



ANNEX D: CHINA – CHINA DEVELOPMENT BANK

D.1. BACKGROUND AND ESTABLISHMENT

CDB was founded in 1994, and is one of the three policy banks of the Government of China, established to implement its domestic and, more recently, international economic development strategy.⁸⁴ It was designed to mobilise surplus household savings, via low cost bonds, and deploy these resources in priority infrastructure projects or key industries, in order to remove bottlenecks or transform the structure and performance of the Chinese economy. As a catalyst it has been very successful, and is now established as a leading DFI, on a global scale beyond that of the World Bank Group and all the main Regional Development Banks combined.⁸⁵

Although initially set up as a financing and implementation arm, with project pipelines being passed along by the then State Planning Commission, this led to a rise in non-performing loans, and the CBD was subject to major governance and operating changes in the late 1990s.^{86, 87} The CBD became a joint stock corporation in 2008 and, formally, a DFI in 2015. From 1998 onwards, it has successfully pursued its goal of being a market-led, commercially-operated development bank with Chinese characteristics. Its operations accelerated following the 2008 global financial crisis. Within China, this included urbanisation and industrial restructuring and high-profile, socially- and economically-productive priority national infrastructure projects. It also rapidly increased its overseas energy and other resource-backed loans, as well as securing raw material supplies. It has been proactive in the development of Chinese capital markets and the internationalisation of China's currency, while continuing to be flexible and innovative in its packaging of interventions, including municipal PPPs and generation of non-loan revenues.

In 2017, CDB reported total assets of CNY 15,959 billion (USD 2,357 billion) and total liabilities of CNY 14,719 billion (USD 2,165 billion). Its net profit was a relatively low CNY 114 billion (USD 16.8 billion), reflecting the CBD's national development mission.

D.2. MANDATE

CDB is a wholesale lender specialising in providing medium- to long-term financing in infrastructure, basic and transformative industries, and related areas.

The CDB Mission Statement is concise: “enhancing national competitiveness and improving people's livelihood.” However, the expanded description that follows it demonstrates the fundamental Chinese characteristics of the CDB and underline its national development policy focus.⁸⁸ This is outlined below.

Enhancing national competitiveness

⁸⁴ Policy Bank Laws of 1994; the other two policy banks are the Export-Import Bank of China and the Agricultural Development Bank of China.

⁸⁵ CDB is the second biggest bond issuer in China. The latest available Annual Report is for 2017 and the Sustainability Report 2016; see CDB website. Unless otherwise stated financial and operating statistics are based on these two sources.

⁸⁶ Reaching some 40 percent; these were progressively restructured using asset management companies and at the same time CDB itself was subject to reform in structure, governance and operations.

⁸⁷ This led to a three-step reform plan in 2013 that included governance change, formal conversion to a DFI and indefinite recognition by the China Banking Regulatory Commission (CBRC) of the sovereign credit rating and zero risk status weight to CDB CNY and foreign currency bonds. This was achieved in May 2015.

⁸⁸ CDB Website. Corporate Culture – Our Mission. [Online]. <<http://www.cdb.com.cn/English/qywh/khsm/>>.





“Since its foundation, CDB has made active efforts to push forward the implementation of national strategies through financial support. The bank dedicates itself to key projects of infrastructure and basic/pillar industries, urbanization development, improving people’s livelihood, overseas investment of Chinese enterprises, alleviating development constraints and supporting macro regulation. The bank has helped mitigate the impact of the global financial crisis and promote stable economic growth and restructuring, contributing greatly to China’s economic and social development and overall competitiveness.”

“Sustainable development of the Chinese economy requires development finance to continue to play its role. CDB will continue to support major national projects, increase the provision of public goods, and continuously build up economic development momentum; create new scope for regional development, and tap into economic growth potential; drive industrial restructuring and facilitate the development of new technology, new industries, and new business formats; inject new vitality into economic development; support the “Beautiful China” strategy, develop green finance, and boost sustainable economic and social development; support internationalization initiatives of Chinese enterprises, actively participate in global governance, increase China’s overall competitiveness and international influence.”

