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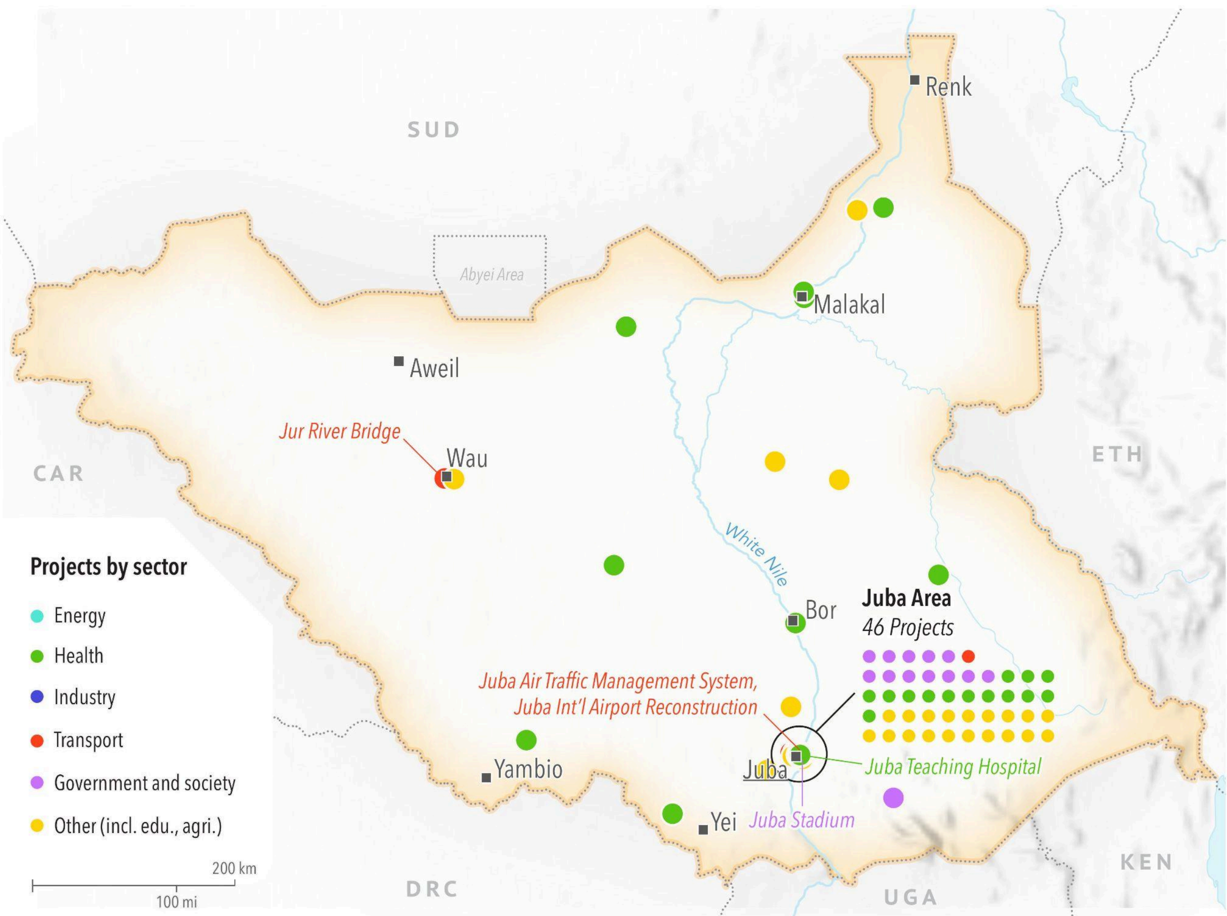
# South Sudan

## The Scale, Scope, and Composition of Chinese Development Finance

October 2025

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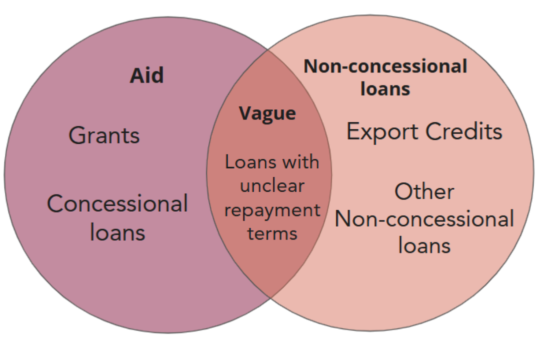
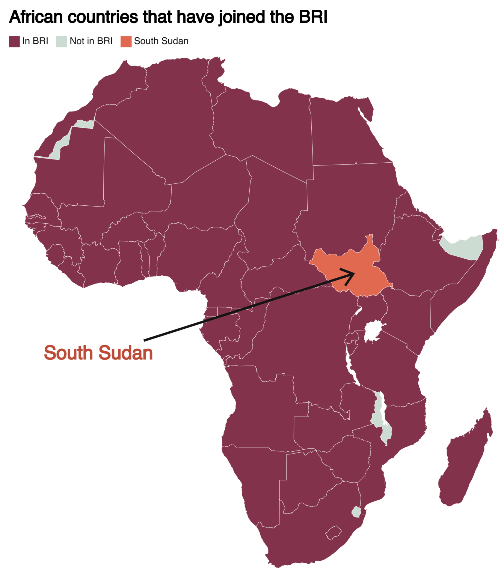
## Key concepts: aid, non-concessional loans, and vague flows

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.




## South Sudan and China's Belt and Road

South Sudan, a landlocked nation in East-Central Africa, officially joined China's Belt and Road Initiative (BRI) in 2018. Its participation in the BRI builds upon a history of cooperation with China and its neighbors through the Forum on China–Africa Cooperation (FOCAC), which has provided a platform for South Sudan to pursue new opportunities in trade, infrastructure, and development.

### Historic relationship

South Sudan officially became independent from Sudan in 2011. China officially recognized South Sudan's independence in 2011, although the two countries engaged before the start of the official diplomatic relationship with China opening a consulate in Juba in 2008.[1] China National Petroleum Corporation, one of the most significant Chinese actors in South Sudan, has been active in South Sudan's oil sector since the 1990s. Between 2013 and 2020, South Sudan experienced a civil war, which exposed the South Sudanese population to human rights abuses, displacement, and instability. Since 2020, South Sudan has been ruled by a government coalition composed of President Salva Kiir and opposition leader Riek Machar as his deputy.[2]

### Present-day relationship

China's present-day engagement with South Sudan is primarily defined by South Sudan's large natural deposits of oil. When the young country faced significant liquidity pressures in the first few years of its independence, Beijing moved early to anchor its role as one of the country's key external partners. Between 2011 and 2022, China committed $5.3 billion in loans for budget support and infrastructure, alongside 160 grants worth $365 million in cash, in-kind aid, and training programs. Some of China's earliest loans to the country provided up-front cash to the South Sudanese government, to be repaid later through future oil sales (called commodity pre-payment arrangements). These loans once kept Khartoum afloat, but the model has since become controversial, with South Sudanese officials claiming it deprived the government of vital revenues that could have been secured at market prices rather than the discounted prices agreed with Beijing during times of crisis. Even so, Beijing has maintained a steady stream of grants and loans directed towards South Sudan, underscoring its drive to build its relationship beyond pre-payment facilities related to oil sales.

