issued 43 loans worth $2.7 billion for projects and activities, accounting for 12% of total official sector financial flows from China to South Africa. BOC mainly provides loans to South Africa's Department of Trade and Industry to develop Special Economic Zones (SEZs) and Industrial Parks, as well as loans for general corporate purposes to South African firms and banks. Its newest loan, worth $40 million, was provided to Metorex (Proprietary) Limited, a copper and cobalt company, for general working purposes in 2022.

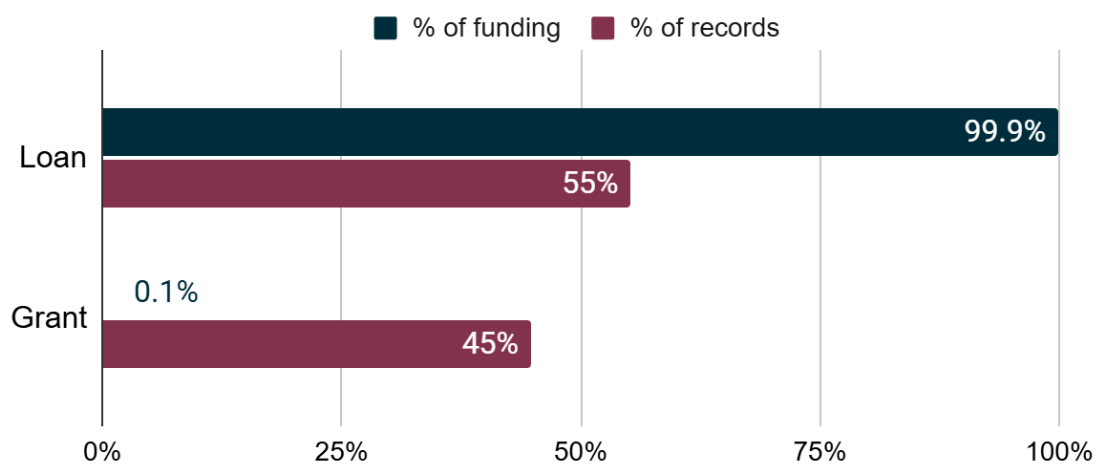
The Industrial and Commercial Bank of China (ICBC) issued 27 loans worth $2.5 billion (11% of total lending), focusing on the Upington Solar PVs Project and loans for general corporate and operating purposes. The two latest loans were committed in 2021 for almost $47 million to Investec, a South African banking and wealth management group, for general corporate and refinancing purposes.

Huarong Energy Africa Co. Ltd. is a subsidiary of China Huarong Asset Management Co. Ltd., a Chinese state-owned enterprise; it is mostly active in Africa's energy sector. It provided one loan worth $1.7 billion—or 8% of total official sector financial flows from China to South Africa from 2000 to 2022—to Eskom for power plant upgrades in 2017.

What kinds of financial and in-kind support does China offer South Africa?

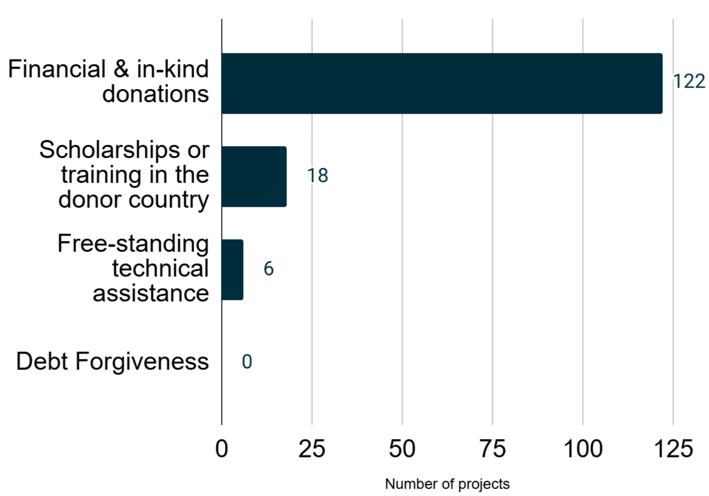
99.9% of China's official sector financing to South Africa takes the form of loans (totaling $22.1 billion), while 0.1% ($20.8 million) comes in the form of grants and in-kind donations. In-kind donations are difficult to monetize, so the monetary values of these activities are likely underrepresented. AidData captures each instance of a grant or in-kind donation as one record, so analyzing the record counts can help provide a better picture of China's activities in South Africa. When looking at record counts, grants account for 45% of all activity records in South Africa (representing 146 records capturing activities taking place between 2000 and 2022).

Figure 1.4: Top financial instruments used by China in South Africa



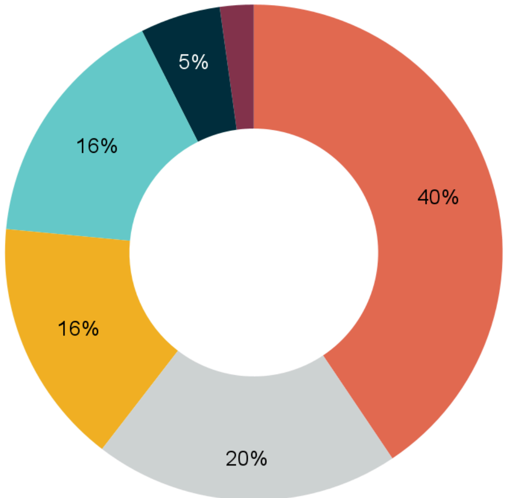
Note: Debt rescheduling and Vague records are excluded from this visual since they are neither loans or grants.

