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Peer-to-Peer Lending

CHINA'S OVERSEAS DEVELOPMENT FINANCE PIVOTS TO NATIONAL AND REGIONAL DEVELOPMENT BANKS

BY REBECCA RAY, DIEGO MORRO, ALICE NI, MENGDI YUE, RIZA ZHAPABAYEVA[1]

EXECUTIVE SUMMARY

In 2024, the China's Overseas Development Finance (CODF) Database, managed by the Boston University Global Development Policy Center, recorded $6.1 billion in 20 new sovereign and publicly guaranteed loans around the world from China's two development finance institutions (DFIs). This figure is roughly in line with the trend since 2020, of an average of $6.2 billion through an average of 24 loans per year.

Notably, this data update reveals that for the first time from 2020-2024, China's overseas development finance was primarily focused on support for national and regional development banks across the world. This marks a significant shift away from direct support of energy and other infrastructure projects, which was the traditional area of focus for China's development finance before 2020.

The CODF Database tracks public and publicly guaranteed (PPG) lending by the China Development Bank (CDB) and the Export-Import Bank of China (CHEXIM) to governments, inter-governmental bodies, majority state-owned entities and minority state-owned entities with sovereign guarantees. It also includes high-precision geolocation for projects associated with Chinese ODF loans, allowing

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for analysis of potential economic, environmental, and social benefits and risks. It tracks projects' overlap with three types of globally defined environmentally and socially sensitive territory: potential critical habitats, Indigenous Peoples' lands and national protected areas.

Key findings:

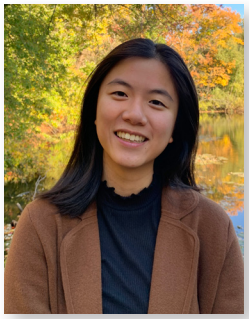
- **Total number of loan commitments:** From 2008-2024, Chinese DFIs committed $472 billion in PPG finance across 1,304 loans and credit lines over $25 million in size. In context, this amounts to 56 percent of PPG finance extended by the traditionally most active DFI, the World Bank.
- **Large-scale loans disappear:** Chinese ODF loans have also fallen in average size after 2020. The growth in lending in the early years of the Belt and Road Initiative (BRI) was driven by larger loans, particularly those larger than $1 billion.[2] These large-scale loans nearly disappeared in the 2020-2024 period.
- **Project overlap with environmentally and socially sensitive territories:** From 2020-2024, projects were *more* likely to overlap with these sensitive territories than in previous years. Of the 861 precisely geolocated projects, approximately two-thirds of project-specific CODF finance supported projects that overlapped with at least one types of sensitive territory. This finding indicates that even in an era of lower total lending, higher-risk projects still make up significant shares of Chinese ODF portfolios.
- **Changes in sectoral focus:** Chinese ODF lending to the financial sector, through which Chinese DFIs do not support specific physical projects but leave project selection and management to regional or local development finance institutions, has increased in importance.
    - From 2020-2024, this lending accounted for nearly half (44.2 percent) of the total. In contrast, from 2013-2019, the financial sector accounted for just 10.1 percent of all CODF. Lending to these development finance peers may allow China to avoid the burdens and risks of direct project oversight, and in the case of regional development banks, avoid adding to sovereign debt burdens.
- **Lending for energy falls overall:** Meanwhile, direct lending for energy projects fell to just 10.3 percent of all CODF, with 7.5 percent aimed at transmission and distribution projects. Energy lending accounted for over one-third (37.3 percent) of all CODF in the 2013-2019 period.
- **No fossil fuel loans:** Since Chinese leader Xi Jinping's 2021 announcement that China would stop supporting new overseas coal-fired power plants and instead ramp up support for renewable energy abroad, Chinese PPG lending has ended for fossil fuel projects overall: oil and gas projects, as well as coal projects, in all stages of exploration, extraction, refining and power generation.
- **But renewable energy loans remain small:** Nonetheless, lending has not risen for renewable energy projects. Renewable energy projects such as solar and wind generation tend to be smaller in scale than fossil fuel or large hydropower projects, presenting a challenge for China's very large and geographically distant DFIs. This may indicate a preference to finance renewable energy portfolios through national and regional development banks, which tend to be smaller in scale and based closer to the projects themselves.
- **Looking ahead:** In coming years, China's ODF is unlikely to return to the levels seen during the peak years of 2015-2017. Over the last decade, Chinese foreign direct investment has soared, both in absolute terms and relative to development finance. This shift may reflect

[2] Currency is reported in USD unless otherwise specified.

a maturation of the BRI, as Chinese firms gain experience overseas and can take on project management themselves.

These findings yield policy recommendations for Chinese DFIs in this new chapter of Chinese development finance:

- Supporting national and regional development banks can build partnerships and local capacity while avoiding the institutional risks and burdens of direct project oversight. However, few low-income countries have their own national development banks. Thus, to continue to support low-income countries, Chinese DFIs may opt to continue building financial relationships with regional development banks that have low-income member countries, particularly in Africa.
- Chinese energy finance has been concentrated in Latin America and the Caribbean and Asia, but has lagged in Africa, where a dearth of early-stage project development platforms has led to a limited pipeline of renewable energy projects that can be supported. Regardless of whether projects are financed directly by DFIs or through cooperation with local national and regional development banks, these projects will need to be designed before they can be funded. If China intends to lead on supporting the energy transition in developing countries, it may consider continuing to develop the Green Investment and Finance Partnership (GIFP), first announced at the 2023 Belt and Road Forum, to build a portfolio of future cooperation opportunities. The GIFP can also be a powerful tool to ensure that future projects have manageable social and environmental risks and avoid sensitive territories that are likely to raise project risks, such as critical habitats, Indigenous Peoples' lands and national protected areas.
- For higher-income countries that can mobilize domestic resources for renewable energy development, but where manufacturing of renewable energy related equipment is impractical, Chinese DFIs may wish to increase renminbi (RMB)-denominated trade finance for these products and equipment. Several countries already have agreements with China to trade in local currencies or RMB, and so RMB-denominated trade finance can facilitate growth in these crucial industrial relationships.



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INTRODUCTION

For over 15 years, China has been an important source of development finance for low- and middle-income countries around the world, committing nearly a half-trillion dollars in public and publicly guaranteed (PPG) finance since 2008. Traditionally focused on energy and other infrastructure lending, it has served as a crucial complement to the World Bank, which has focused more on public administration and social services (Ray 2025). These trends are tracked through the China's Overseas Development Finance (CODF) Database, managed by the Boston University Global Development Policy Center (GDP Center).