Improving people’s livelihood

“CDB aligns its operations with the goal of finishing building a moderately prosperous society, applying successful experiences gained in infrastructure construction to projects closely related to the people’s livelihood, e.g. affordable housing for low-income groups, poverty relief, agriculture, rural areas, and farmers development, education and healthcare, SMEs and microbusiness projects. In addition, inclusive finance will be further developed to stimulate social progress and facilitate the building of a harmonious society.”

“Efforts should be made to improve people’s livelihood by effectively addressing fundamental production and development issues affecting the general public. CDB commits itself to strongly supporting “shared development”, pushing forward key projects related to people’s livelihood, promoting social equity and justice, improving people’s well-being, so that more people can benefit equally from the country’s development. To this end, we will continue to innovate our products, services and business models, and mobilize various resources to channel private capital toward projects closely related to people’s livelihood; we will work to strengthen “weak links” in China’s modernisation drive, and make new contributions to finish building a moderately prosperous society.”

The vision that follows is to create a world class DFI that provides sustained support to economic and social development. CDB also emphasises core values, namely: **responsibility, innovation, green growth, prudence and win-win development.**

D.3. INSTITUTIONAL STRUCTURE

The CDB is wholly owned by the Government of China and its shares are not listed. It was officially defined as a DFI in 2015 and is regulated by the People’s Bank of China. Its current share ownership structure is: Ministry of Finance (MoF) 36.54 percent; Central Huijin Investment Limited (a subsidiary of the China sovereign wealth fund) 34.68 percent; Buttonwood Investment Holding Company Limited (a subsidiary of the State Administration for Foreign Exchange) 27.19 percent; and the National Council for Social Security Fund 1.5 percent. There are no known plans to change or diversify ownership.

As of 2015, the CDB group had over 9,000 employees spread over some 37 functioning departments, plus housing finance recovery and poverty units; these were in some 37 primary branches in China, plus five representative offices overseas in London, Caracas, Rio do Janeiro, Cairo and Moscow. CDB’s international



activities, either directly or via Chinese enterprises, cover some 100 countries and domestic branches are twinned; for example, the Shandong branch handles Venezuela.⁸⁹ It also has five specialised subsidiaries; for instance, CDB Capital deals in equity investments, and other subsidiaries are funds or facilities including the China Africa Development Fund. Equity investment seems to be mainly in strategic or emerging industries rather than infrastructure, but mergers and acquisitions activities have also increased in recent years. The largest subsidiary, CDB Capital Co Ltd, has registered capital of USD 7.8 billion.

In 2017, the CDB developed, with the regulatory authorities, a new guide for operations and sustainable growth. The strategic emphasis remains to support national infrastructure and economic development priorities as laid out in the 19th National Congress of the Chinese Communist Party and the 13th Five Year Plan. CDB structures will continue to evolve in line with the priorities set by the above framework, with increased emphasis on risk, market-led innovation and international DFI cooperation. China is not a member of the OECD and is not bound by OECD Development Assistance Committee (DAC) or other reporting requirements.

D.4. GOVERNANCE STRUCTURE

CDB has the status of a Ministry and is under the direct jurisdiction of the State Council of the Central Government. There are thirteen members on the Board of Directors under the current Articles of Association set by the State Council. Of these, three are Executive Directors, including the Chairman and Vice Chairman, four were appointed from government agencies and six were appointed by the equity shareholders.⁹⁰ The Board reports to a six-person Supervisory Board and is assisted by an International Advisory Council of banking experts. The Board and governance structures have progressively evolved since reform began in the late 1990s; given its positioning and performance, day-to-day government involvement is very limited but overall strategic control remains due to the direct representation of the agency and equity stakeholders plus the reporting line from the Supervisory Board to the State Council.

Project origination in mainland China is through comprehensive application of national and local economic and social development planning, with the CDB systematically involved from early stage concepts through to feasibility and structuring, transactions, construction and operation. Models are standardised and benefit from public sector convening and regulatory powers. Urbanisation, land values and infrastructure are packaged and de-risked through the use of special purpose vehicles. CDB has developed strong project development expertise and uses its high-scale/low-cost DFI positioning to secure its own version of ‘bankable’ projects. It seeks to do this in a way which is commercially and financially sustainable but not based on CDB profit maximisation.