Figure 1.5: Breakdown of grants by project count



The most common types of in-kind donations from China to South Africa are for COVID-19 supplies, disaster relief, and other essential materials. Since 2021, the only new grants that have emerged are financial and in-kind donations, focused mainly on disaster relief. Free-standing technical assistance consists mostly of training, including training for a police department, language training, and legal assistance. China has awarded scholarships on at least 18 different occasions, and also offered training to officials and professionals.

Figure 1.6: Breakdown of lending by purpose



Infrastructure: loans to support the construction, rehabilitation, or maintenance of a physical structure.

General/Unspecified: loans for equipment acquisition or unspecified purposes.

Inter-Bank Loans: loans from a Chinese bank to a recipient country bank that can support on-lending or other bank needs.

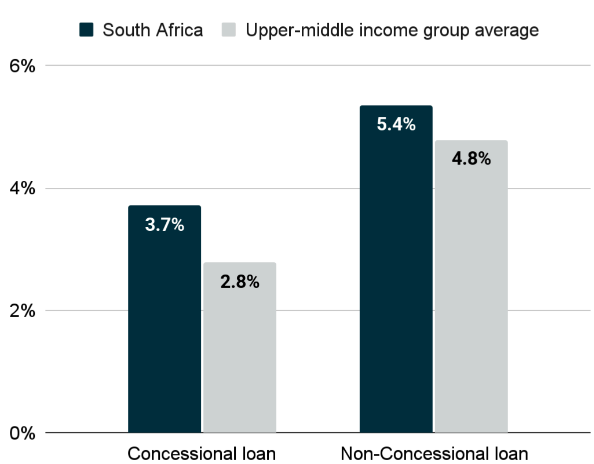
Corporate: loans for mergers and acquisitions, working capital, interest rate swaps, and revolving credit facilities.

Refinancing: loans to refinance existing debt.

Emergency Lending: emergency rescue loans and rollovers meant to support a country's liquidity.

40% of China's $22.1 billion in official sector lending to South Africa supports infrastructure projects. Only 0.7% of all infrastructure projects in South Africa are implemented by at least one Chinese entity, such as a Chinese state-owned company or a private sector company.[5] This percentage remains low because South Africa features only 14 infrastructure loans, out of which only one—a loan to construct the Mamba Cement Plant—was implemented by a Chinese agency, the Jidong Development Group Limited. 16% of financing each support corporate and inter-bank loans, such as refinancing old debt, loans for mergers and acquisitions, and working capital loans. Here, companies such as Investec or South Africa's Standard Bank have benefited from loans for general corporate purposes. Roughly 20% of loans are general or unspecified loans, which represents export credit loans for equipment purchases, such as the purchasing of Huawei equipment to roll out new mobile networks. Lastly, South Africa received 9 emergency rescue loans (2.2% of lending) from China between 2000 and 2022.

Figure 1.7: Borrowing terms



Between 2000 and 2022, China's concessional lending (which is considered to be aid) to South Africa carried a weighted average interest rate of 3.71% and a weighted average maturity of 15 years. By comparison, China's non-concessional lending to South Africa carried a weighted average interest rate of 5.35% and a weighted average maturity of 8 years. These borrowing terms were less generous than those found in China's broader portfolio of official sector loans to upper-middle income countries, both in terms of interest rates and maturities.

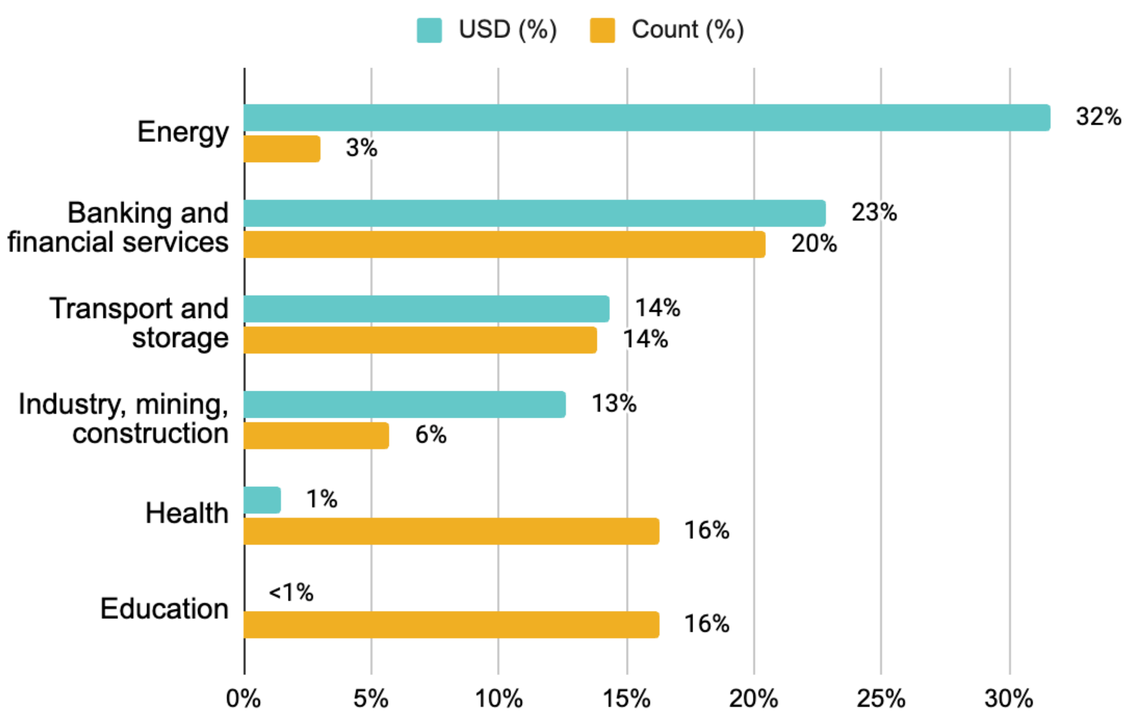
[5]In the first submission of this profile, the percentage of infrastructure projects implemented by at least one Chinese agency was reported as 71%. The percentage for 2000 and 2022 is at 0.7%, and was properly adjusted in this profile.