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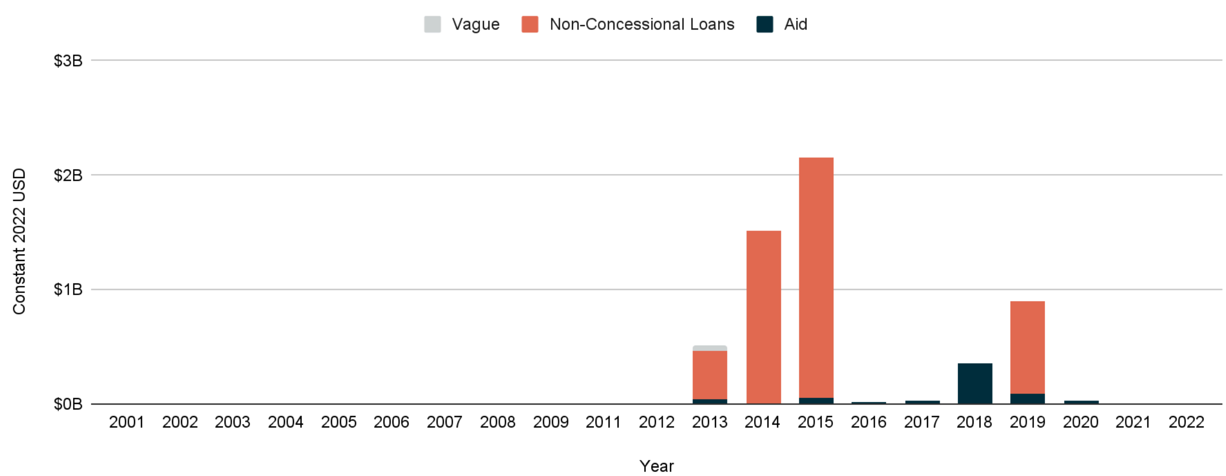
[1] *China recognizes the independence of South Sudan. (n.d.).* From http://ss.china-embassy.gov.cn/eng/sbjw/201107/t20110711_7252414.htm

[2] For more information on South Sudan's coalition government, see Al Jazeera (2020) for more information at https://www.aljazeera.com/news/2020/2/22/south-sudans-rival-leaders-form-coalition-government.

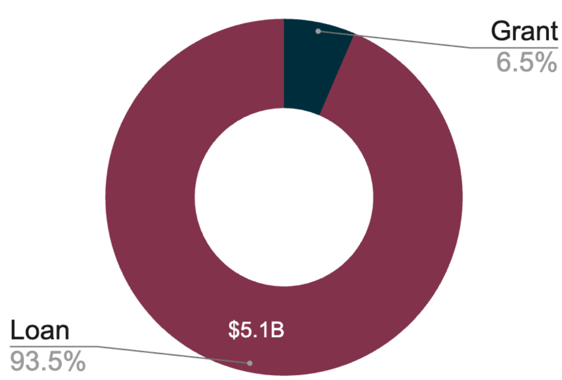
# Overview: Chinese development finance in South Sudan from 2000-2022

| | | | | |
|---|---|---|---|---|
| **$5.5 billion** in loans and grants provided by official sector donors from China. | **93%** of Chinese development finance is provided via loans. | **161** grants, technical assistance, and training activities offered. | **18th** largest recipient of Chinese aid and credit in Africa. | **91%** of China's infrastructure portfolio has significant ESG risk exposure. |

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

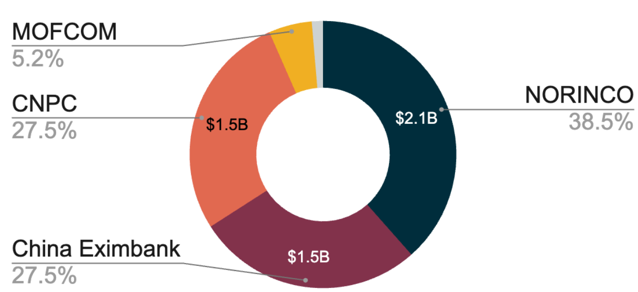



*Portfolio by type of finance*




*Loans include concessional and non-concessional loans.*

*Portfolio by funder*




*Norinco: China North Industries Group Corporation Ltd.; China Eximbank: Export-Import Bank of China; CNPC: China National Petroleum Corporation; MOFCOM: Ministry of Commerce*

[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

South Sudan joined China's BRI in 2018. However, most of China's aid and non-concessional loans came before the agreement was signed (see Figure 1.1). For a list of bilateral diplomatic visits between China and South Sudan in the BRI era, see Appendix A.

China's financing to South Sudan started in 2013 shortly after it gained independence in 2011 (see Figure 1.1). In 2013, China delivered development finance in the form of non-concessional loans, aid, and other means to South Sudan, specifically focusing on financing for infrastructure projects. In 2014 and 2015, following the outbreak of the civil war in South Sudan, China mostly provided general budget support. After South Sudan's accession to BRI in 2018, China once again ramped up its financing in South Sudan.

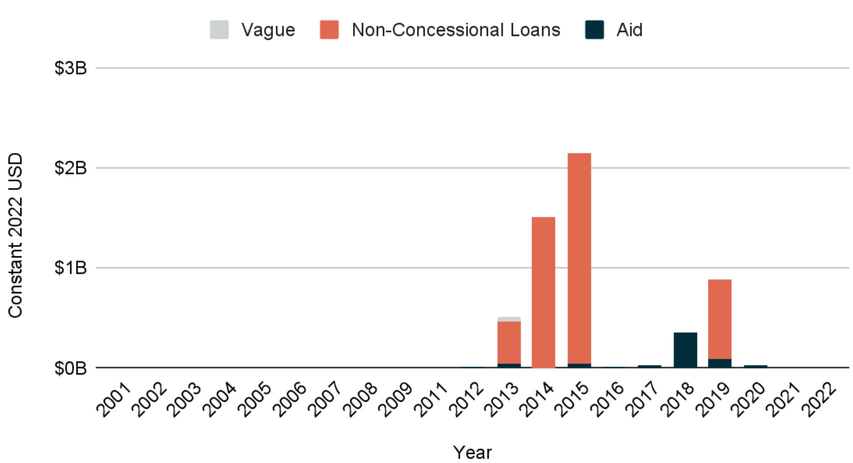
## How much development finance has China provided South Sudan since 2000?

Between 2000 and 2022, official sector lenders and donors from China provided grant and loan commitments worth $5.6 billion for 171 projects and activities in South Sudan. That makes South Sudan—a country with a small economy (GDP: $11.9 billion, as of 2015) and population (11 million residents)—the 16th largest recipient of Chinese aid and credit in Africa and the 51st largest recipient in the developing world.