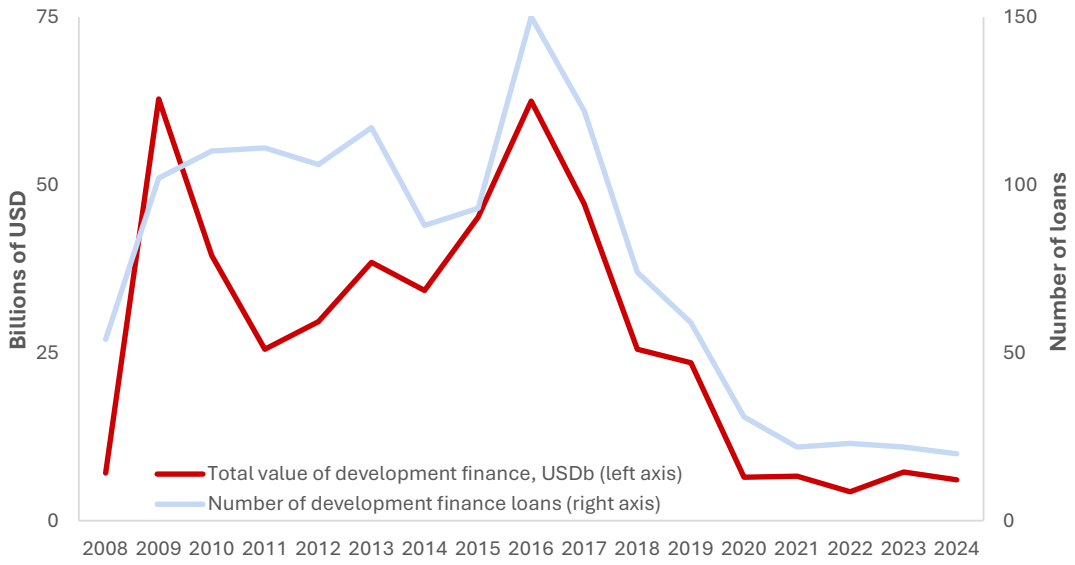
The CODF Database tracks PPG lending commitments of at least $25 million from China's two most active development finance institutions (DFIs): the China Development Bank (CDB) and the Export-Import Bank of China (CHEXIM). Its coverage stretches from 2008 (the peak of the previous global business cycle) through 2024. It also provides high-precision, visually verified geolocations for projects with geographic footprints, to facilitate consideration of potential economic, social, and environmental benefits and risks associated with this lending. More information on the CODF Database methodology is available in the Appendix and in the GDP Center Methodology Guidebook (Springer, Moses and Ray 2023).

The rest of this policy brief highlights trends in China's overseas development finance, alone and compared with sovereign lending by the traditionally most active DFI, the World Bank. Considering these two sources of development finance together allows for a robust consideration of global trends in development finance. It then explores recent trends in China's ODF, including a significant shift away from direct project finance and toward support of development finance intermediaries like national and regional development banks. Finally, it considers possible directions for future movement and policy recommendations for how China can continue to support development through finance, particularly in its traditional areas of strength in energy and other infrastructure sectors.

CHINA'S OVERSEAS DEVELOPMENT FINANCE TRENDS, 2008-2024

In 2024, China's two development finance institutions (DFIs) lent $6.1 billion in 20 sovereign and publicly guaranteed loans around the world. This figure is roughly in line with the trend since 2020, of an average of $6.2 billion through an average of 24 loans per year. Figure 1 shows the trends in total lending and number of loans since 2008, the last global business cycle peak. Before 2020, the last year with such low level of total Chinese overseas development finance was 2008, the first year in the CODF Database.

Figure 1: Chinese Overseas Development Finance, 2008-2024



Source: Author calculations from the China's Overseas Development Finance Database, Boston University Global Development Policy Center, 2025.

Across the years shown in Figure 1, three time periods emerge: from 2008-2012 (the five years from the previous global business cycle peak to the announcement of the Belt and Road Initiative (BRI)), from 2013-2019 (from the start of the BRI until the outbreak of the COVID-19 pandemic) and from 2020-2024 (after the outbreak of the COVID-19 pandemic). During the first period, developing countries around the world found themselves in need of additional sources of sovereign finance as the traditional lenders in the Paris Club became engulfed in the so-called North Atlantic Financial Crisis (Bhar and Malliaris 2011; International Monetary Fund 2014). China quickly began answering these calls, with lending rising from just $7.1 billion in 2008 to $62.8 billion in 2009. Chinese lending receded to more moderate levels again until the announcement of the BRI in late 2013. For the next several years, Chinese development finance returned to a rapidly increasing pace, rising to $62.5 billion in 2016. The following years saw reduced but still significant Chinese development finance, which then fell to below $10 billion per year beginning in 2020.

As Figure 2 shows, the size of typical CODF loans has changed over these three time periods. From 2008-2012, most CODF loans were small: over half (54 percent of loans) were less than $100 million in value. Nevertheless, Chinese DFIs also issued 27 large loans of at least $1 billion, bringing the average value to $340.6 million. From 2013-2019, most Chinese DFI loans were mid-sized, with 54 percent of loans between $100 million and $1 billion, and Chinese DFIs also issued more large loans than in the first time period, raising the average loan value to $393.7 million. From 2020-2024, Chinese DFIs issued many fewer loans below $100 million *or* above $1 billion, with 70 percent of loans in middle range, lowering the average down to $261.4 million.

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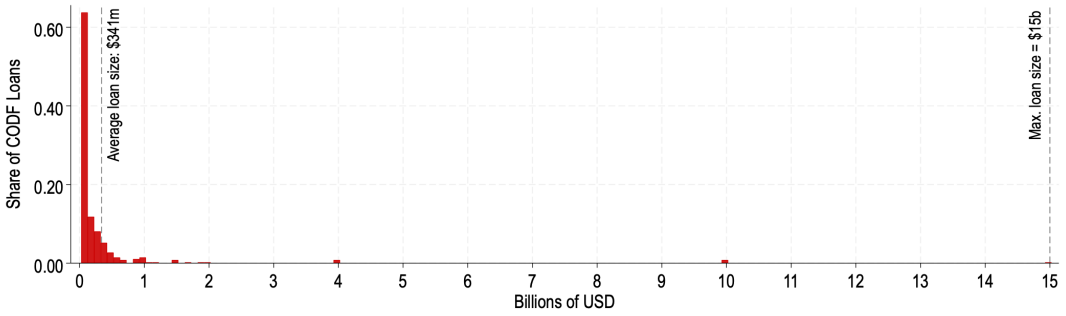
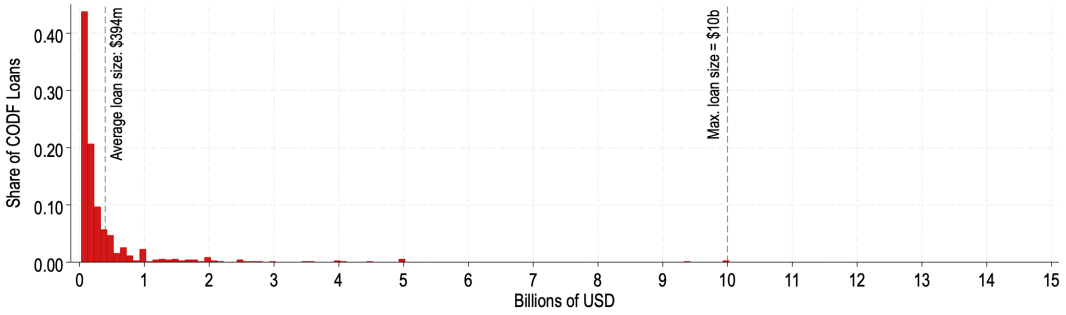
Figure 2: Distribution of CODF Loan Size by Time Period