In which sectors is China most active?

Top sectors for China's aid and credit in South Africa differ greatly when comparing monetary value and record count. Certain sectors, such as health and education, often represent a large percentage of records but offer small or no transaction amounts. In Figure 1.8, we have provided the top sectors by both monetary value and record count to demonstrate this dichotomy.

Figure 1.8: Selected top sectors

Sectors by monetary value and record count



In terms of monetary value, 82% of China's grant and loan commitments to South Africa supported four top sectors by financial value: energy, banking and financial services, transport and storage, and industry, mining, and construction between 2000 and 2022.

- ➔ Energy: This sector is the largest sector by financial value, with $7 billion in funding (or 32% of China's entire portfolio). It encompasses the generation and distribution of renewable and non-renewable sources, as well as hybrid and nuclear power plants. Noteworthy activities in the energy sector include a $2.6 billion loan for the 4800MW Kusile Coal-Fired power plant construction to the South African Electricity Supply Company (Eskom), and an additional $1.7 billion loan to Eskom for the 4800MW Medupi Power Plant Project. No new projects in the energy sector have been committed since 2019.

- ➔ Banking and financial services: This sector refers to the planning, management, and facilitation of financial institutions. 23% of China's development finance portfolio in South Africa is specifically dedicated to this hardware sector, representing $5 billion in aid and non-concessional loans. The largest financial commitment from a single source is a $531 million loan provided by CDB for the Standard Bank of South Africa for on-lending purposes, in addition to a $366 million contribution by ICBC for a syndicated loan to Standard Bank for general corporate purposes; the Bank of China, CDB, and China CITIC Bank also contributed to this loan.

- Transport and storage: This sector refers to the construction and maintenance of road, rail, air, and water transit infrastructure and is characterized by high-value infrastructure projects. 14% of China's development finance portfolio in South Africa is specifically dedicated to this hardware sector, representing $3.2 billion in aid and non-concessional loans. The largest financial commitment from a single source is a $1.6 billion buyer's credit loan from CDB to transport company Transnet for the acquisition of 1064 locomotives. This sector has had no new financial commitments since 2019.

- Industry, mining, construction: This sector includes manufacturing, fossil fuels, mining for coal, gas, metals, minerals, and construction. This sector represents 13% of China's development finance portfolio in South Africa, $2.8 billion in aid and non-concessional loans. The largest financial commitment in the sector is a $495 million loan from CDB to Wesizwe Platinum for the construction of the Bakubung Platinum mining plant. In 2022, the Bank of China provided a $40 million loan to Metorex, the cobalt and copper company.

China is also heavily engaged in the "software" sectors, such as health, education, and governance.[6] China's footprint in these sectors is difficult to represent, however, because the activities in these sectors usually attract smaller grant and loan commitments, or represent some form of in-kind donation, technical assistance, etc.

- Health: This sector includes medical care, infrastructure, equipment, and control activities. In total, activities in the health sector represent 54 records in China's portfolio in South Africa (or 16% of records). Notable activities in the health sector include grants by the Chinese Consulate General in Johannesburg for the provision of anti-epidemic materials and the donation of 300,000 Sinovac COVID-19 doses by the Chinese People's Liberation Army to the South African National Defence Force. In addition to its aforementioned vaccine donations, China provided a total of $6.4 million in COVID-19 aid to South Africa during the pandemic. While China provided COVID-19 aid in 2021, no new activities in the health sector emerged in South Africa in 2022.

- Education: This sector encompasses schooling at the primary, secondary, and post-secondary levels, as well as technical and advanced training activities. Education activities represent $2.1 million in funding and 16% of China's total record count, with 54 records. Notable activities in the education sector include donations by the Chinese Embassy of school supplies in Eastern Cape, 500 pairs of school shoes to disadvantaged students, and the provision of Chinese language learning materials. In 2022, the Chinese General Consulate in Johannesburg donated $6108 to the Funda Ujabule Primary School to fund better education.

[6] We define "software" sectors based on the following 3-digit OECD sector codes: 110 ,120, 150, 160, 240, 310, 330, 600.

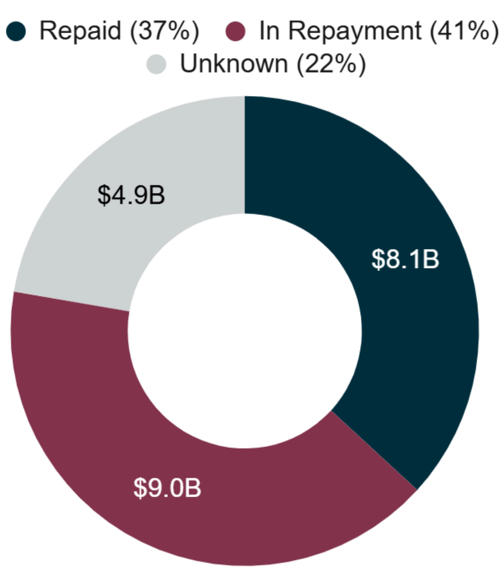
Section 2: South Africa's debts to China

180	$22.1 billion	25.8%	52%
loans issued	cumulative value of loan commitments (5.4% of GDP)	of total debt shows signs of financial distress	public debt

What is "public debt"?		
Public debt Loans issued directly to public institutions, loans that have sovereign repayment guarantees, or loans extended to special purpose vehicles or joint ventures that are majority-owned by one or more public sector institutions.	Potential public debt Loans to special purpose vehicles or joint ventures in which recipient governments hold minority equity stakes.	Private or opaque debt Loans to private sector borrowers and entities with opaque ownership structures.