Before South Sudan joined the Belt and Road Initiative (BRI), nearly all (99%) of its financial flows from China (2013–2017) came through commodity prepayment arrangements. Under these deals, Chinese state-owned companies provided up-front cash to the South Sudanese government, to be repaid later through future oil sales.[4]

This early financing approach contrasts sharply with China's post-2018 portfolio, which shifted toward infrastructure development, including major projects like the construction of the Juba-Terekeka-Yirol-Rumbek Road. Since 2021, however, there have been no significant changes or new commitments in China's development finance activities in South Sudan.

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




Types of funding:[5]

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]See Appendix B for the definition of prepayment facility.

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

China's portfolio of financing to South Sudan is significantly less concessional than other donors, and has been subject to scrutiny. Although the oil prepayment facilities provided by Chinese and other international institutions initially seemed like an attractive way to secure quick money to address government budget shortfalls during and after the civil war, over time they have created significant cash flow problems for the government of South Sudan. These prepayment agreements charge interest on the amount prepaid to the borrower, while the financier receives a discount on the price of the commodity. In South Sudan, these prepayment facilities have left the government with debt, while also significantly reducing the potential revenue that could be obtained from the oil sales due to the agreed-upon discounted prices. According to the World Bank, oil accounts for 90% of South Sudan's revenue and almost all its exports. This lack of diversification makes the problems caused by the oil prepayment facilities even more acute.

The oil prepayment facilities provided by Chinese lenders were committed in 2014 and 2015, and after South Sudan's accession to BRI in 2018, China's development finance portfolio pivoted away from oil prepayment facilities to focus on lending for infrastructure projects. However, in order to continue mitigating the risk of South Sudan failing to meet repayment obligations on these infrastructure projects, Chinese lenders required that the government of South Sudan maintain minimum cash deposits in Chinese-controlled escrow accounts as a form of liquid collateral. The government of South Sudan is expected to deposit project revenues or the cash proceeds from oil export sales into these accounts, which can be seized by Chinese lenders should the sovereign fail to meet its repayment obligations. 100% ($1.1 billion) of China's lending operations in South Sudan since 2018 have benefited from this type of credit enhancement.[6] Examples of projects that had credit enhancements include the 2018 China Eximbank-financed Air Traffic Management System (ATMS) Project, which required that airport revenues be deposited in an escrow account, and the 2019 China Eximbank-financed Juba-Terekeka-Yirol-Rumbek Road Project, which required that oil revenues be deposited in an escrow account. As a point of comparison, only 47% of China's global lending portfolio was collateralized during the same 2018-2022 period.

[6]To learn more about credit enhancements, see Page 7 in AidData's TUFF Methodology 3.0 at https://docs.aiddata.org/ad4/pdfs/AidData_TUFF_methodology_3_0.pdf

## How does China compare to other development partners?

China is South Sudan's second largest development partner in aid and non-concessional lending behind the United States (see Figure 1.2). In terms of aid provision only, the United Kingdom, European Union institutions, Germany, Canada, Norway, and the World Bank Group all rank higher than China, who only provided $621 million in aid over the same twenty three-year period. The EU institutions emerge as the largest multilateral development partner, providing $1.5 billion over the whole time period.

While South Sudan has undergone significant instability due to civil war in recent years, most aid operations have continued. However, recent developments in some of South Sudan's top bilateral donors will affect South Sudan's development portfolio in 2025 and beyond:

- ➔ United States: The U.S. has slashed its foreign assistance budget and drastically downsized its international aid organization, USAID, in February 2025. This will impact aid delivery to South Sudan, where the U.S. is the largest bilateral development partner. Given the U.S.'s historic focus on humanitarian aid in South Sudan, a complete funding cut would leave a significant and potentially devastating gap in critical support.
- ➔ United Kingdom: The UK has announced plans to cut its aid budget to 0.3% of gross national income starting in 2027, which likely will also decrease aid to South Sudan.

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

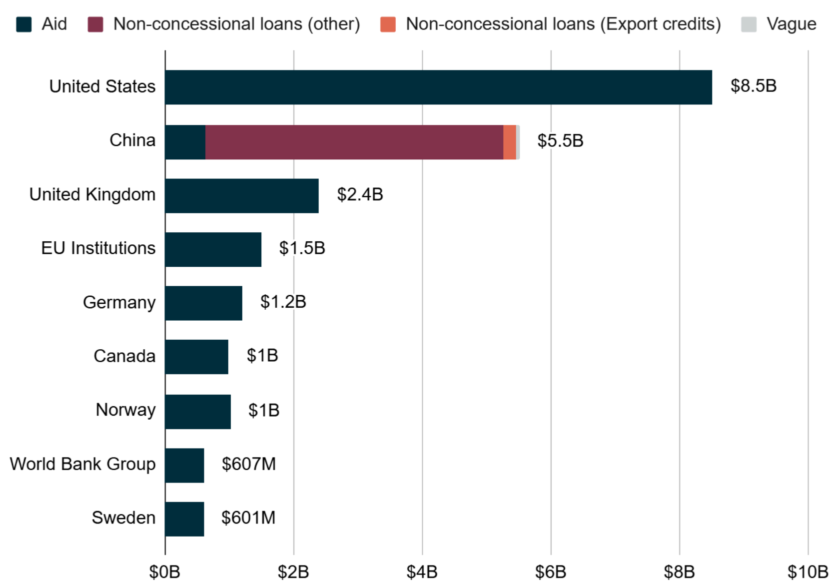



*Figure 1.2 contains the top nine development partners providing aid and other financing to South Sudan. However, only China has detailed bilateral export credit flows to South Sudan. This level of granularity is not available for other development partners as the OECD does not provide export credit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

*Total export credits from G7 Countries: $230,000.*

*Total export credits from DAC member countries (including G7): $230,000.*

### How does China use export credits?

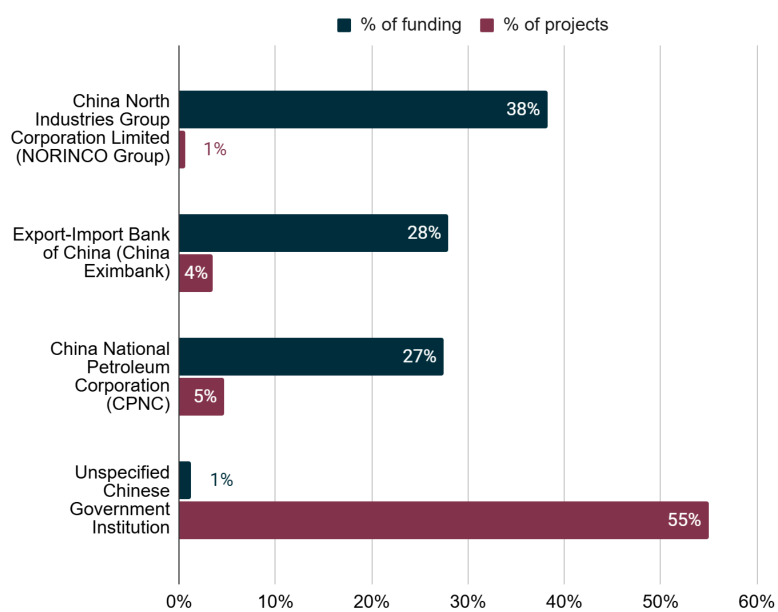
The central role that export credits play in China's overseas lending portfolio sets it apart from other official sector creditors: Under a so-called "Gentlemen's Agreement" on Officially Supported Export Credits, OECD member countries agreed in 1978 to "tie their own hands" and voluntarily abide by 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 Sudan?