D.5. CAPITAL STRUCTURE AND SOURCES OF FINANCE

The debt to equity ratio (including a small amount of subordinated debt) is 92:8, a very high level of gearing. Capital adequacy was 11.6 percent, with shareholders’ equity at CNY 1,240 billion (USD 182 billion). The most recent injection of equity – some USD 38 billion – from the subsidiary investment company of the State Administration of Foreign Exchange was in July 2015, and raised its equity share to similar levels to the MoF and the Central Huijin Company. Share capital only accounts for CNY 421 billion (USD 61.9 billion), with

⁸⁹ The six largest country debtors are Venezuela, Russia, Brazil, Argentina, Australia and India.

⁹⁰ The agency directors are from the MoF, the National Development and Reform Commission, the Peoples’ Bank of China and the Ministry of Commerce. In principle they are meant to facilitate coordination while the other Directors provide strategic and operational business development.





the residual being capital reserves or general risk provisions. Return on average shareholder equity in 2017 was 9.45 percent, progressively down from around 15 percent in 2013/14.

The main source of finance is debt securities; these are currently some 58 percent of liabilities. On the other side of the balance sheet, net loans and advances total just over two-thirds of total assets. Due to its privileged position and the limited number of household savings investment alternatives, the CDB is able to issue long-term debt at low interest rates. As of 2017, the tenor profiles of its bonds were: less than one-year at 18.2 percent; one to five years at 37.2 percent; five to ten years at 40 percent; and over ten years at 4.5 percent. The CDB has been able to maintain a low cost of capital resulting in typical loan rates of around four percent and a net operating margin of 1.27 percent.

The CDB proactively seeks to diversify its own financing sources, in particular to deepen and widen the domestic capital markets – CDB bonds account for 23 percent of market trading volume – through bond swap mechanisms, development of market instruments and improved treasury techniques.

Intermediary business includes Asset Backed Securities, of which some CNY 38 billion (USD 5.6 billion) were issued in 2017 with an aggregate total of CNY 300 billion (USD 44 billion).⁹¹ These include poverty alleviation bonds and performance guarantees for PPPs. CDB is an established lead underwriter (and syndicator) and attributes reductions in infrastructure financing costs to its interventions. It also offers softer terms to its loans, which try to crowd-in other resources to areas or industries needing regeneration or emerging high potential industries.

CDB does not appear to be reliant on government budget allocations or guarantees, even on overseas projects, due to its privileged ability to raise bond finance. CDB bond issues are rated as equivalent to sovereign debt and were marginally downgraded in 2017 for the first time in thirty years. The current ratings are: Fitch A +, Moody's Aa3, and Standard & Poor's AA -.

Based on its sovereign credit status with bonds that are zero-risk rated, in 2017, CDB issued CNY 1.65 trillion (USD 240 billion) of domestic bonds, together with USD 9 billion of overseas bonds. These were structured in a variety of forms, including green and poverty alleviation bonds, and through a diverse set of outlets, including commercial banks and the CDB-sponsored Bond Connect initiative that allows international access. CDB bonds provide a full yield curve that provides domestic market benchmarks across different capital maturity dates.

Due to the lack of alternatives and the zero-risk status, CDB bonds have low interest rates and can command medium- to long-term tenors. Internationally, the recent BRI Green Bond had a coupon rate of 2.75 percent for five years (USD 500 million) and 0.375 percent for the four-year EUR 1 billion issue.

D.6. FINANCING ACTIVITIES

The 2017 accounts give the following sector distribution of the outstanding loan balances: railways 7.3 percent; highways 16.1 percent; electric power 8.2 percent; public infrastructure (includes water) 11.1 percent; urban renewal 25.8 percent; strategic emerging industries 6.2 percent; and other assets 25.3 percent.

⁹² In total, therefore, 42.7 percent is directly classified as infrastructure, but other investments will include overseas infrastructure financed by CDB cross-border loans. In geographic terms, despite the rapid rise in

⁹¹ This is in reference to the financing of CDB's portfolio.