In this section, AidData examines South Africa's debts to China based upon their repayment profiles and levels of public liability. A loan's repayment period begins when the grace period—the time after the issuance of a loan when a borrower is not expected to make repayments—has ended. This information, in conjunction with information about the extent to which the recipient government may eventually be liable for the repayment of a given loan, makes it easier to understand the nature of South Africa's debt exposure to China.

Figure 2.1: Repayment status for all loans from China

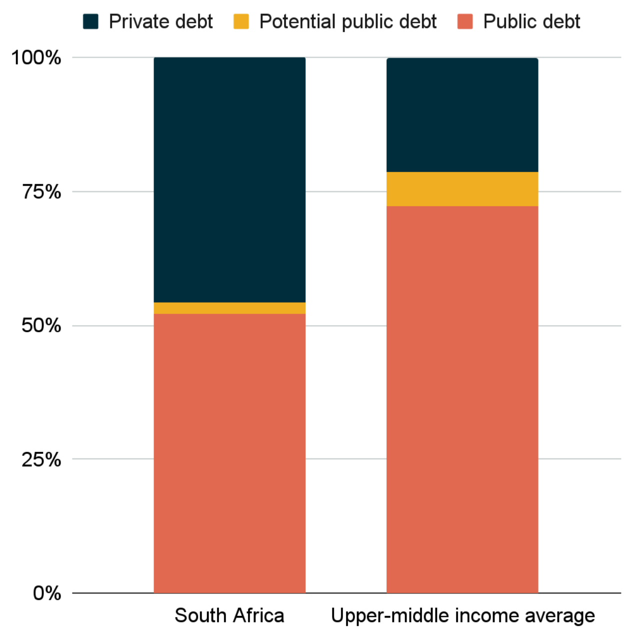


There are currently 180 loans for which AidData has access to repayment details. 156 of those loans (worth $17.1 billion) are currently in their repayment periods. 101 loans (worth $8.1 billion) have exited their repayment periods—meaning they should have been fully repaid based on their original maturity dates outlined at the time of signing. 55 loans, worth $9 billion (or 53%), are currently in repayment.

However, the amount in repayment may be understated, since there are 24 loans (worth $4.9 billion) for which AidData has insufficient repayment details.

Figure 2.2: Composition of debt from China by public liability

Total debt, 2000-2022—South Africa: $22.1 billion. Upper-middle income country average: $9.9 billion.



South Africa's debt profile within China's development finance portfolio stands out for its relatively low public debt share. Just 52% of Chinese financing to South Africa is classified as public debt—significantly below the 71% average for other countries classified as upper-middle income. Potential public debt, which refers to loans that could eventually become government liabilities, is also lower than average: only 2% in South Africa compared to 5% in upper-middle income countries. This is tied to a single 2007 loan for the expansion of the Dilokong Ferrochrome Plant. The remaining 46% of financing consists of loans to private borrowers—primarily South African corporations seeking business capital—or loans lacking enough information to determine their level of public liability.

To date, about 25.8% of China's cumulative loan commitments to South Africa, publicly guaranteed or not, are in financial distress. Evidence of financial distress includes, among other things, borrowers accruing principal or interest arrears, defaulting on their repayment obligations, or filing for bankruptcy. Nine loans in South Africa have shown signs of financial distress, accounting for $6.1 billion in lending. Many of the loans with evidence of financial distress in South Africa relate to power plant projects and the South African mobile operator Cell C Limited. In January 2020, Cell C defaulted on a $2.7 billion loan as well as capital and interest payments on loan facilities from several banks, including China Development Bank. South Africa's level of financial distress aligns with average levels in China's development portfolio—on average, only 22% of China's portfolio across low- and middle-income countries has evidence of financial distress. The World Bank does not list South Africa as a country with risk of external debt distress in its Debt Sustainability Analysis.[7] To alleviate debt burdens arising from the COVID-19 pandemic, Chinese lenders participated in multiple rounds of G20-initiated debt-service suspension initiatives (DSSI).[8] South Africa, however, was not eligible for DSSI.

[7] For more information on the World Bank's Debt Sustainability Analysis, see World Bank (2024) at https://www.worldbank.org/en/programs/debt-toolkit/dsa.

[8] Debt Service Suspension Initiative (DSSI) is a G20-initiated initiative to help alleviate debt burdens during the pandemic. For more information, see https://www.worldbank.org/en/topic/debt/brief/covid-19-debt-service-suspension-initiative.

Section 3: ESG risk profile of China's grant- and loan-financed infrastructure portfolio

Chinese infrastructure in South Africa with ESG risk exposure:

11 infrastructure projects supported by grants and loans from China	**$4.8 billion** in loan commitments supporting infrastructure projects	**54%** of infrastructure lending with ESG risk exposure

Examples of global ESG risks

Environmental: increase in air or water pollution, biodiversity loss, deforestation, increased carbon footprint, or natural resource depletion.

Social: poor labor law compliance, human rights abuses, displacement of local residents, or archaeological or cultural heritage site degradation.

Governance: corruption, money laundering, lack of transparency, and non-competitive bidding processes.