Between 2000 and 2022, 19 official sector donors and lenders from China provided aid and non-concessional loans to South Sudan. 94% of China's development finance portfolio is provided through 4 main donors and lenders (see Figure 1.3). The other 6% is provided by a diverse array of government agencies (including central, regional, or municipal government agencies), state-owned commercial banks, and state-owned companies.

China's financing portfolio in South Sudan differs significantly from China's global portfolio with respect to the types of donors and lenders. Chinese state-owned companies administered 66% of China's financing portfolio in South Sudan during the 2000-2022 period, compared to 8% in China's global portfolio. This difference is due to the commodity prepayment arrangements used in South Sudan. China's portfolio of financing pivoted in South Sudan to favor lending for infrastructure projects after 2018, there was a similar shift in lenders with China Eximbank replacing state-owned companies. Between 2018 and 2022, Chinese state-owned banks administered 84% of China's portfolio in South Sudan, which falls close to the 2000-2022 global average of China's portfolio, of which 82% was administered by Chinese state-owned banks.

Figure 1.3: Top Chinese donors and lenders




NORINCO Group: state-owned defense corporation providing loans.

China Eximbank: state-owned policy bank that primarily provides concessional loans and export credits.

CNPC: state-owned enterprise that provides both loans and grants.

Unspecified Chinese Government Institution: a blanket category for when the specific funder is unknown, but it is clear the funder is part of the Chinese government or official sector institution.

The top funding agency is a state-owned enterprise, China North Industries Group Corporation Limited (NORINCO Group). NORINCO Group signed an oil prepayment facility with the government of South Sudan in 2015 for $2.1 billion—or 38% of China's total financial commitments in South Sudan between 2000 and 2022. To date, this remains NORINCO's only loan to South Sudan.

The Export-Import Bank of China, a state-owned policy bank, issued 6 loans worth $1.5 billion for projects and activities, accounting for 28% of total official sector financial flows from China to South Sudan between 2000 and 2022. All of the projects financed by China Eximbank were infrastructure projects, including financing for road construction, air traffic management system development, airport reconstruction and expansion, and national broadband network development. China Eximbank issued its latest loan to South Sudan in 2019.

China National Petroleum Corporation (CNPC) issued 3 loans and 6 grants (including one instance each of technical assistance and scholarships) worth a total of $1.5 billion. The value of these loans and grants represents 27% of total official sector financial flows from China to South Sudan between 2000 and 2022. Similar to NORINCO, CNPC primarily provided financing to South Sudan via oil prepayment facilities. The grants provided by CNPC include some corporate social responsibility projects, such as the provision of scholarships, donations to schools in Juba and Melut, and donations in response to disasters (such as famine) affecting the country. However, CNPC was last actively committing grants and loans in South Sudan in 2017.

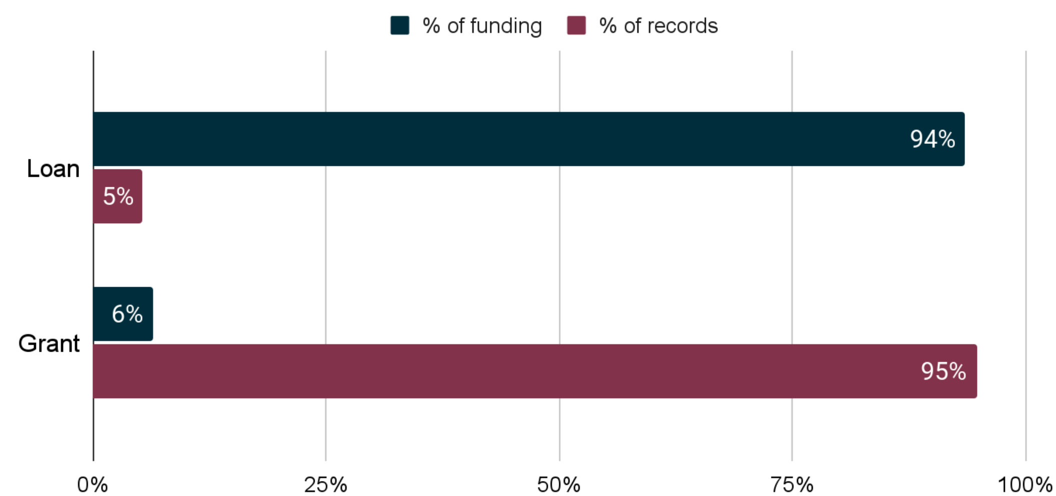
55% of records (94 projects and activities) were issued by unspecified government agencies from China. Unspecified Chinese Government Institutions is a residual category for cases when the specific funder is unknown, but the funder is clearly a Chinese official sector institution. These 98 projects accounted for $68 million of total funding between 2000 and 2022, and included activities such as anti-epidemic equipment donations. For example, an unspecified Chinese government agency provided anti-epidemic materials to refugee camps in South Sudan in June 2022, with an unknown financial commitment value.

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

94% of China's official sector financial commitments to South Sudan take the form of loans (totaling $5.1 billion), while 6% ($356 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.

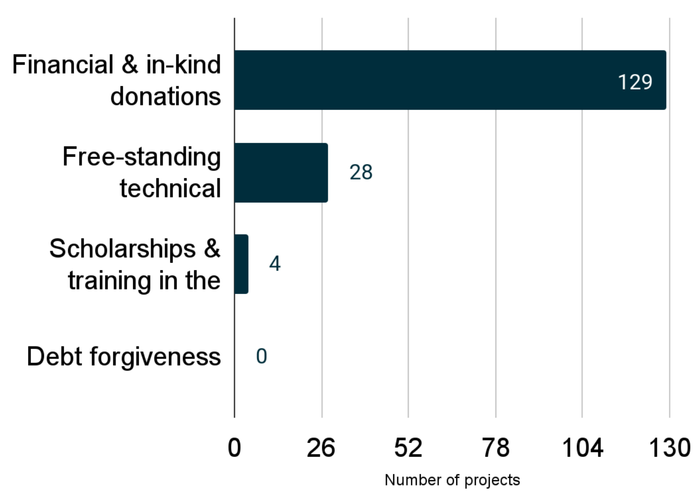
AidData captures each instance of a grant or in-kind donation as one record, so analyzing the record counts can help provide a better picture of China's activities in South Sudan. When looking at record counts, grants account for 95% of all activity records in South Sudan (representing 161 records capturing activities taking place between 2000 and 2022).