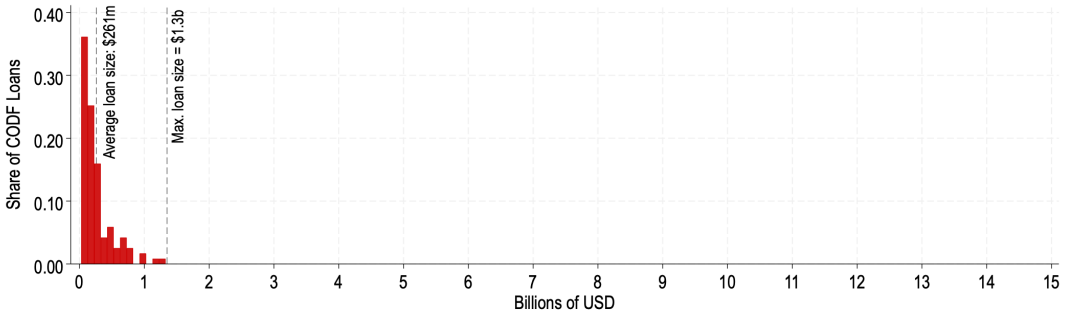
A. 2008-2012



B. 2013-2019



C. 2020-2024



Source: Author calculations from the China's Overseas Development Finance Database, Boston University Global Development Policy Center, 2025.

In addition to the funds committed, the CODF Database also includes high-precision, visually validated locations for each loan that is associated with a specific physical project. In this way, CODF allows for the consideration and management of potential economic, environmental, and social benefits and risks associated with projects' locations. Of the 1,304 projects included in the CODF Database, 986 CODF loans (financed with a total of $281.8 billion) are associated with physical CODF projects. Table 1 shows the level of precision with which these projects have been located. Approximately 90 percent of these 986 physical CODF projects (861 projects worth $267.0 billion) have been located within 25 kilometers, enabling high-precision geospatial analysis.

Table 1: Geolocation Precision of CODF Projects

	Projects		Share of CODF Projects	
	Number of Loans	Funds (USDb)	Share of Loans	Share of Funds
1. Exact location	759	230.0	77.0%	81.6%
2. Within 25km	102	37.0	10.3%	13.1%
3. Municipality or county	61	8.3	6.2%	2.9%
4. Province or state	13	0.7	1.3%	0.2%
5. Multiple provinces or states	20	2.1	2.0%	0.7%
6. Country	31	3.7	3.1%	1.3%
Total	**986**	**281.8**	**100.0%**	**100.0%**

Source: Author calculations from the China's Overseas Development Finance Database, Boston University Global Development Policy Center, 2025.

As Table 2 shows, the sizes of physical CODF projects has varied over time. Linear projects expanded from an average of 218.4 kilometers in the first time period to 258.3 kilometers in the second period, and remained nearly constant in the third period at an average of 262.1 kilometers, as Chinese DFIs continued to finance extensive power transmission and distribution (T&D) projects.

Area-based projects, such as reservoirs and mines, show a different pattern. Their average size more than tripled between the first and second time periods, rising from 46.1 to 160.4 square kilometers. In the last few years they have become much smaller, shrinking to just 25.2 square kilometers on average. However, as the median values show, typical CODF projects are well below these average sizes. For example, the median size of an area-based project never exceeds one square kilometer.

Table 2: Average and Median Sizes of CODF Projects, by Time Period

	Length of Linear Projects (km)		Area of Area-Based Projects (km^2)	
	Average	Median	Average	Median
2008-2012	218.4	76.4	46.1	0.6
2013-2019	258.3	76.1	160.5	0.7
2020-2024	262.1	45.9	25.2	0.4

Source: Author calculations from the China's Overseas Development Finance Database, Boston University Global Development Policy Center, 2025.

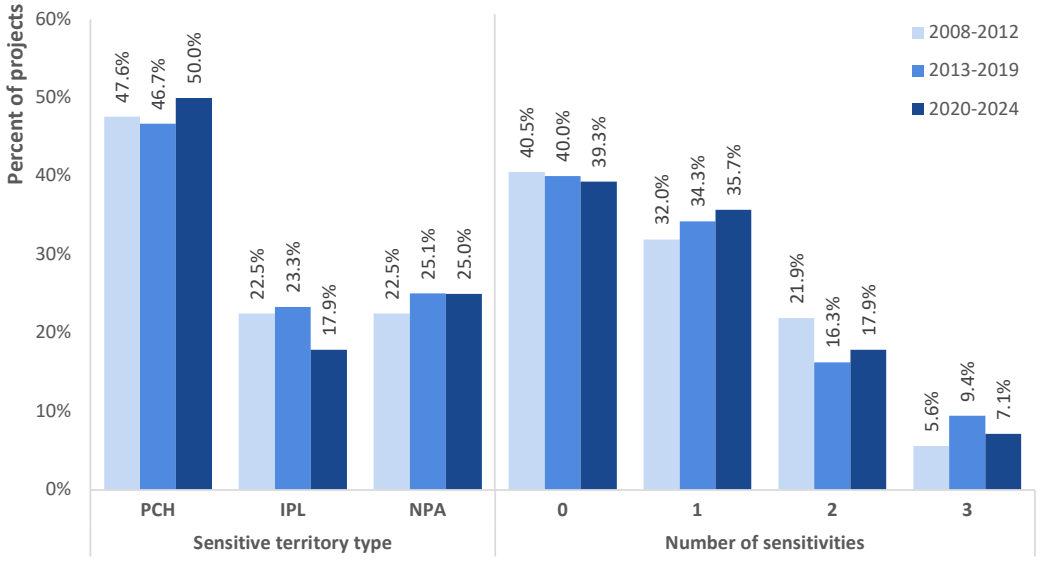
The CODF Database uses these locations to examine projects' physical overlaps with three types of socially and environmentally sensitive territory: Indigenous Peoples' lands, potential critical habitats and national protected areas (Brauneder et al. 2018; Garnett et al. 2018; Martin et al. 2015; United Nations Environment Programme and World Conservation Monitoring Centre 2025). Projects that overlap these areas are not necessarily unwise projects, but they may require particularly attentive environmental and social management. The CODF Database relies on these three types of sensitive territory for their globally harmonized definitions. However, many other project aspects may merit attention for scholars, policymakers and civil society members with specific regional or national priorities. The shapefiles associated with the CODF Database allow for these in-depth analyses.

Figure 3 shows trends in CODF projects' overlap with these three types of socially and environmentally sensitive territory. The share of CODF projects that overlap with these sensitive territory types (shown in Panel A) has remained relatively constant: the portion of projects with zero sensitive territory overlaps fell from 40.5 percent to 40.0 percent and then 39.3 percent. The only meaningful change by share of projects is a change toward potential critical habitats (which accounted for 50.0 percent of projects in the most recent period) and away from Indigenous Peoples' lands (which accounted for 17.9 percent of projects).