Figure 3.1: Distribution of China's infrastructure projects with significant ESG risk exposure

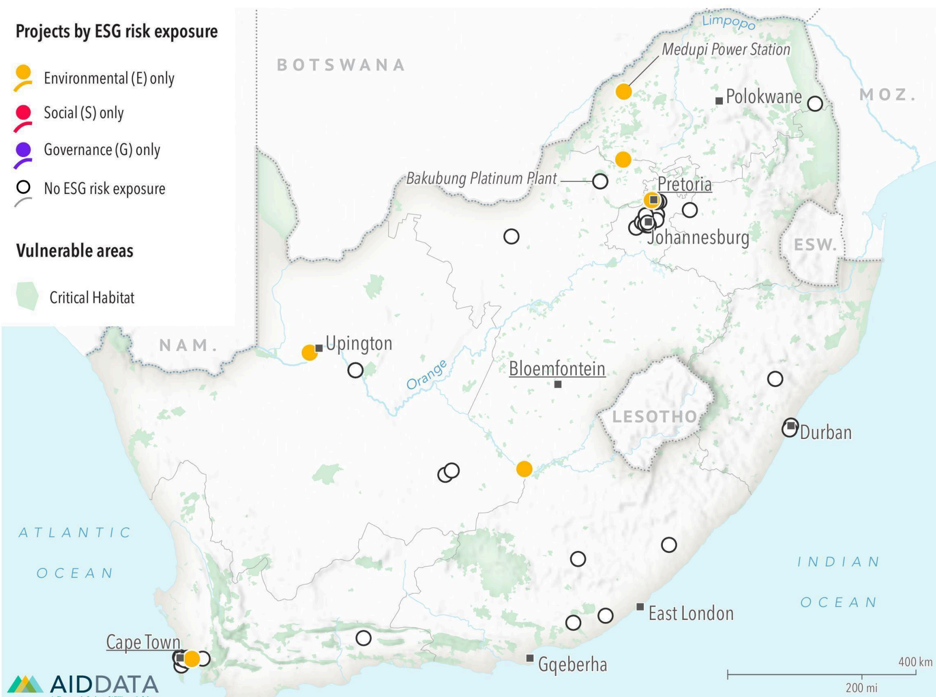


Figure 3.1 presents the geographic locations of Chinese-financed infrastructure projects in South Africa by their environmental, social, or governance (ESG) risk exposure. Projects with ESG risk exposure are relatively few but represent high-value financing. The most prevalent risk (by monetary value) was governance risk, though these projects lack precise locations to display on the map.

In the *Belt and Road Reboot* report, AidData developed a set of metrics that identify the environmental, social, and governance (ESG) risk exposure of Chinese-financed infrastructure projects overseas, as well as the steps it has taken to build safeguards into its programs to combat these risks (see Appendix B for details on the ESG risk exposure methodology).[9]

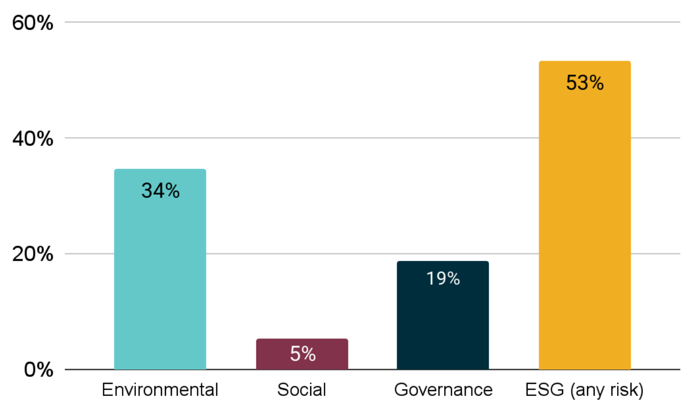
[9] For more information, see AidData's 2023 "Belt and Road Reboot: Beijing's Bid to De-Risk Its Global Infrastructure Initiative" report. https://www.aiddata.org/publications/belt-and-road-reboot.

What is the level of ESG risk exposure in China's grant- and loan-financed infrastructure portfolio?

In China's broader grant- and loan-financed infrastructure project portfolio in the developing world, the cumulative percentage of financing with significant ESG risk exposure increased from 12% to 54% over the same 22-year period, showing China's signature infrastructure initiative is facing major implementation challenges. With additional data uncovered for 2022, South Africa's portfolio from China is facing similar levels of ESG risk exposure: over 54% of China's grant- and loan-financed infrastructure project portfolio in South Africa has significant ESG risk exposure. This part of the portfolio consists of 11 infrastructure projects worth $4.8 billion (see Figure 3.2).

Exposure to environmental and governance risk is dominant among these projects. An example of governance risk was a $1.7 billion loan from Huraong Energy Africa to South Africa's state-owned electric company, Eskom, for power plant upgrades. Eskom provided inaccurate information to the South African Reserve Bank to ensure the loan was signed. Separately, only 5% of infrastructure lending was associated with increased social risk exposure. Strikes and sit-ins have occurred at the Dilokong Ferrochrome plant expansion by workers.

Figure 3.2: Percentage of infrastructure project portfolio with ESG risk exposure



ESG issues observed in South Africa

Environmental: destruction of ecosystems and habitats, environmental pollution.

Social: strikes and sit-ins at the Dilokong Ferrochrome Plant Expansion Project.

Governance: corruption at Eskom, the company responsible for upgrading South Africa's power infrastructure.

Figure 3.3: Cumulative proportion of Chinese infrastructure financing with ESG risk exposure

South Africa (2022): 54%. Middle income country average (2022): 51%.