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



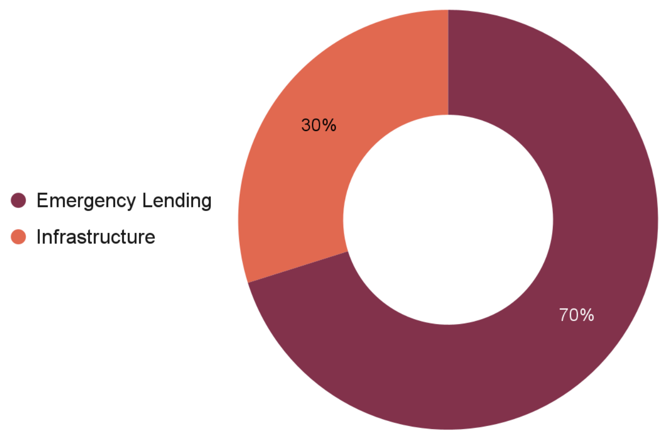

*Note: Debt rescheduling and Vague records are excluded from this visual since they are neither loans or grants.*

Figure 1.5: Breakdown of grants by project count




The most common types of in-kind donations from China to South Sudan include anti-epidemic materials, food aid, and school equipment. Free-standing technical assistance included dispatching 9 medical teams and peacekeeper teams. China has awarded roughly 240 scholarships for students in South Sudan to study Chinese or to study in China. China also provided one training on economic management and political strategy for members of South Sudan's ruling party in 2014. China did not provide any debt forgiveness to South Sudan.

Figure 1.6: Breakdown of lending by purpose



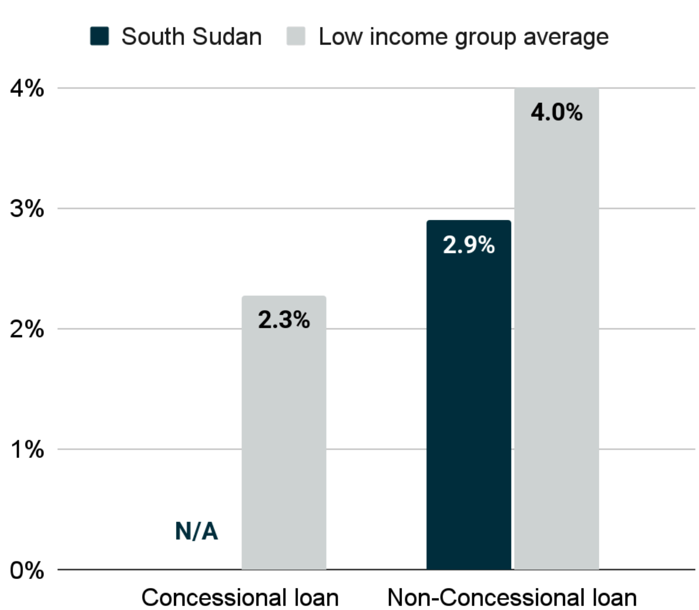

Infrastructure: loans to support the construction, rehabilitation, or maintenance of a physical structure.

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

Seventy percent of China's lending to South Sudan comes from three emergency rescue loans provided through oil prepayment facilities. These loans allowed the government to service existing debts and ease liquidity pressures, underscoring its heavy reliance on oil-backed financing. Compared to the global average—where emergency lending accounts for just 9.6% of China's portfolio—South Sudan's unusually high share highlights both the country's acute fiscal vulnerabilities and Beijing's role as a lender of last resort.

Roughly 30% of China's official sector lending to South Sudan supports infrastructure projects. Nearly 99.9% of all infrastructure project lending in South Sudan is implemented by at least one Chinese entity, such as a Chinese state-owned company or private sector company.

Figure 1.7: Borrowing terms




Between 2000 and 2022, China provided one concessional loan (which is considered to be aid) to South Sudan, but its borrowing terms are unknown.

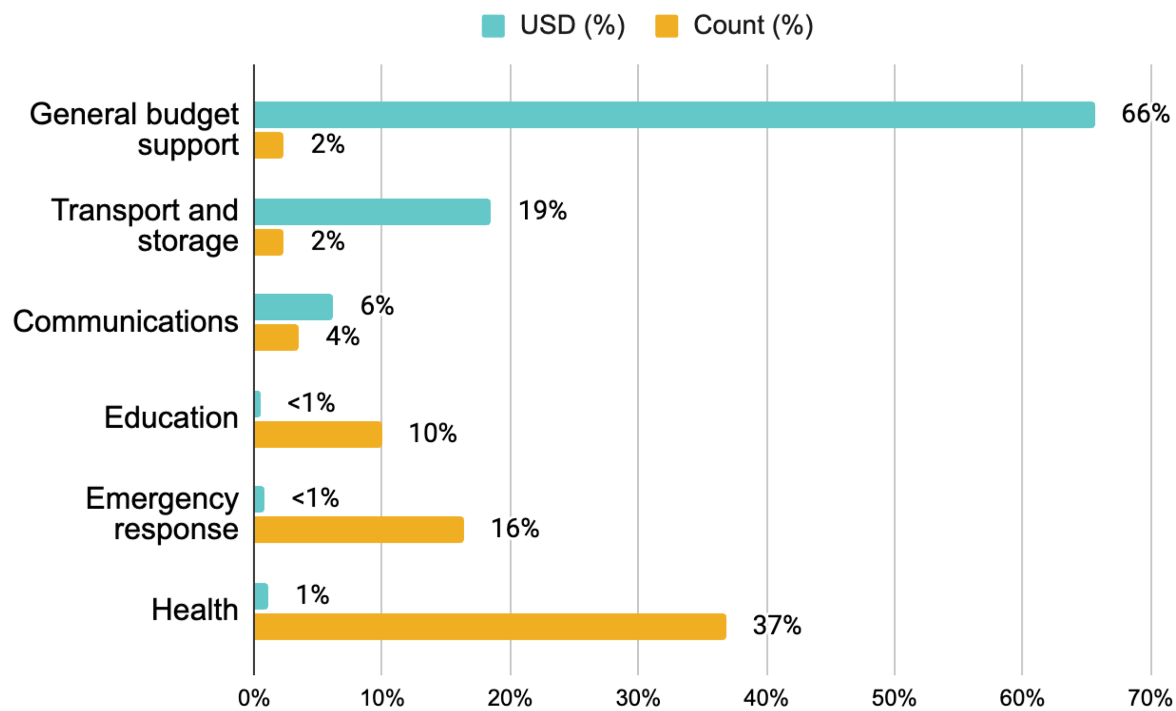
China's non-concessional lending to South Sudan carried a weighted average interest rate of 2.9% and a weighted average maturity of 2 years. While this interest rate is more generous than the weighted average interest rate found in China's broader non-concessional lending portfolio in low-income countries, the maturity is far shorter than the corresponding average. The weighted average maturity of 2 years is driven by two loans with *formal* maturities of only 45 days, but South Sudan hadn't fully repaid one of these loans until five years after it was issued.

## In which sectors is China most active?

Top sectors for China's aid and credit in South Sudan 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, AidData provides 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, 91% of China's grant and loan commitments to South Sudan supported three top sectors: general budget support, transport and storage, and communications between 2000 and 2022.

