# 2. The Traditional NIB Model

The 'traditional NIB model' is the starting point for the analysis. As set out in Section 2, the rationale for setting up NIBs in the first instance was to act as a way of raising long-term capital efficiently in order that it was on-lent to public sector infrastructure, initially in the context of post-war reconstruction. Since then, other public finance-focused institutions were also set up to drive economic development ambitions, such as BNDES, the DBSA and the CDB. As well as supporting infrastructure projects sponsored by national governments, the traditional NIB has been able to provide long-term debt finance to projects at the sub-national level.

Two versions of the traditional model have emerged which differ in how they were capitalised and resourced:

- **Model 1 - fiscal transfers from government:** BNDES, for example, was largely financed by fiscal transfers; and
- **Model II - direct government equity contributions:** KfW, the CDB and the DBSA were given direct government equity contributions to leverage capital raised in national and international bond markets, typically with different forms of sovereign guarantees, including callable capital.

In addition to providing long-term debt capital, such institutions also employed professionals with technical, legal, financial and economic appraisal skills.

From the 1990s onwards, there has been a shift towards an increased role for the private sector in both the operations and financing of infrastructure in both developed and emerging economies. Whilst this has necessitated the development of new, more commercial skills, aspects of the traditional NIB model are still evident.

## 2.1 PROVIDING LONG-TERM DEBT AT EFFICIENT RATES

Where the traditional NIB model has involved the raising of debt in capital markets, it has been accompanied by significant credit enhancement by host governments, which has enabled them to raise finance very efficiently, at very low risk premia and, therefore, low cost. This is facilitated through NIBs having credit ratings that are typically the same as those of the sovereign, as illustrated in Table 2.1[12].

12 Note that it is very difficult for a NIB to have a rating higher than the host sovereign given the significant role of the host sovereign in the NIB's own funding.

*Table 2.I: NIB and sovereign ratings*

| | KfW | DBJ | DBSA | BNDES | CDB |
|---|---|---|---|---|---|
| **NIB rating** | AAA | A+ | BB+/B (FC)<br>'BBB-/A-3 (LC) | BB- | AA- |
| **Sovereign rating** | (LT/outlook/ST) | (LT/outlook/ST) | (LT/outlook/ST) | (LT/outlook/ST) | (LT/outlook/ST) |
| **Foreign currency ratings** | AAA/Stable/A-1+ | A+/Positive/A-1 | BB/Stable/B | BB/Stable/B | A+/Stable/A-1 |
| **Local currency ratings** | AAA/Stable/A-1+ | A+/Positive/A-1 | BB/Stable/B | BB/Stable/B | A+/Stable/A-1 |
| **Credit enhancement of bond issues** | 100 percent of debt guaranteed by Germany | 39 percent of bonds issued in 2018 guaranteed by Japan[13] | Callable capital | N/A | 100 percent of debt issuance guaranteed by China[14] |

Source: S&P Sovereign Ratings and Country T&C Assessments as of 31 August 2018. [Online] and NIB websites.

13 Development Bank of Japan. Bond Issuance - Fiscal 2018 Bond Issuance Policy and Plan. [Online] <https://www.dbj.jp/en/ir/credit/plan.html>.

14 CBonds Website. China Development Bank — Company card. [Online]. http://cbonds.com/organisations/emitent/19527.

This low-cost financing provides the ability of the institution to on-lend at rates significantly below the rates it would have to charge if its financing costs had been higher. This is effectively a taxpayer subsidy, in which the usually remote risk of a default by the NIB is socialised across taxpayers, with infrastructure projects benefiting from this. As long as the NIB is well-run and at an efficient scale, ultimately customers should benefit where this leads to tariffs or other costs of service that are lower than they otherwise would be. The corollary to this, however, is that NIBs do not expose themselves to excessive risk. Whilst this is not such an issue in the traditional model where the lending is to public sector entities, ultimately backed by taxpayers, it has greater implications where the lending is 'at risk', that is, in the context of PPPs, where it is likely more difficult to recover exposures in the event of a default[15].