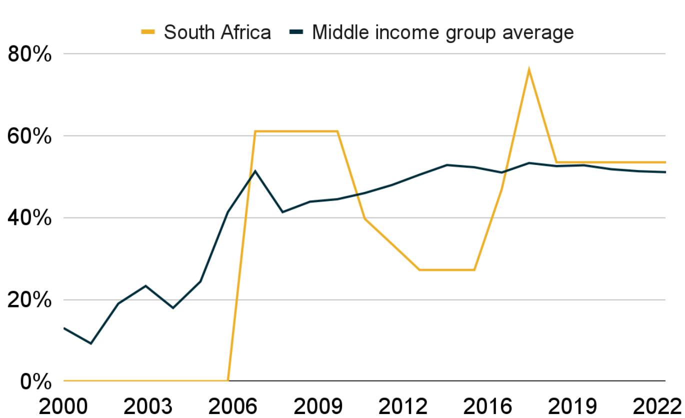


Figure 3.3 shows that the risk exposure in South Africa has fluctuated significantly (due to a small infrastructure portfolio before 2015). However, less than 5% of South Africa's infrastructure project financing was exposed to significant ESG risks in the 2000s and early 2010s. By 2019, though, the cumulative proportion balanced out close to the middle income country average (51%). Since 2018, there have been no new infrastructure projects with significant ESG risk exposure.

Section 4: New ESG safeguards in China's infrastructure project portfolio

Percent of infrastructure portfolio with strong ESG safeguards	What are ESG safeguards?
4.1% 2000-2020	ESG safeguards are formal provisions written into financing contracts (grant or loan) to mitigate environmental, social, and governance risks during an infrastructure project's implementation and operation.

Chinese lenders and donors have responded to rising levels of ESG risk in their portfolio across the developing world by putting in place increasingly stringent safeguards via changes to their contractual provisions on infrastructure funding. These safeguards can include, among others, contractual provisions that mandate Environmental and Social Impact Assessments (ESIA), Environmental Management Plans (EMP), Resettlement Action Plans (RAPs), Open Competitive Bidding (OCB) processes, and the preparation and submission of financial statements that meet International Financial Reporting Standards (IFRS).

To implement these safeguards, Beijing is increasingly outsourcing risk management to other lending institutions with stronger due diligence standards and safeguard policies. It is dialing down its use of bilateral lending instruments and dialing up the provision of credit through collaborative lending arrangements with Western commercial banks and multilateral institutions (called syndicated lending).

Through this pivot in financing strategy, China's overseas infrastructure portfolio has gone from having no ESG safeguards in place in 2000 to 57% of its infrastructure project portfolio having strong ESG safeguards in place by 2021. Chinese grant- and loan-financed infrastructure projects that are subjected to strong ESG safeguards present fewer ESG risks during implementation. They are also less likely to be suspended or canceled. Perhaps most importantly, Chinese grant- and loan-financed infrastructure projects with strong ESG safeguards do not face substantially longer delays than those with weak ESG safeguards, showing that China has succeeded in pairing speed and safety when it has implemented ESG safeguards in its infrastructure portfolio.

Key aspects of infrastructure projects with strong ESG safeguards
Present fewer ESG risks during implementation
Less likely to be suspended or canceled
Speed of implementation is not delayed compared to projects with weak ESG safeguards

Has China increased ESG safeguard stringency in its infrastructure portfolio in South Africa over time?

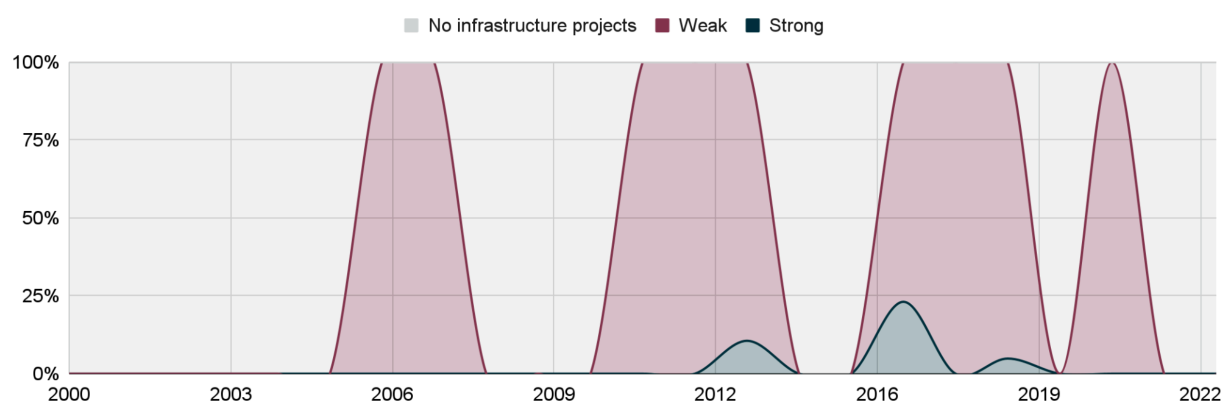
Between 2000 and 2022, 23% of China's grant- and loan-financed infrastructure project portfolio had strong contractual ESG safeguards in place across all developing countries. China's infrastructure portfolio in South Africa is inconsistent with this global trend, as only 4.1% of China's grant- and loan-financed infrastructure project portfolio in South Africa had strong contractual ESG safeguards in place during the same time period.[10] Data recorded in 2006-2007, 2011-2012, 2017, and 2019-2020 shows that South Africa only had weak contractual ESG safeguards. Before 2006, between 2008-2010, and between 2014-2015, no grant and loan-financed infrastructure projects took place in South Africa. 2021 and 2022 also featured no further grant and loan-financed infrastructure projects.

However, 2013, 2016, and 2018 featured 11%, 23%, and 5% strong ESG safeguards, respectively. These temporary increases can be attributed to new infrastructure projects, such as the 2018 commitment by the Africa Growing Together Fund for the Eskom Transmission Network Improvement project, which featured environmental and social impact assessments.

As ESG safeguards were exclusively weak in 2019 and 2020, there is no discernible trend in South Africa that ESG safeguards have become stronger over time, departing from the average late-BRI trend. However, as new infrastructure projects may be committed to South Africa in the future, this trend may continue to change.