- General budget support: This sector is the largest sector by financial commitment with $3.6 billion in funding (66% of China's entire portfolio), and refers to development finance provided in support of general government cash flow. This sector accounts for all the emergency rescue lending provided to South Sudan, and all of the financing was provided in 2014 and 2015 via oil prepayment facilities from CNPC and NORINCO. None of the rescue lending in South Sudan represented short-term rollover facilities used to refinance existing debt (as seen in Argentina and Egypt). Since 2015, Chinese agencies have not contributed more general budget support.

- 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. 19% of China's development finance portfolio in South Sudan is specifically dedicated to transportation and storage, representing $1 billion in aid and non-concessional loans. The largest financial commitment from a single source is a $807 million loan from China Eximbank for the first phase of the 392 km Juba-Terekeka-Yirol-Rumbek Road Construction Project. No new transport and storage projects have been financed by Chinese creditors since 2020.

- Communications: This sector encompasses the provision and access of telecommunications and information services, such as telephone, radio, and TV networks. Projects in the communications sector account for $340 million in funding (or 6% of China's development finance portfolio). Activities in the communications sector include a $220 million loan from China Eximbank for South Sudan's national broadband network project, which included the laying and linking of fiber optic and underwater cables. No new projects financed by Chinese state-backed creditors have emerged since 2020.

China is also heavily engaged in "software" sectors, such as health and education, when looking at the number of projects and activities. China's footprint in these sectors is often difficult to represent, because the activities in these sectors usually attract smaller grant and loan commitments, or represent some form of in-kind donation or technical assistance.

- Education: This sector encompasses schooling at the primary, secondary, and post-secondary levels, as well as technical and advanced training activities. Education activities represent $29 million in funding and 10% of China's total record count, with 20 activities recorded. Education activities include Chinese embassy donations of school bags and soccer balls to a school in South Sudan, and ZTE donating school equipment and a dormitory. The only project in 2022 featured the 9th medical team dispatched by China hosting a Chinese language course for staff at the Juba Teaching Hospital.

- Emergency response: This sector encompasses activities that address the preparation, management, and response to public disasters. This sector is the largest sector by record count, representing a total of 28 records for $47 million (or 16% of the total record count). China's activities in the emergency response sector include flood relief donations from PetroChina and the Chinese Embassy following large-scale flooding in November 2021 as well as rice and food donations by the Chinese government.

- Health: This sector includes medical care, infrastructure, equipment, and disease control activities. In total, activities in the health sector represent 63 records in China's portfolio in South Sudan (or 37% of records). Notable activities in the health sector include a MOFCOM grant worth $36 million for the Juba Teaching Hospital renovation and expansion. In response to the COVID-19 pandemic, Chinese lenders donated a total of $4.5 million in COVID-19 donations to South Sudan, providing over 100,000 doses of Sinovac vaccines in 2020 and 2021. In 2022, the Chinese medical team dispatched to South Sudan donated Christmas gifts and medical checkups to an orphanage in South Sudan, with four other projects pertaining to medical donations taking place the same year.

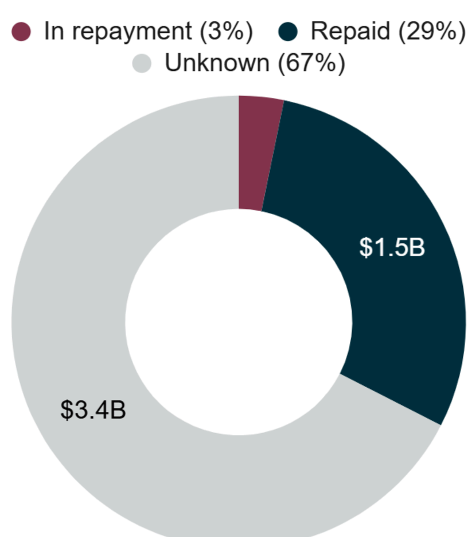
# Section 2: South Sudan's debts to China

| | | | |
|---|---|---|---|
| 9<br>loans issued | $5.1 billion<br>cumulative value of loan commitments (43% of GDP) | 34%<br>of total debt shows signs of financial distress | 100%<br>public debt |

| What is "public debt"? | | |
|---|---|---|
| Public debt<br>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<br>Loans to special purpose vehicles or joint ventures in which recipient governments hold minority equity stakes. | Private or opaque debt<br>Loans to private sector borrowers and entities with opaque ownership structures. |

In this section, AidData examines South Sudan'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 Sudan's debt exposure to China.

Figure 2.1: Repayment status for all loans from China

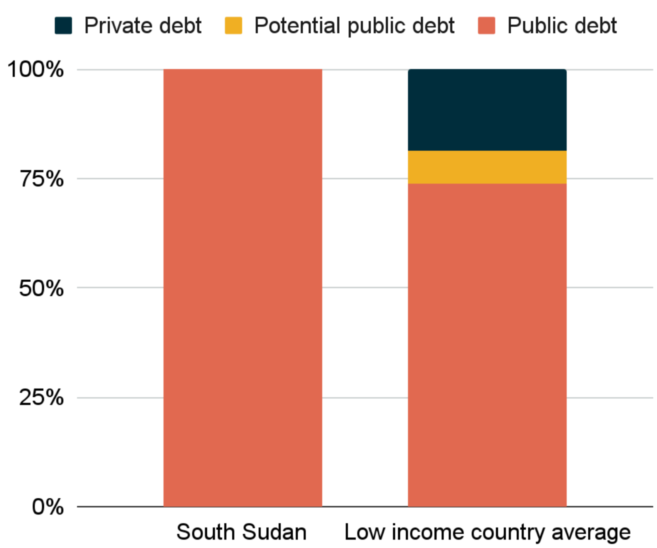



There are currently three loans for which AidData has access to repayment details. One of those loans (worth $1.5 billion) is currently in its repayment period. Two loans (worth $165 million) have exited their repayment periods—meaning they should have been fully repaid based on their original maturity dates outlined at the time of signing.

However, the amount in repayment may be significantly higher, since there are six loans (worth $3.4 billion) for which AidData has insufficient repayment details.

Figure 2.2: Composition of debt from China by public liability

*Total debt, 2000-2022—South Sudan: $5.2 billion. Low income country average: $6 billion.*




With only nine loans over a 22 year period, China's lending in South Sudan is much less diverse than that of other countries, who on average received 34 loans during this time period.

100% of South Sudan's debt is classified as public debt, which is higher than the average of 74% across low income countries. All of the loans extended by Chinese lenders in South Sudan were contracted directly by the South Sudanese government.