⁹² Often these will be clustered within a network or corridor or urban area and integrated within a transformational program, such that scale and linkages can be maximised and economic development outcomes form the basis for credit enhancement and guarantees.



foreign loans, the CDB remains predominantly focused on the domestic market: taking the balance of 2017 net loans, only 2.35 percent were outside the Chinese mainland. Internally, the eastern and western areas of China dominated, with a combined 70 percent share. Nevertheless, it has rapidly grown to become the leading Chinese bank in terms of foreign exchange loans. In 2017, these totalled CNY 261.7 billion (USD 39 billion), concentrated in the Asia–Pacific and Euro–Asia regions.

The CDB also has a portfolio of poverty alleviation interventions that include regional development, urban regeneration and rapid transit, social housing, emerging industries and education. The packaging mechanism is standard and referred to as the “Four Platforms plus Agencies” model; this integrates management, financing, guarantees and public information with credit enhancement and on-lending. The CDB does not publish a client list but the majority are SOEs or local governments (often through an incorporated Local Government Finance Platform or other special purpose vehicles) or foreign governments/public bodies.

The CDB continues to be a leading policy, planner and financier of the Belt and Road Initiative (BRI) and has committed some USD 17.1 billion in BRI project or program loans in 2017.⁹³ It issued USD 350 million of BRI bonds in Hong Kong through the new market Bond Connect mechanism and was lead underwriter of the Maybank CNY 1 billion (USD 150 million) “panda” bond to facilitate international participation. BRI is promoted through various cooperation platforms such as the China–Central and Eastern Europe Interbank Association but also the Shanghai Cooperation Organisation, and the China–ASEAN and China–BRICS Associations. It underlines its policy status by deepening its research and planning capacities, and its knowledge management activities, and by exporting Chinese experiences and models. This cooperation extends to the World Bank Group, DFIs, BRICS and bilateral country arrangements.

While the CDB often contracts with a private sector entity (as noted above), these arrangements are typically some form of special purpose platform with majority public ownership at the local government or city level; overseas, the contracts are mainly with governments or Chinese enterprises. The CDB is very flexible on blending concessional and more commercial terms; but as a lead sponsor it also provides technical assistance, consultancy and other in-house project development expertise, including early stage finance. Typically, it will seek to recover this via a mix of financing and user fees or shares of fiscal revenues or land sales over long-term operating periods. Project banking arrangements tend to ensure this happens by internalising cash flows through CDB channels.

Recent major investments include the Three Gorges Dam; the Xi’an – Chengdu Railway and other sections of the Chinese high-speed rail network; Beijing Airport; and numerous expressways and city rapid transit programs. The CDB approach, which stresses early participation and screening according to established local or national priorities and then packaging within a proven financial model with extensive guarantees, is normally closely adhered to; changes or innovations are always carefully piloted before being rolled out at scale. CDB is an established anchor institution within its chosen infrastructure and other sectors. Its dependence on economic growth and, more specifically, land values has been seen by some commentators as a structural weakness.⁹⁴ Its domestic bond dominance remains closely associated with the continuance of the zero-risk status for bonds, which underpins its ability to raise large-scale low-cost financing over the medium to long-terms. After a period of uncertainty, this regulatory policy was retained in 2015.

⁹³ It also increasingly provides CNY cross-border financing linked to sponsored Chinese SOEs or natural resource-backed deals. African central banks also have CNY accounts.

⁹⁴ Boston University, Global Economic Governance Initiative, working paper 05, July 2017, “The Sustainable Infrastructure Finance of China Development Bank: Composition, Experience and Policy Implications,” Yongzhong Wang.





D.7. GREEN FINANCING

In China, the CDB has financed a wide range of clean energy infrastructure projects across all sectors, and it reports on environmental benefits through the use of standard indicators. It has recently issued an CNY 25 billion (USD 3.7 billion) retail green bond that was marketed to individuals through commercial banks, a departure from the usual channels to try and widen participation and awareness. In 2017, it also successfully issued quasi-sovereign green bonds for BRI projects, mainly transport, water and renewable energy, for USD 500 million and EUR 1 billion.