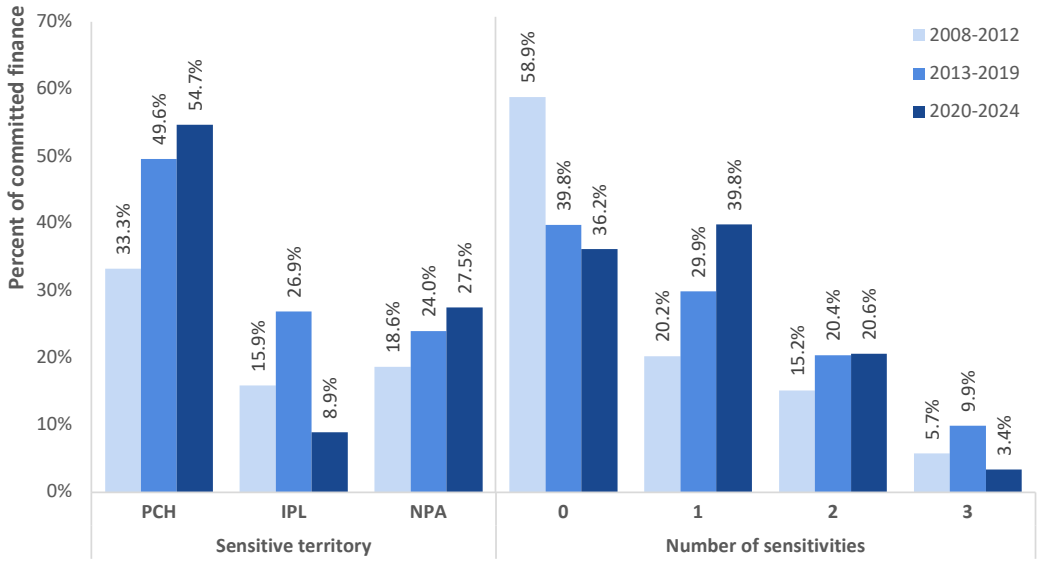
Panel B considers the share of committed finance, effectively giving more weight to larger projects, and shows a less optimistic picture. In this approach, the share of committed finance that supported projects with zero sensitive territory overlaps fell from 58.9 percent from 2008-2012 down to just 36.2 percent from 2020-2024. In other words, approximately two-thirds of project-specific Chinese ODF funds over the last five years supported projects that overlapped with at least one of these three types of sensitive territories. It should be noted that projects that have this type of overlap are not necessarily socially or environmentally damaging, but they do present unique risks and require high-level management.

Figure 3: Prevalence of CODF Project Overlap with Sensitive Territory Types, by Time Period

A. Percent of CODF Projects



B. Percent of Funds Committed to CODF Projects



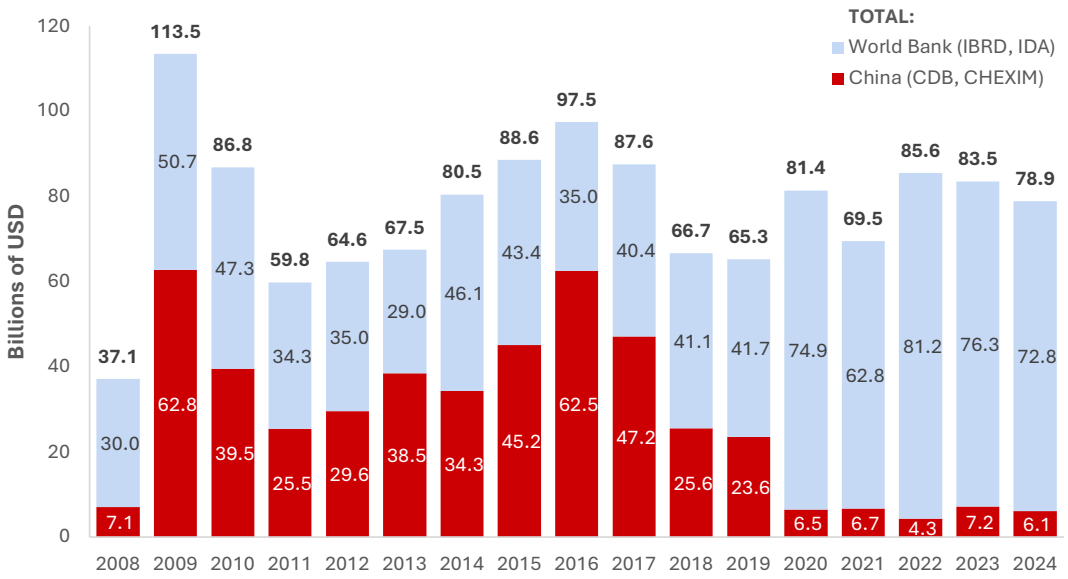
Source: Author calculations from the China's Overseas Development Finance Database, Boston University Global Development Policy Center, 2025.

The difference between the trends shown in Panels A and B indicates that typical CODF projects are not necessarily growing riskier but that the larger projects are more likely to carry these risks. This finding adds nuance to the "small is beautiful" trend that characterized Chinese ODF lending in the early days of the COVID-19 pandemic (Ray 2025), and indicates that Chinese DFIs have not addressed the project selection and risk issues highlighted by Yang et al. (2021).

CHINESE DEVELOPMENT FINANCE IN COMPARISON TO THE WORLD BANK

Chinese DFIs have reduced their overseas sovereign lending since 2016. However, during the same time, developing economies have borrowed more from the World Bank's International Development Association (IDA) and International Bank for Reconstruction and Development (IBRD) windows. Taken together, total annual development finance from Chinese DFIs and the World Bank has varied between $70 and $90 billion per year since 2020, as Figure 4 shows.

Figure 4: Chinese DFI and World Bank Sovereign Lending, 2008-2024



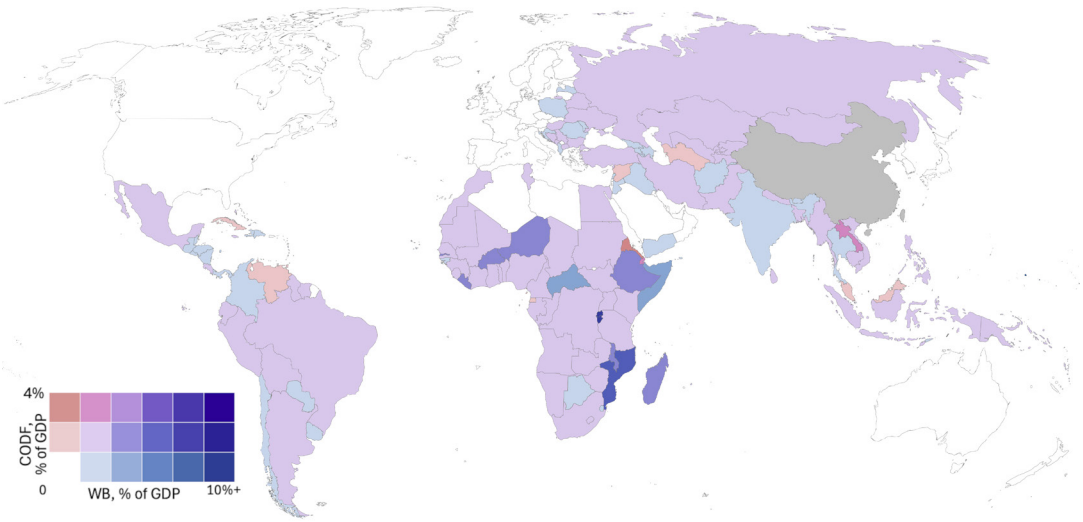
Source: Author calculations from the China's Overseas Development Finance Database, Boston University Global Development Policy Center, 2025; World Bank 2025.