When AidData examines South Sudan's public debt to China, there are three instances of financial distress that account for 34% of all China's cumulative loan commitments to South Sudan. Financial distress can include borrowers accruing principal or interest arrears, defaulting on their repayment obligations, or filing for bankruptcy. One such loan is the $264 million loan from China Eximbank for an Air Traffic Management System (ATMS). The government of South Sudan accrued arrears worth $36 million on this loan.[7] The other two loans—worth a combined $1.4 billion— are commodity-backed agreements between China National Petroleum Corporation (CNPC) and the government of South Sudan from 2014. These loans were meant to help the government meet its outstanding debt obligations and pay for general operating expenses. Under the oil prepayment arrangement, the government of South Sudan was expected to repay the loan within 45 days. It failed to meet this obligation, and still had outstanding debt related to these loans five years later. In June 2019, the president of South Sudan suspended all oil prepayment agreements due to the significant cash flow problems these types of agreements created for the economy.

In a joint report from the World Bank and IMF on Debt Sustainability Analysis, South Sudan is classified as sustainable but with high risk of external debt distress.[8]

[7] The South Sudanese authorities did not disclose the existence of the ATMS loan to the World Bank and the IMF until it "came to light during [a] debt stocktaking exercise conducted by an international auditing firm." See https://www.elibrary.imf.org/view/journals/002/2023/108/article-A002-en.xml#A002fn04

[8] For more information on the World Bank-IMF's analysis of South Sudan's external debt, please see http://documents.worldbank.org/curated/en/952211618431680325/South-Sudan-Joint-World-Bank-IMF-Debt-Sustainability-Analysis

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

## Chinese infrastructure in South Sudan with ESG risk exposure:

| 14 | $1.6 billion | 91% |
|---|---|---|
| infrastructure projects supported by grants and loans from China | in loan commitments supporting infrastructure projects | 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

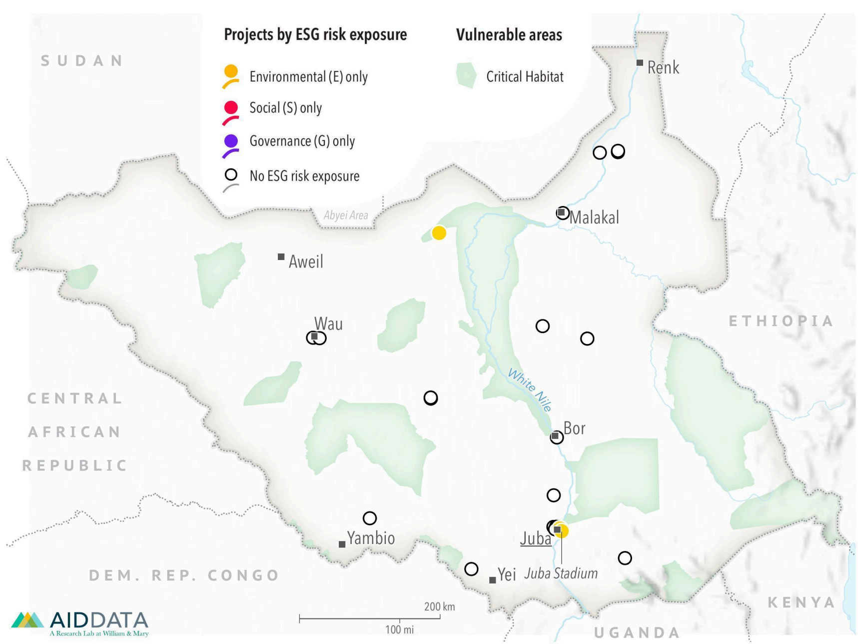



Figure 3.1 presents the geographic locations of all Chinese-financed infrastructure projects in South Sudan according to their environmental, social, or governance risk exposure. It shows two project locations with environmental risk exposure. Governance risk was the most prevalent in South Sudan (by monetary value), but these are not represented on the map because many of the projects with governance risk did not have a precise geographic location.

In the *Belt and Road Reboot* report[9], 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] 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.

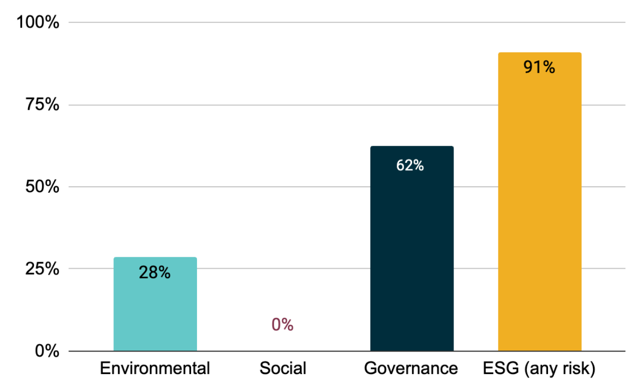
In China's broader grant- and loan-financed infrastructure project portfolio in the developing world, the cumulative percentage of financing with significant ESG risk exposure increased from 12% to 54% over the same 22-year period—showing China's signature infrastructure initiative is facing major implementation challenges. In comparison, with additional data uncovered for 2022, South Sudan's ESG risk exposure was at 91% overall.

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

South Sudan's grant- and loan-financed infrastructure portfolio from China shows exceptionally high ESG risk exposure—91% of projects report at least one type of ESG risk, nearly 40% above the global average in 2021. The portfolio includes 14 infrastructure projects valued at $1.6 billion. Among these, governance and environmental risks are more common, while no social risks have been recorded to date (see Figure 3.2).

Governance is the most prevalent ESG risk in South Sudan's infrastructure project portfolio. Common governance challenges include corruption, forgery, mismanagement, and a lack of transparency. Notably, four of South Sudan's high-value infrastructure projects—each worth more than $50 million—have faced serious governance issues such as corruption and fraud. These include the National Broadband Network project, and the construction of the 392 km Juba-Terekeka-Yirol-Rumbek Road, linking the capital, Juba, to the northwestern city of Wau. Environmental risks are also present, such as improper waste management and pollution, including incidents reported at the Juba Teaching Hospital.

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




*ESG issues observed in South Sudan*

Environmental: improper waste management and pollution (e.g. Juba Teaching Hospital), projects located in environmentally protected areas.

Social: no social risk recorded in South Sudan.

Governance: corruption, forgery, and lack of transparency (e.g. Digital Migration TV project and the 392 km Juba-Terekeka-Yirol- Rumbek Road Construction Project).

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

*South Sudan (2022): 91%. Low income country average (2022): 55%.*

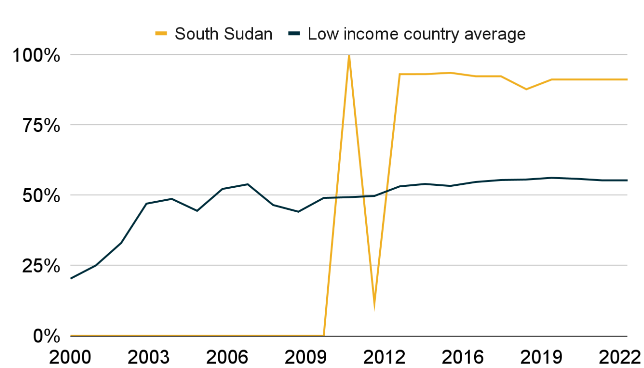



Figure 3.3 shows the increase in the cumulative ESG risk exposure over time compared to all low-income group countries. South Sudan's ESG risk exposure for its Chinese financed infrastructure portfolio remained below the global average until 2011, when it increased due to the National Broadband Network project. Between 2019 and 2022, China focused on COVID-19 aid and other disaster response efforts in South Sudan, providing no new infrastructure financing.