A further aspect of this model is that, because of the NIB's high credit rating, not only can it borrow at a lesser cost than most private entities, it can often raise capital at longer maturities. Borrowing is also often in the domestic currency, which can help develop the depth and breadth of local capital markets.

This traditional public sector-based model in which lending is to the public sector and where bond issues are guaranteed in some way by the sovereign mimics some of the characteristics of multi-lateral institutions, such as the International Bank for Reconstruction and Development (IBRD), in which any capital raisings are effectively guaranteed by callable capital from member countries.

Additional subsidies can also be delivered to public sector borrowers through this model, over and above the passing through of efficient financing costs. In these instances, the capital of the NIB can be supplemented by additional fiscal transfers which, for instance, can be used as explicit interest rate subsidies. For example, KfW offers Investitionskredit Kommunen 208 (Investment Credit Municipalities) (IKK) for municipalities which allows municipalities to combine loans from KfW with grants[16].

Although not a focus of this Guidance Note, it is worth observing that several traditional NIBs, in particular KfW, have internationalised their operations as a result of policy direction from their government owners. This has enabled foreign governments, typically in less developed countries, to borrow from them on a sovereign basis and benefit from the NIBs' low-cost capital. This also replicates the changed focus of the World Bank from European reconstruction to global development.

## 2.2 TYPICAL LENDING ACTIVITIES

Within the infrastructure space, the traditional NIB model was focused on public finance of state-owned utilities and publicly sponsored projects on both national and sub-national bases. Lending on a sub-national basis involves providing loans to sub-sovereign entities, such as SOEs, states and provinces, municipalities and cities, without a formal guarantee from the national government. As such, both national and sub-national lending can involve borrowing by different forms of public sector corporations and arms of government, but the difference is arguably more one of where the ultimate recourse for repayment lies.

Hence, depending upon the specifics of the arrangement, sub-national lending can involve a higher degree of risk than lending to projects in which the national treasury is responsible for repayments of principal and interest, although there may still be an implicit guarantee that central government will step in if problems arise. Examples of central government-backed lending includes projects where the national government, be it line ministries or even the national treasury, is ultimately responsible for repaying a project's financial obligations. This can include lending directly to the government, with proceeds being used to fund infrastructure or where the government has provided an explicit guarantee to an infrastructure project. For example, Caisse des Dépôts et Consignations (CDC) in France has often provided debt to projects backed by the Government of France, and a recent example of this includes the EUR 250 million it will provide to the Nice-Côte d'Azur tramway project.

15 NIBs can, in theory, establish separate ring-fenced subsidiaries that can take on more risk.

16 KfW Public Facilities - IKK - Investment Credit Municipalities. [Online]. https://www.kfw.de/inlandsfoerderung/%C3%96ffentliche-Einrichtungen/Kommunale-soziale-Basisversorgung/Finanzierungsangebote/Investitionskredit-Kommunen-(208)/.

Examples of sub-national lending include providing long-term loans to SOEs – for instance, the DBSA has provided long-term loans to Eskom, the publicly-owned power utility in South Africa (a R15 billion loan was recently made without a formal guarantee). On the other hand, municipality lending refers to projects and programmes where finance is provided to sub-national government entities, examples of which include:

- **KfW's IKK lending programme**, whereby it provides up to EUR 150 million per year and client to municipal and social infrastructure projects such as schools, telecommunication networks and transport infrastructure;
- **The DBSA's ZAR 700 million (USD 14 million)**[17] **15-year loan to eThekwini Municipality** to support the financing of delivery of potable water to the northern and western regions of the municipality; and
- China's CDB, which has been a key lender to a range of municipal infrastructure projects throughout the country. A recent example includes a CNY 3 billion (USD 440 million) loan commitment to the Anhui provincial government for the **Yuexi-Wuhan railway project**.