Note: These figures exclude World Bank lending to China and loans of less than $25 million for the sake of comparability with CODF. These excluded low-value World Bank loans sum to $18.9 billion, or approximately 2.2% of World Bank non-China lending during this time period.

Over the entire 2008-2024 time period, the vast majority of countries that have borrowed from China's DFIs have done so as a complement, rather than a substitute, for their World Bank borrowing. Figure 5 shows each country's borrowing from China's DFIs and from the World Bank from 2008-2024, as a share of their gross domestic product (GDP). Almost all countries in Figure 5 appear in shades of purple, meaning that they borrow at comparable levels (within two percent of their GDP) from both sources of development finance.

Nine countries in Figure 5 appear in pink, indicating that they borrowed from Chinese DFIs but not the World Bank: Antigua and Barbuda, Cuba, Equatorial Guinea, Eritrea, Malaysia, Syria, Trinidad and Tobago, Turkmenistan and Venezuela. Two other countries (Djibouti and Laos) appear in shades of magenta, indicating that they each borrowed between 2 percent and 4 percent of GDP from Chinese DFIs and borrowed less than 2 percent of GDP from the World Bank. All of the other countries shown here appear in purple, indicating that they borrowed from Chinese DFIs and the World Bank at about the same rate (within 2 percent of GDP) or appear in blue or indigo, showing that they borrowed significantly more from the World Bank.

Figure 5: Country Borrowing from Chinese DFIs and the World Bank, 2008-2024 (% of GDP)



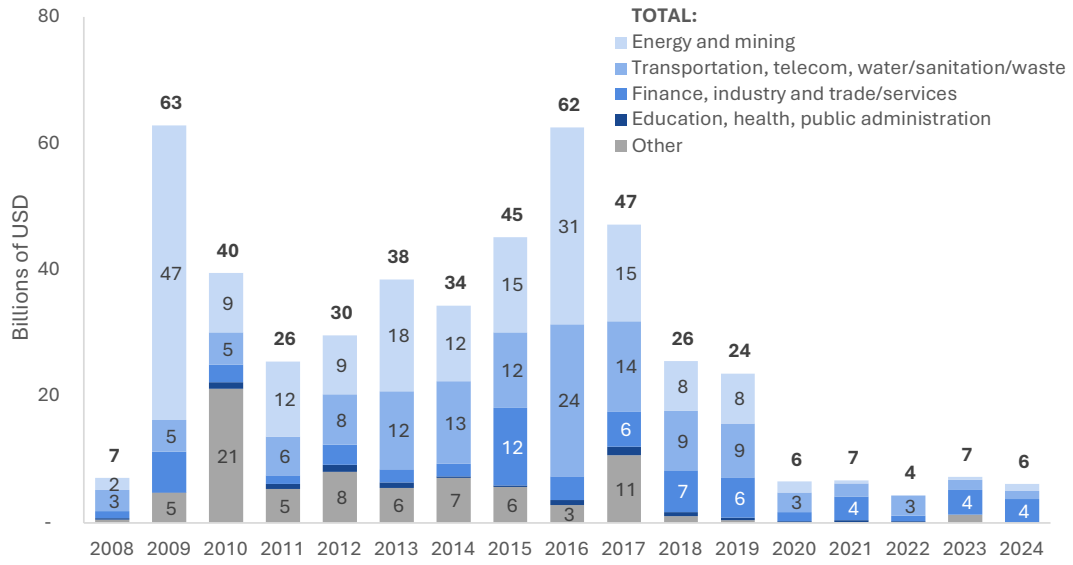
Source: Author calculations from the China's Overseas Development Finance Database, Boston University Global Development Policy Center 2025; International Monetary Fund 2025; World Bank 2025.

Note: These figures exclude World Bank loans of less than $25 million for comparability with CODF.

SECTOR TRENDS

Figure 6 shows China's ODF by sector over the entire 2008-2024 period. From 2008-2012, the most important sector was energy. From 2012-2019, other infrastructure lending rose as well, often meeting or exceeding the value of energy lending. From 2020-2024, however, the most important sector has been finance. Lending to the transportation and energy sector follow. The decline in energy lending and rise in the importance of financial sector lending is discussed in more detail below.

Figure 6: Chinese ODF by Sector, 2008-2024



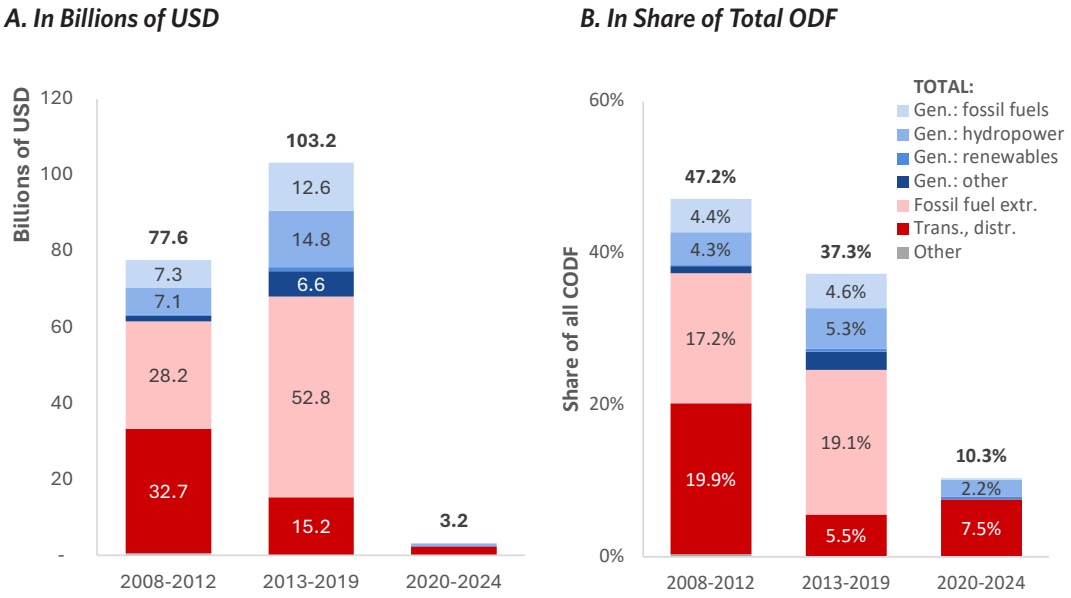
Source: Author calculations from the China's Overseas Development Finance Database, Boston University Global Development Policy Center, 2025.

Note: "Other" includes multi-sector and discretionary loans.

Energy Lending

China's energy sector ODF has fallen to a small fraction of its value in the mid-2010s, as Figure 7 shows. Most notable in the decline of Chinese energy development finance is the drop in fossil fuel lending, which has collapsed across all fossil fuel types – coal, gas and oil. The last fossil fuel project identified was the 2020 loan of $61 million to Mongolia for the 86-megawatt (MW) Choibalsan thermal power plant. After Xi Jinping's 2021 announcement that China would not build new coal-fired power projects abroad (Xi 2021), Chinese DFIs appear to have ceased PPG finance for coal and for all other fossil fuels as well.