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

| Percent of infrastructure portfolio with strong ESG safeguards | What are ESG safeguards? |
|---|---|
| 0%<br>2000-2022 | 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 Sudan 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. 0% of China's grant and loan-financed infrastructure project portfolio in South Sudan had strong contractual ESG safeguards in place during the same time period, not consistent with the global trend.[10] This trend has not changed over time, with 2022 also displaying 0% strong safeguards, as no new infrastructure projects have emerged since 2019. All infrastructure projects recorded featured exclusively weak ESG contractual safeguards.

Trends across China's global infrastructure portfolio suggest the increase in strong ESG safeguards is likely to continue in future years, although South Sudan is an outlier in this case, due to the ongoing instability and conflict in the country.

Figure 4.1: Proportion of infrastructure financing with strong contractual ESG safeguards

*Proportion of official Chinese infrastructure financing during the late BRI period (2018-2022)*

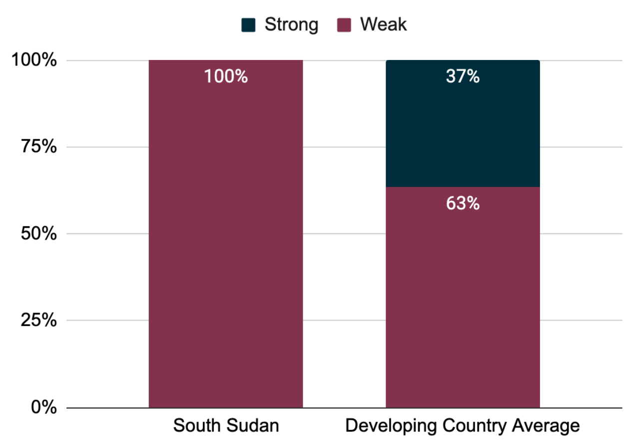



Figure 4.1 highlights the increase in ESG safeguards seen across China's infrastructure portfolio in developing countries by the late BRI period compared to South Sudan. While the annual average of infrastructure financing with strong ESG safeguards rose to 37% between 2018-2021 across China's whole portfolio, South Sudan did not see a similar increase. In fact, 0% of its infrastructure portfolio had strong ESG safeguards (before and during the BRI periods).

[10]During the same 22-year period, 25% 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.

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

Approval rates of the South Sudanese population toward Chinese leadership were only collected between 2014 and 2017 by Gallup.[11] Over these four years, South Sudanese citizens held an average approval rate of 72%, compared to the global average in developing countries of 60.1% between 2000 and 2022. No additional data for South Sudan has become available since 2017.

Figure A.1: South Sudan's approval of Chinese leadership, 2006-2022[12]

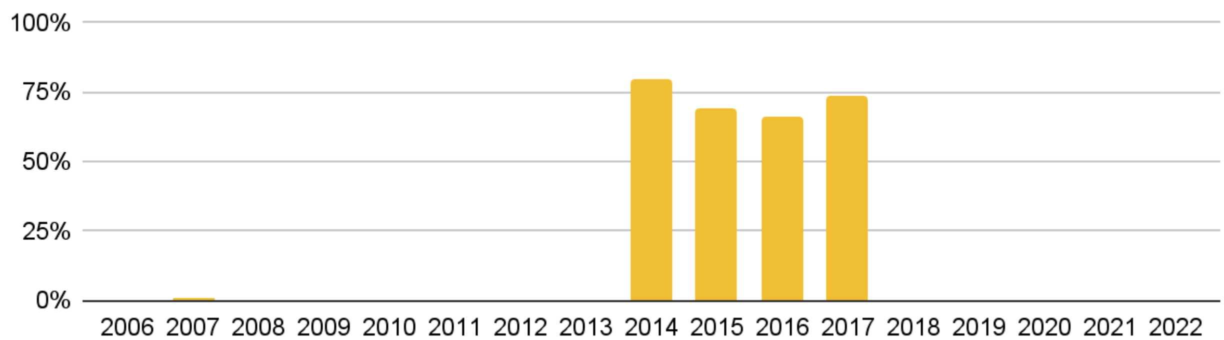



Figure A.2: Bilateral diplomatic visits between China and South Sudan

| | |
|---|---|
| 2014 AUG | South Sudanese Minister of Foreign Affairs and International Cooperation Barnaba Marial Benjamin visited China and met with State Councilor Yang Jiechi to hold diplomatic talks. |
| 2015 JAN | Chinese Foreign Minister Wang Yi visited South Sudan and met Sudanese Foreign Minister Ali Karti where diplomatic talks were held. |
| 2018 SEP | Sudanese Minister of Foreign Affairs and International Cooperation Nhial Deng Nhial visited Beijing and met Vice Foreign Minister Le Yucheng where diplomatic talks were held ahead of the Forum on China-Africa Cooperation (FOCAC). |
| 2022 MAR | The Special Envoy for the Horn of Africa Affairs, Xue Bing, visited South Sudan and met with President Salva Kiir where diplomatic talks were held. |
| 2024 SEP | President Salva Kiir Mayardit visited Beijing for FOCAC and met with President Xi Jinping where their diplomatic ties were elevated to a strategic partnership. |

[11] 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 2006-2022. For South Sudan, there is no Gallup data prior to 2014 and after 2017. For more information on the Gallup methodology see https://www.gallup.com/178667/gallup-world-poll-work.aspx

[12] 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, AidData 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 Sudan 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. AidData determined that these additional financial flows would not substantially change Figure 1.2.

## Pre-export Finance Facility (PXF)

A pre-export finance (PXF) facility is an arrangement in which a commodity (e.g. oil) producer gets up-front cash from a customer in return for a promise to repay the customer with that commodity (possibly at a discount) in the future. PXF funds may be advanced by a lender or syndicate of lenders to a commodity producer to assist the company in meeting either its working capital needs (for example, to cover the purchase of raw materials and costs associated with processing, storage and transport) or its capital investment needs (for example, investment in plant and machinery and other elements of infrastructure). PXF facilities are usually secured by (1) an assignment of rights by the producer under an 'offtake contract' (i.e., a sale and purchase contract between the producer and a buyer of that producer of goods or commodities), and (2) a collection account charge over a bank account into which proceeds due to the producer from the buyer of the goods or commodities under the offtake contract are credited.

## Calculating loans from China within repayment periods

Figure 2.1 shows the percentage of official sector lending from China to South Sudan 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, AidData assumes 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, AidData identifies whether a given infrastructure project is located in an environmentally sensitive area. Second, AidData analyzes 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). AidData assesses whether the project is located in a geographical area that is vulnerable to political capture and manipulation by governing elites in host countries. Fourth, AidData evaluates if the Chinese lender/donor relied on a contractor sanctioned for fraudulent and corrupt behavior to implement the project. Fifth, AidData identifies 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.

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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).

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