D.8. PROJECT PREPARATION AND TECHNICAL ASSISTANCE ACTIVITIES

In its early history, the CDB was essentially allocated projects from the then State Planning Commission, and this led to pipeline quality and performance/debt issues. As part of its commercialisation and sustainability reforms, it has invested in major planning, project preparation credit, special investment platforms, technical assistance and research capacities. This means it can de-risk its project pipeline and portfolio, be catalytic and also establish itself as an independent key advisor on infrastructure strategy, both domestic and foreign.⁹⁵

Within China, the CDB incrementally developed the Wuhu (1998) and Tianjin (2003/4) models of integrating urbanisation, infrastructure finance and economic development through the creation of special purpose Local Government Finance Platforms – these being essentially private in legal form - in partnership with local governments and developers, which utilised land usage rights and fiscal revenues to mitigate credit risk. CDB established supervisory financial management mechanisms that ensured they were in control of all relevant transaction flows. This model became standard throughout local governments in China with flexible packaging of hard and soft loans, and was then adapted for oil or other resource-backed overseas transactions. In China, this portfolio was developed in a context of high growth and high demand for land and infrastructure services. It should also be noted that, in China, local governments are authorised to issue bonds in line with the rules set by the central government and under the quantity limitation annually approved by the National People's Congress.

CDB has developed a comprehensive 'turnkey' project development/structuring/transaction/exit approach with very early stage involvement in planning and feasibility studies; providing both financing, consultancy and technical assistance to local governments and developers to proactively support project origination in a manner that will facilitate the bankability of the projects. Prospective projects are screened by local and national development strategies and the Local Government Finance Platform model and expertise is drawn from local and national centres. Once financed and constructed, a pre-prepared exit strategy is implemented, and funds are recycled. Financing may be bundled between hard and soft loans, but the overall aim is commercial, and CDB is flexible about the way non-interest income is optimised. It also has a long-term presence through its office network and sees any demonstration effects as part of its mission.

Public reports do not disaggregate data on the overall costs of project preparation through the cycle; there are also no breakdowns of CDB operating costs by business segments or units. In developing the BRI program and potential pipeline, the CDB has deployed a similar planning-led approach, seeking to identify and structure projects that enhance network connectivity and production capacity and finance in an integrated manner.

⁹⁵ This includes the Belt and Road Initiative. Domestically, CDB also indirectly helps crowd-in other Chinese commercial banks via bond issues and guarantees.



D.9. PERFORMANCE MONITORING

Non-performing loans in 2017 were reported as 0.7 percent and the loss allowance as a proportion of total loans was 3.6 percent. Non-performing loans have remained under one percent over the last 50 quarters.

The CBD's annual reports provide considerable comment on the importance given to the management of risk – credit, market, operational, reputational, foreign exchange - and efforts to improve processes and techniques, but offer very little detail. The status and positioning of the bank clearly puts pressure on the preservation of state capital and the avoidance/resolution of non-performing loans. There is evidence of some small-scale write-offs on domestic projects, but the preference seems to be to restructure or refinance within the envelope offered by long-term packaging and transaction operation finance management.

The CDB has been criticised in the past for a lack of transparency and low weightings given to social and environmental standards, but Chinese government policy has now radically shifted, with green infrastructure and green industry/housing now being seen as a driver and an investment priority. The CDB has already significantly transformed its portfolio to address this.

D.10. KEY LESSONS LEARNED

The CDB has successfully mobilised infrastructure financing at a scale, tenor and cost that is remarkable. It also continues to grow its capacity and funding channels at a sustained high rate through economic cycles and shocks. It has leveraged its position and status to retain and enhance its domestic zero-risk bond financing privileges. To do so, it has focused on performance and improving the quality of its core loan portfolio through a comprehensive approach to pipeline preparation, structuring, financing and management. By following this course of action, the CBD has addressed the gap in infrastructure financing at the local government level in China and supported large, transformative national network priorities. It has kept a rigorous domestic infrastructure focus, but has also been willing to flexibly address social, green, and emerging industries and the BRI. The relationships with local and national government have also allowed the CBD to take a longer and wider view on infrastructure economic benefits, both direct and indirect. It has also tended to pilot and incrementally develop standard models which are then replicated and accelerated by demonstration effects.

The extent to which the CBD is catalytic is difficult to assess on the evidence available in the public domain, and there may be some market distortion or displacement effects, but its central anchor role – albeit within a high growth, export-led national economic context – is clear. The CDB would also claim additionality above the project or program level, looking at capital market development, internationalisation and financial cooperation at the country, regional and global level. It has also led on green financing and sought to increase its advisory and policy research positioning.