Figure 4.1: Infrastructure project portfolio with strong contractual ESG safeguards[11]

Percent of infrastructure project portfolio committed each year



[10]During the same 22-year period, 23% of China's grant- and loan-financed infrastructure project portfolio across all low- and middle-income countries had strong *de jure* (contractual) environmental, social, and governance safeguards in place.
[11]This graph shows all years of Chinese funding regardless of if there was an infrastructure project in that year. Those years are represented by the gray or "no infrastructure projects" area.

Appendix A: Public opinion and bilateral diplomatic visits between China and South Africa in the BRI era

South Africa has consistently maintained somewhat favorable views towards China. Data captured by Gallup between 2007 and 2021 shows that South African citizens held an average approval rate of 56.4% toward China.[12] This is roughly 4% lower than the global average of 60.1% over the same period. This approval rate hit a low in 2010 with 47.8% and again in 2020, with a 48.8% approval rate. The temporary drop can be explained by the emergence of the COVID-19 pandemic, but overall, South Africans have remained ambivalent toward Chinese leadership. While additional Gallup data has become available for 2023 and 2024, no 2022 data is available for South Africa.

Figure A.1: South African approval of Chinese leadership, 2007-2021[13]

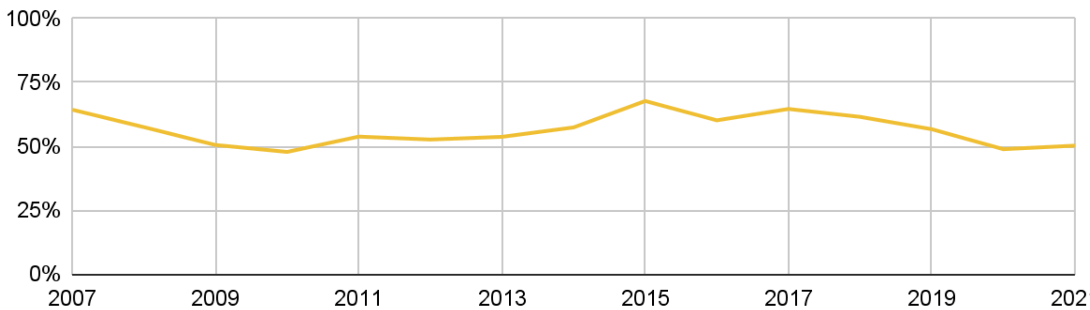


Figure A.2: Bilateral diplomatic visits between China and South Africa

2015 DEC	President Xi visited South Africa and met with President Zuma, where the 5-10 year Strategic Plan on Cooperation Between China and South Africa was implemented ahead of the Forum on China-Africa Cooperation (FOCAC).
2016 SEP	President Zuma met with President Xi in China and held diplomatic talks ahead of the G20 Hangzhou Summit.
2017 APR	Chinese Vice Premier Liu Yandong visited South Africa and met with Foreign Minister Maite Nkoana-Mashabane, where the China-South Africa High-Level People-to-People and Cultural Exchanges Mechanism was launched.
2018 JUL	President Xi visited Johannesburg and met with the new South African President Cyril Ramaphosa ahead of the BRICS Summit.
2023 AUG	President Xi visited South Africa and met with South African President Cyril Ramaphosa ahead of the BRICS summit.
2024 SEP	President Ramaphosa visited China and met with President Xi, where their diplomatic ties were elevated to a strategic cooperative partnership.

[12] This data comes from Gallup's World Poll which started in 2005. Gallup conducts the survey in various frequencies on a country-by-country basis; therefore, the years we have data for vary and there are gaps pre-2006 and, in some cases, between 2006-2021. For South Africa, data is available for 2007-2024, with no data available for 2022. For more information on the Gallup methodology see https://www.gallup.com/178667/gallup-world-poll-work.aspx

[13] The data for the graph and approval rate is based upon Gallup's Rating World Leaders' report and dataset.

Appendix B: Methodology & definitions

Capturing Chinese development finance methodology:

The insights in this profile are derived from AidData's preliminary 2000-2022 Global Chinese Development Finance (GCDF) dataset, which has not yet been published. By nature of AidData's data collection process, we uncovered new sources and information related to projects across all commitment years, and as such, there may be movements in the underlying data since the previous version of the profile. For more details regarding the methodology used to assemble the data, please refer to the Tracking Underreported Financial Flows (TUFF) 3.0 Methodology. All financial values reported in this profile represent USD Constant 2022 prices, unless otherwise stated.

Definitions of finance types:

- Aid: Includes any grant, in-kind donation, or concessional loan (i.e., loans provided at below-market rates and categorized as ODA-like in GCDF 3.0).
- Non-concessional loans: Captures export credits and loans that are priced at or near market rates (i.e., non-concessional and semi-concessional debt categorized as OOF-like in GCDF 3.0).
- Vague: Any official financial flows that could not be reliably categorized as "aid" or "non-concessional loans" because of insufficient information in the underlying source material.

Definitions of instrument types:

- Grant: The donation of money or an in-kind donation of goods from an official sector institution in China (e.g. donations of supplies or equipment, humanitarian aid or disaster relief, or financing for the construction of a government building, school, hospital, or sports stadium).
- Free-standing technical assistance: Skills training, instruction, consulting services, and information sharing by official sector entities and experts from China. Training provided by Chinese entities outside of China is classified as technical assistance.
- Scholarships/training in the donor country: Funding from an official sector institution in China that allows a citizen from the host country to study at a Chinese university or other educational institution. This includes training programs and activities that are sponsored by an official sector institution in China and held for host country citizens in China.
- Debt forgiveness: The total or partial cancellation of debt owed by a borrowing institution in the host country to a Chinese government or state-owned entity.