As this creates few opportunities for the involvement of private capital, such financing operations are typically limited to the provision of long-term credits to public sector borrowers. In many countries, the potential for this business has decreased in recent years as more and more infrastructure and utilities have been privatised, reducing the available customer base. For instance, outside of renewable energy, less than four percent of KfW's public sector domestic lending is for economic infrastructure, with lending activities focused more on either SMEs or on social infrastructure, with a portfolio of low-cost debt instruments developed specifically for these purposes. KfW's public sector lending is observed more in emerging markets, where there is a greater prevalence of SOEs engaged in infrastructure sectors.

In terms of governance and an emphasis on long-term patient credit provision to sub-national clients, the CDB, BNDES and the DBSA have a high degree of similarity. BNDES has had a wide thematic and sector remit and the CDB has been a platform to support the internationalisation of domestic enterprise and trade, often involving SOEs. The portfolios of the CDB and BNDES show significant sub-national geographic concentration, while non-performing loans tend to be low but cyclical. More recently, avoidance of losses of financial resources provided by the state have been a key reform driver at both the CDB and DBSA.

***Box 2.1: Questions to answer when considering establishing a new NIB***

BNDES, the CDB and the DBSA all provide long-term debt at efficient rates and have a number of common characteristics. They are 100 percent government-owned, with substantial state equity investment, and provide long-term debt as their primary product.

The CDB and BNDES have privileged access to low-cost public financial resources, either through captive capital markets or Treasury fiscal transfers. All three have lending structures/policies that cover national/federal, provincial/state, local governments and urban corridors/cities, but with a very strong anchor in sub-national clients. They also have significant client and geographic concentration.

Their infrastructure sectoral priorities emphasise energy and transport, less so water and sanitation; housing and social infrastructure are also present but are marginal in value terms. BNDES is also a major financing platform for Micro, Small and Medium-Sized Enterprises (MSMEs).

Their portfolios are typically over 80 percent domestic, but with more recent regional or global activities, reflecting a strong policy alignment with national governments. There is also an increasing interest in green finance and alternative energies, particularly wind, solar and smaller hydro. In theory, they all present a strong corporate adherence to sustainability, social and environmental values. However, attribution and impact are not independently generated and typically based on forecasts, rather than on actuals measured once a project is operational.

Both BNDES and the DBSA are in the process of transformation to organisations more focused on additionality, crowding in private sector investment and capital market development. Each of the three banks has the same credit rating as the national government.

Source: CEPA analysis.

17 Please note that figures in currencies other than US dollars or Euros are also provided with US dollar equivalents, based on current exchange rates at the time of writing. These are intended to provide an indication of the US dollar equivalent value.

## 2.3 CAPITAL MARKET OPERATIONS AND DEVELOPMENT

Although there has not been much scope for financial innovation in this model in terms of traditional public finance business, the capital raising activities involved in issuing bonds, with differing principal maturity dates and in domestic currency, can be seen as helping to promote capital market development. Examples of guaranteed longer-term bond issues include:

- CDB[18] – Domestic bonds, CNY 40 billion (USD 5.9 billion), coupon rate: 4.8 percent, maturity: 4 November 2029[19]; and
- KfW[20] - Domestic bonds: EUR 1 billion, coupon rate: 1.375 percent maturity: 31 July 2035[21].

Whilst the more established and often larger NIBs all started with the business model outlined above, most have adapted in recent years and diversified their operations to support private finance of infrastructure, as discussed below in Section 4 of this Guidance Note.

18 All CDB bonds appear to be fully guaranteed by the Chinese Government.

19 CBonds Website. Domestic bonds: China Development Bank, 4.8 percent 4nov2029, CNY (090219, CND1000020Z6). [Online]. <http://cbonds.com/emissions/issue/259927>

20 All KfW bonds appear to be fully guaranteed by the German Government.

21 Boerse Struttgart Website. KREDITANST.F.WIEDERAUFBAU MED. TERM NTS. V.15(35) WKN A11QTK | ISIN DE000A11QTK7. [Online]. < https://www.boerse-stuttgart.de/en/products/bonds/stuttgart/a11qtk-kreditanstfwiederaufbau-medterm-nts-v1535>.