Figure 7: Chinese DFIs' Energy-Sector Sovereign Lending, by Sub-Sector



Source: Author calculation from the China's Overseas Development Finance Database, Boston University Global Development Policy Center, 2025.

Note: Gener. refers to power generation. Renewables include geothermal, solar, and wind energy. Other generation includes biomass and nuclear. The "fossil fuels extr." sub-sector includes exploration, extraction and refining.

Meanwhile, Chinese DFI finance in overseas renewable energy generation projects such as solar, wind and geothermal have not yet scaled to fill the void left by the withdrawal from fossil fuels. Lending in this category decreased from $1.14 billion in 2013-2019 to $117 million in 2020-2024. Table 3 shows the breakdown of Chinese overseas development finance in non-fossil energy by energy source and region.

Table 3: Energy generation lending by non-fossil energy source, Chinese DFIs, 2008-2024

	Millions of USD			Share of non-fossil fuel energy lending		
	2008-2012	2013-2019	2020-2024	2008-2012	2013-2019	2020-2024
Biomass		**60**			**0.3%**	
LAC		60			0.3%	
Geothermal	**88**			**1.0%**		
Africa	88			1.0%		
Hydropower	**7,071**	**14,767**	**689**	**79.7%**	**65.6%**	**85.5%**
Africa	2,053	7,270	454	23.1%	32.3%	56.4%
Asia	1,986	4,179		22.4%	18.6%	
Europe	186		235	2.1%		29.1%
LAC	2,776	3,317		31.3%	14.7%	
Oceania	70			0.8%		
Nuclear	**1,579**	**6,530**		**17.8%**	**29.%**	
Asia	1,579	6,482		17.8%	28.8%	
Europe		48			0.2%	
Solar		**471**	**117**		**2.1%**	**14.5%**
Africa		139	117		0.6%	14.5%
LAC		332			1.5%	
Wind	**137**	**672**		**1.5%**	**3.0%**	
Africa	99	512		1.1%	2.3%	
LAC	38	160		0.4%	0.7%	
TOTAL	**8,876**	**22,499**	**806**	**100.0%**	**100.0%**	**100.0%**

Source: Author calculation from the China's Overseas Development Finance Database, Boston University Global Development Policy Center, 2025.

Note: Totals may not sum due to rounding.

Historically, hydropower commanded the largest share of energy generation lending from Chinese DFIs among all non-fossil sources. This dominance was evident as early as the 2008-2012 period and saw funding more than double between 2013-2019, rising from $8.9 billion to $22.5 billion. However, a dramatic shift occurred in the subsequent period, with DFI lending for hydropower generation plummeting to just $806 million in 2020-2024. This decline was accompanied by a reduction in average loan deal sizes; notably, all hydropower generation lending deals exceeding $300 million were signed before 2020. The three hydropower plant loans recorded between 2020-2024—for projects in Rwanda, Bosnia and Herzegovina, and Madagascar—averaged $230 million.

Lending for nuclear energy experienced a significant surge from the 2008-2012 period to 2013-2019. This momentum was not sustained, with funding dropping to zero in the 2020-2024 timeframe. China's DFI lending in nuclear energy has also been highly concentrated geographically: almost all nuclear power generation lending between 2008-2019 was allocated to the construction of two nuclear power plants in Pakistan. No new DFI funding for nuclear projects has been recorded since 2020.

Funding from Chinese DFIs for newer renewables (geothermal, solar and wind) has remained relatively small in scale. Africa and Latin America and the Caribbean (LAC) have been the primary recipients. The comparatively limited financing also likely partially stems from a deliberate policy shift towards a diversification of financial sources and greater involvement of commercial lenders (Wu and Chen 2024). In addition, renewable energy projects tend to be smaller in scale, creating challenges for large, geographically distant lenders. For example, the China's Global Power Database shows that among Chinese overseas power plants (whether financed through ODF or through foreign direct investment (FDI)) with commission years between 2008-2024, renewable energy power plants had much lower average capacity levels (80.4MW for solar, 52.2MW for wind and 21.3MW for geothermal) than coal or gas-fired power plants (389.3MW for coal and 147.9MW for gas) (Boston University Global Development Policy Center 2025a).

This slowdown in China's development finance in overseas energy projects and the currently limited scale of development financing for renewable energy do not necessarily indicate CDB or CHEXIM's lack of interest for outbound energy finance altogether. Other funding strategies have emerged, such as lending to national development banks (NDBs) and government agencies with the express purpose of supporting energy projects, at the intermediary's discretion. A recent example is a long-term facility provided by CDB for Brazil's National Bank for Economic and Social Development (BNDES) of up to $800 million to finance infrastructure and industrial projects in Brazil, including electricity and mining, among others (project BR.016 in the CODF Database). This lending to development finance intermediaries, when not designated for one single sector, is included in financial sector lending, which is discussed at more length below.

Amid a broader decline in Chinese overseas development finance in the energy sector, investment in energy transmission and distribution has demonstrated relative resilience.

Recent examples highlight this focus include:

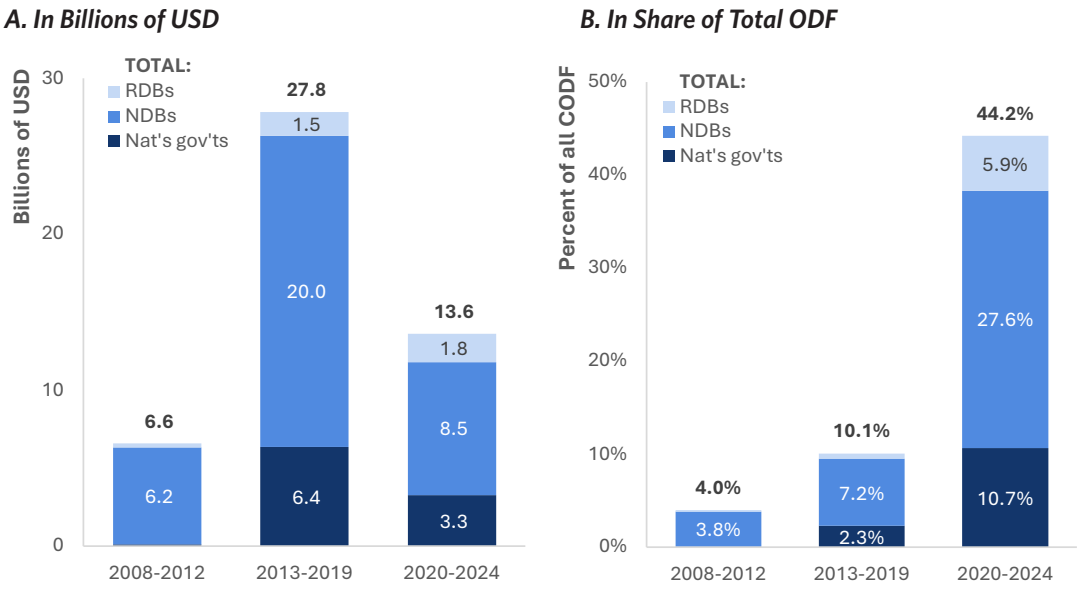
- Bangladesh borrowed of $966 million in 2020 (across two different loan facilities) for the Power Grid Strengthening Project;
- Angola secured of $760 million in 2024 for an electricity transmission project linked to the Luachimo dam;
- Uganda borrowed of $212 million in 2023 for the Electrification of Industrial Parks Phase III, which covered the Jinja, Njeru, Masese, Kases and Ishaka industrial parks;
- Serbia borrowed $187 million in 2020 for the New Belgrade District Heating System; and
- Cambodia saw multiple commitments in 2020, including $112 million for a backbone transmission line and $78 million for rural power grid extension Phase 7.