Development finance to South Africa from other donors

All data on development finance from other donors came from the Organisation for Economic Co-operation and Development's Development Assistance Committee (OECD DAC) Creditor Reporting System (CRS). The CRS is the OECD's aid activity database, which compiles activity-level statistics from all providers who report to the OECD. For the analysis in Figure 1.2, 'Aid' represents Official Development Assistance (ODA) grants and loans. Non-concessional loans represent the Other Official Flows (OOF) measure. However, the flows captured in CRS (which are project-level records) specifically exclude export credit flows (due to their potentially sensitive nature). Data on export credits is available in OECD's DAC2B database in aggregate form. DAC2B provides data on OOF loans and grants and gross export credits. However, consistent and comprehensive data on export credits from one development partner to a specific country are not available. Gross export credits to a specific country are available at an aggregate level, such as G7 or all DAC Members. We determined that these additional financial flows would not substantially change Figure 1.2.

Calculating loans from China within repayment periods

Figure 2.1 shows the percentage of official sector lending from China to South Africa that represents loans within their repayment periods as of 01/01/2025 date. To determine when each loan will enter repayment, each loan's grace period is added to its commitment date. This figure represents when loans will reach their repayment period according to their original borrowing terms, although many loans have been rescheduled (often involving an extension of the loan's grace period and/or maturity). When the grace period is not available, we assume the grace period is 0.

ESG risk exposure methodology:

AidData's ESG risk exposure metric is a composite, project-level score based on five criteria. First, we identify whether a given infrastructure project is located in an environmentally sensitive area. Second, we analyze whether the project is located in a socially sensitive area—specifically, in an area where Indigenous populations are often denied free, prior, and informed consent (FPIC). We assess whether the project is located in a geographical area that is vulnerable to political capture and manipulation by governing elites in host countries. Fourth, we evaluate if the Chinese lender/donor relied on a contractor sanctioned for fraudulent and corrupt behavior to implement the project. Fifth, we identify whether a significant environmental, social, or governance challenge arose before, during, or after the implementation of the project. 2022 data on ESG risk exposure at the global level is currently only available through 2021.

Common ESG Risks in Infrastructure Projects:

- ➔ Environmental: Negative effects on the environment due to building, rehabilitating, or maintaining a physical structure. These include an increase in air or water pollution, biodiversity loss, deforestation, increased carbon footprint, or natural resource depletion.
- ➔ Social: Negative effects on different groups of people due to the infrastructure project, such as employees, nearby residents, Indigenous populations, or community members. Such negative effects include poor labor law compliance, human rights abuses, displacement of local residents, or archaeological or cultural heritage site degradation.
- ➔ Governance: Negative effects related to the infrastructure project's financial, legal, and ethical management during the design and implementation of the project. These can include corruption, money laundering, lack of transparency, and non-competitive bidding processes that lead to higher project costs and/or poor project quality.

ESG safeguard methodology:

In addition to metrics of ESG risk exposure, the *Belt and Road Reboot* report introduced a measure of China's responses to ESG risks through its own grant and loan financing agreements. AidData obtained a large cache of unredacted infrastructure financing agreements that provide detailed information about whether financiers, at the time that they signed the agreements with their host country counterparts, identified behavioral expectations related to ESG risk management and mechanisms to monitor and enforce compliance with those expectations. AidData used these agreements to create indicators that measure the formal stringency of China's ESG safeguards built into its infrastructure grant and lending instruments. It then applied these metrics to the full GCDF 3.0 dataset.

We thank Julie Sickell for her thoughtful review of this profile and data quality assurance; Sheng Zhang for providing data analysis support; John Custer for supporting the formatting and data visualization design of the profile; Sasha Trubetskoy for providing cartographic support; and Isaac Herzog for conducting a final copy-edit of the profile.

AidData gratefully acknowledges financial support from the Swiss Agency for Development and Cooperation (SDC), the United States Agency for International Development (USAID), and the Ford Foundation. The findings and interpretations in this profile are entirely those of the authors. AidData's research is guided by the principles of independence, integrity, transparency, and rigor. A diverse group of funders support AidData's work, but they do not determine its research findings or recommendations.

The insights in this profile are primarily derived from AidData's preliminary 2000-2022 Global Chinese Development Finance (GCDF) dataset, although it also draws upon ancillary data from other sources. This preliminary dataset has not yet been published. It builds upon AidData's publicly available GCDF 3.0 dataset, incorporating an additional commitment year of data and new information across all commitment years based on sources uncovered during the data collection process. GCDF 3.0 is a uniquely comprehensive and granular dataset that captures 20,985 projects across 165 low- and middle-income countries supported by loans and grants from official sector institutions in China worth $1.34 trillion. It tracks projects over 22 commitment years (2000-2021) and provides details on the timing of project implementation over a 24-year period (2000-2023). An accompanying report, *Belt and Road Reboot: Beijing's Bid to De-Risk Its Global Infrastructure Initiative*, analyzes the dataset and provides myth-busting evidence about the changing nature, scale, and scope of China's overseas development program.

For the subset of grant- and loan-financed projects and activities in the dataset that have physical footprints or involve specific locations, AidData has extracted point, polygon, and line vector data via OpenStreetMap URLs and produced a corresponding set of GeoJSON files and geographic precision codes. The GCDF 3.0 geospatial data and precision codes are provided in AidData's Geospatial Global Chinese Development Finance Dataset, Version 3.0 (Goodman et al, 2024).

For any questions or feedback on this profile, please email china@aiddata.org.

AIDDATA
A Research Lab at William & Mary

AidData & William & Mary,
PO Box 8795, Williamsburg, VA 23185.
www.aiddata.org | @AidData