In 2020-2024, about half of China's development finance recorded in the T&D sector went to Asian countries, with another 42 percent directed to Africa and 8 percent to Europe. The continued support from Chinese DFIs for T&D projects in recipient countries is instrumental in bridging the "last mile" gap in power delivery and enabling the grid to integrate intermittent renewable energy sources.

Financial-Sector Lending

One of the clearest shifts in Chinese ODF over the 2020-2024 period is the rising importance of development finance intermediaries: NDBs, regional development banks (RDBs) and other national government finance programs. As Figure 8 shows, these financial sector loans now make up 44.2 percent of all Chinese ODF. This lending is mostly for general support, but may also be earmarked for financing trade or on-lending to small and medium enterprises.

Figure 8: Chinese DFIs' Financial-Sector Sovereign Lending, by Borrower Type



Source: Author calculations from the China's Overseas Development Finance Database, Boston University Global Development Policy Center, 2025.

This shift is compatible with the "small is beautiful" approach of eschewing larger projects in favor of smaller and more sustainable projects, which are easier to manage through NDBs and RDBs that are smaller in scale and positioned closer to the projects themselves, relative to Chinese DFIs (Ray 2025). Solar and wind energy projects, in particular, tend to be smaller in scale than fossil fuel energy generation or hydropower projects and are thus easier to finance through local bodies (Morro et al. 2025).

By lending to local financial intermediaries, Chinese DFIs can support a broad portfolio of projects without exposure to project-specific risks in a partner country, but this approach requires a local development bank to identify bankable and sustainable projects and manage them properly to ensure environmental, social and governance (ESG) compliance. This potentially calls for a project pre-feasibility or development facility, especially in countries where the capacity of local DFIs may need support to meet this challenge.

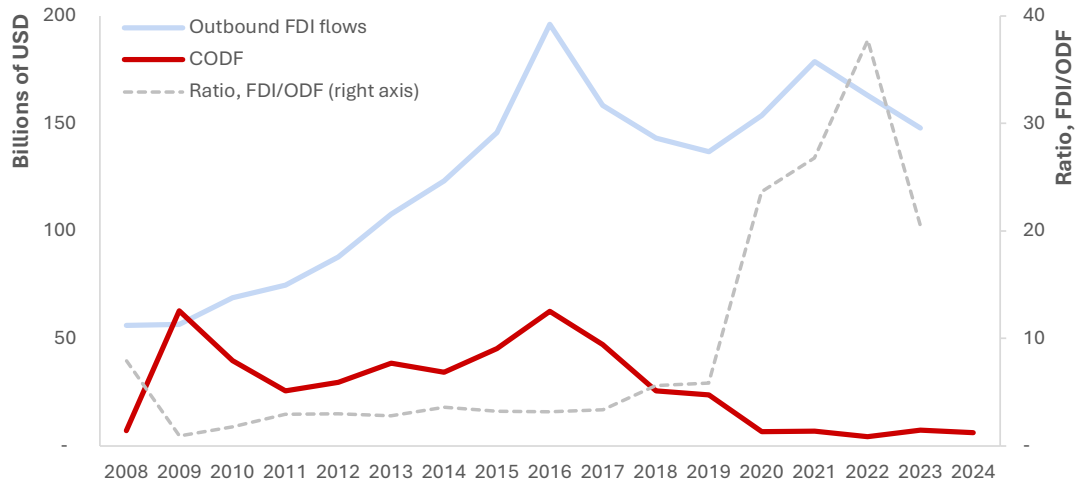
Lending to NDBs in particular also brings changes in the composition of borrowers, as not all developing countries have these institutions. Indeed, low-income countries (LICs) are less likely than their higher-income peers to have NDBs: the Public Development Banks and Development Financing Institutions Database finds that LICs host just 19 out of 483 total NDBs and 536 total public DFIs (Peking University Institute of New Structural Economics and Agence Française de Développement 2025). Nonetheless, this dearth of NDBs among LICs is blunted by the fact that China has developed lending relationships with RDBs that have LICs as members, including the African Export-Import Bank, African Finance Corporation, Banque de Développement des États de l'Afrique Centrale, Banque Ouest Africaine de Développement, and Eastern and Southern African Trade and Development Bank. This regional financial sector lending has grown from 0.1 percent of total lending in the 2008-2012 period to 5.9 percent in the 2020-2024 period. Continuing to build these relationships can allow Chinese DFIs to continue to fund projects in LICs without the burden of overseeing many smaller projects individually.

FUTURE PROSPECTS

It is unlikely that China's ODF will return to its highest levels seen in the middle of the last decade. As the BRI has matured, a shift has occurred of increasing FDI in addition to development finance. As Chinese firms gain experience operating overseas, often through projects backed by development finance, those firms are then more able to take on equity in future overseas projects. In fact, scholarship on the economic motivation of the BRI has largely coalesced around China's interest in pursuing cooperation on finance and infrastructure in order to facilitate international investment and trade (Djankov and Miner 2016; Liu 2018; Ruta et al. 2018). Such a shift may be beneficial for host countries, as it can allow for continued infrastructure development without the risk of sovereign debt distress.

As Figure 9 shows, Chinese FDI has indeed continued to grow, surpassing $150 billion each year since 2019 even while China's ODF has remained below $10 billion each of those years. The ratio of outbound FDI flows to ODF commitments shows an inflection point between 2019-2020. Before 2020, the ratio remained below 10, but it jumped to 24 in 2020 and has remained elevated since. The ratio rose to 38 in 2022 before declining to 20 in 2023.

Figure 9: Chinese outbound FDI and ODF, 2008-2024

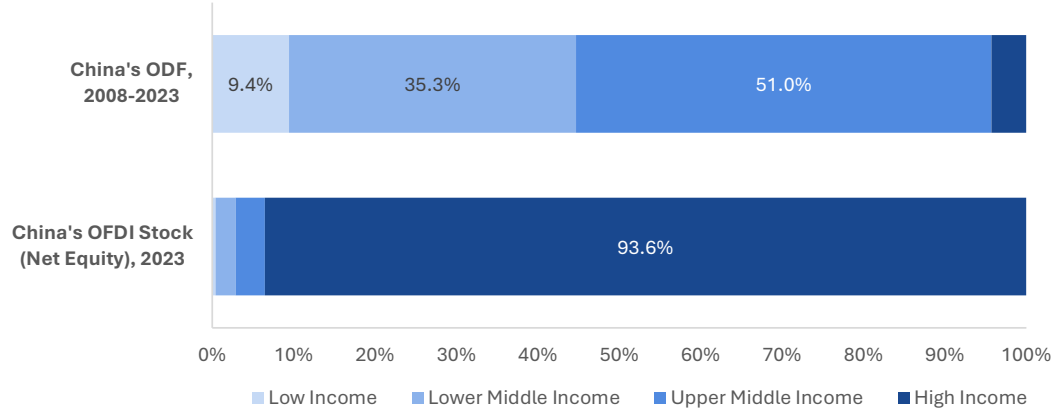


Source: Author calculation from the China's Overseas Development Finance Database, Boston University Global Development Policy Center, 2025b; UN Trade and Development 2025.

Note: FDI data for 2024 is not yet publicly available as of June 2025.

This rising importance of FDI may bring challenges in China's goal of engaging with LICs, which struggle to attract FDI in general, regardless of its source. Thus, for example, as Figure 10 shows, while China's total ODF from 2008-2024 had modest but significant (9.4 percent) representation of LICs, China's net equity in overseas FDI was concentrated in high-income countries. While loan commitments and FDI stock are not strictly comparable, it is nonetheless evident that this shift to FDI brings changes in host country income as well.

Figure 10: Chinese Overseas Development Finance, 2008-2024, and FDI (Net Equity) Stock, 2023, by Host Country Income Level



Source: Author calculation from the China's Overseas Development Finance Database, Boston University Global Development Policy Center, 2025; International Monetary Fund 2025b, as reported by China.

Note: The analysis does not include lending to regional bodies.

Given this diversification of financing methods within the BRI (as shown in Figure 9) and the fact that China's outbound FDI is mostly oriented toward high-income countries, Chinese ODF may continue to focus on low- and middle-income countries by relying on relationships with RDBs and NDBs. For example, in addition to the final loan commitments shown in the CODF Database, CDB and CHEXIM have also signed recent framework agreements with NDBs in Malasia, Türkiye, Thailand and Vietnam, which may yield specific financing commitments in the future (Export-Import Bank of China 2023, 2024; Vietnam Development Bank 2024). These agreements indicate a policy goal of greater cooperation in national and regional development bank finance.

Nonetheless, it is unlikely that China has lost interest in supporting LICs, particularly in the renewable energy sector. For example, at the 2024 Forum on China-Africa Cooperation, Xi Jinping pledged to support 30 new clean energy projects and signed development finance deals supporting solar power in Namibia and Zambia (Wu 2024). However, the dearth of existing renewable energy projects in LICs continues to present an obstacle to the development of renewable energy, regardless of whether it is financed through direct lending, lending through NDBs or RDBs, or FDI. Musasike et al. (2024) find that African nations face a high barrier to renewable energy projects from a lack of early-stage project development platforms, and call for continued planning around proposed mechanisms such as the Green Investment and Finance Partnership (GIFP).

POLICY RECOMMENDATIONS

For nearly a generation, Chinese DFIs have played a crucial role in supporting energy and other infrastructure projects around the world. Over the last few years, they have partially pivoted toward supporting partner NDBs and RDBs, instead of providing direct project support. This approach has several significant potential benefits, including building regional and bilateral partnerships and institutional capacity while avoiding the financial and institutional burdens of managing individual projects. However, in order to continue this role, Chinese DFIs face two major obstacles: the low prevalence of NDBs among LICs and a dearth of projects ready to finance in China's traditional sectors of strength, particularly renewable energy.

LICs have been traditional recipients of Chinese ODF, accounting for 12.3 percent of CODF finance from 2008-2012. However, this participation fell to 7.9 percent from 2013-2019 and 7.2 percent from 2020-2024. The continuation of this relationship may be limited as Chinese DFIs rely more heavily on lending to NDBs, which are more prevalent in middle- and high-income countries. Fortunately, Chinese DFIs have already begun to increase their lending to regional development banks that have low-income members, particularly in Africa. Continuing to build these financial relationships can allow for China to play an ongoing role in development finance for the countries that most need it without contributing to individual countries' debt burdens.

At the 2023 Belt and Road Forum, China announced the GIFP, intended to support early stage project development to build pipelines of renewable energy projects that can be supported through finance or investment (Zhang and Gallagher 2023). If the GIFP comes to fruition, it could play a crucial role in creating the next generation of projects ready for development, particularly in Africa where Musasike et al. (2024) find a lack of project feasibility facilities. Whether these projects are supported through sovereign development finance or foreign direct investment, creating a platform like GIFP can help ensure that investors and lenders have ample choices of sustainable projects to support.

Finally, not all developing countries need or prefer to rely on external capital for renewable energy development. For higher-income emerging market and developing countries, which may be interested in developing their own renewable energy projects but may still need to import the materials and equipment for these projects, increasing RMB-denominated trade finance for renewable energy could be a constructive step forward. This approach may be particularly useful in Latin America, a predominantly upper-middle income region where several countries have already signed agreements with China to use local currency and RMB in bilateral trade, alleviating the need to acquire USD (China Daily 2023; Global Times, n.d.; Zhou and Shang 2025). After a recent notice by the Ministry of Commerce and People's Bank of China (2023) on further supporting the cross-border use of RMB in foreign trade, it is likely to accelerate in the coming years. RMB-denominated trade finance can help ensure that this trend facilitates the energy transition and sustainable development.

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APPENDIX

Revisions to the CODF dataset in 2025

Revisions from the 2023 update can be attributed to the following methodological changes in the 2025 updates:

- **Currency**: The 2025 CODF Database introduces an important methodological refinement in that it now measures loan commitments in their original currency and then uses International Monetary Fund (2025c) annual average conversion rates. This improvement allows for more precision and comparability among loans, and also brings some variation in the amounts previously reported in earlier editions of the CODF Database.
- **Suspended projects:** Projects with highly reliable, public sources indicating their suspension are no longer included in the CODF Database. If they are revived in future years with Chinese DFI sovereign finance, they will return to future CODF updates.
- **Sovereign guarantees of Chinese DFI lending to private entities:** Where projects have highly reliable, public sources indicating the amount of sovereign guarantee, that guarantee amount will be used as the level of PPG finance.
- **Syndicated loans:** The CODF Database only tracks CDB and CHEXIM commitments. For included syndications that involve other participating banks, the loan amount used is the amount contributed by CDB and/or CHEXIM. Syndicated loans are excluded from the CODF Database when the amount contributed by China's two DFIs is not publicly available.

Analysis of Differences with CODF, 2023

The 2025 database release shows several changes compared to the previous version:

- 308 entries were added.
- 120 entries were removed.
- 71 entries had a change in loan signed year.
- 285 entries had loan amount changes with absolute differences over $1 million.

The 120 entries that were excluded for various reasons:

- 46 percent were outside the scope of CODF (e.g., loans committed before 2008, not financed by CHEXIM or CDB, had revised loan amounts below $25 million or not public or publicly guaranteed sovereign loans).
- Some were duplicate records.
- Entries with unknown DFI contributions to syndicates were removed.
- Cancelled or suspended projects were identified and excluded.

Tables with the added, removed and changed entries are available upon request.

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