

### 3. Supporting PPPs

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Over time, the traditional NIB model discussed in Section 3 has often evolved in different ways to enable support for new government policy initiatives, especially PPPs and, more latterly, the green economy (which also has the objective of mobilising third-party private capital and is discussed in Section 5). This has either involved existing NIBs diversifying their operations or else the creation of new national institutions to mobilise third-party private finance for infrastructure. To varying degrees, support to PPPs has therefore involved:

- In the case of existing NIBs, a move from predominantly lending to public infrastructure projects and state-owned utilities, where loan evaluations were largely based on technical, economic, social and environmental criteria, to risk-based lending to projects involving credit assessments, where the NIB has been exposed to full project risk (in the absence of a guarantee from central or local governments);
- The use of subordinated investment and guarantees, including subordinated debt, equity-based investment and credit guarantees, in order to mobilise third-party capital, in addition to senior lender positions, through either the establishment of dedicated subsidiaries or wholesale investment in intermediated equity funds (e.g. NAIF, NIIF);
- Albeit to a limited degree, greater sophistication in capital market operations in terms of mobilising third-party risk capital (including through more complex securitisations), especially institutional finance from pension and insurance funds (e.g. the DBJ);
- Support for concessional loans through the deployment of budgetary allocations, which have been used to support privately financed projects (e.g. CIB, NAIF); and
- Increased activity in project preparation, particularly in order to support public sector pipeline development, origination of PPPs, knowledge management, communications and advocacy (e.g. BNDES, the DBSA)<sup>22</sup>.

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<sup>22</sup> As set out, the focus of this Guidance Note is on the domestic activities of NIBs, but it should also be noted that several of the larger traditional NIBs, as well as lending on a sovereign basis, have also provided risk capital to projects. In the case of KfW, this has occurred both directly but also through its private sector-focused subsidiary, DEG. As with the World Bank, exposure to non-sovereign risk usually necessitates some degree of indemnification from the host government. The CDB's international operations also involve similar protections.

### 3.1 OBJECTIVES OF RAISING THIRD-PARTY RISK CAPITAL FOR PPPS

Attracting private finance into infrastructure and therefore mobilising additional financial resources has the benefit of helping to bring more infrastructure onstream than would otherwise be the case; although it should be remembered that all infrastructure has to be ultimately paid for either by users or government (constrained affordability being the principal limitation on infrastructure provision in most markets). A corollary to raising private finance, however, is that this finance is typically 'at risk' (at least to some degree), in that it is not fully guaranteed by government (otherwise it would be largely the same as government borrowing). In other words, by removing the 'fiscal headroom' constraints that governments face, private financing offers a route to accelerate infrastructure provision, with the costs of this being spread out over the term of the financing.

NIBs can *potentially* play a significant role in the mobilisation of third-party risk capital in three ways:

- **Raising capital without guarantees by leveraging their own capital.** A relatively straightforward approach to mobilising third-party risk capital is through issues of bonds by NIBs, but without full guarantees or the backing of callable capital. This is the same way as DFIs raise third-party capital without guarantees, utilising their high credit ratings. A criticism of some DFIs pursuing such an approach, however, is that in order to maintain a high credit rating the institutions pursue extremely conservative, low-risk lending and investment policies.
- **Mobilising capital at an intermediated level through debt and equity funds.** NIBs can be anchor or cornerstone investors in debt and equity funds, helping to attract third-party capital. The NIIF and the GIB were both established with the potential to invest in third-party funds. Subordinating debt investment or equity investment into a fund can help attract third-party private capital into the funds<sup>23</sup>.
- **Mobilising finance at the project level** through a range of instrument and structures, either in **primary** financings of *greenfield* projects or else in **re-financings** of *operational* assets:
  - **Primary financings:** As with DFIs, the main product of NIBs is senior debt, which involves the least risky part of the financing structure of a project whether this involves the provision of a loan or investment in senior debt instruments, such as project bonds. This can provide confidence to commercial lenders. Other credit instruments include guarantees of senior debt. Because they absorb more risk, guarantees, subordinated debt and equity investments can be more catalytic in mobilising third-party finance. These interventions can be even more attractive to private finance providers if the additional risk is not fully priced (that is, subsidised).
  - **Secondary financings,** in which operational assets are refinanced, can be more attractive to private sector investors, particularly institutional ones, than greenfield primary financings. NIBs can facilitate these secondary financings through exiting either an individual transaction or a group of transactions. In the case of the former, the individual project can then seek refinancing either through new bank loans or else bond issues. In the case of a group of transactions, the loan assets can be placed within a securitisation vehicle, into which institutional investors can invest.

In exploring specific approaches involved in NIB support to PPPs, institutions supporting domestic PPP infrastructure in high-income countries are differentiated from those in emerging markets, and are discussed separately in Sections 3.2 and 3.3 on the following page. Box 3.1 describes how the financing challenges differ across markets.

<sup>23</sup> Often this can involve a three-tier structure, in which government grants are the most subordinated tier, the public finance institution the next tier, and commercial capital ranking most senior. Although outside the scope of this Guidance Note, this approach has been followed in many instances by KfW which has been provided by grant monies from the German Government and the European Union. Similarly, both the DBSA and KfW have, at different points in time, been subordinated lenders within the three-tier structure of the Emerging Africa Infrastructure Fund.

**Box 3.1: How do the infrastructure financing challenges differ across markets?**

Improving access to quality infrastructure is a key policy objective of governments across both developed and emerging markets. While political commitment to improving infrastructure provision may be present at the highest level, obstacles still exist. Aside from challenges related to project preparation and development, many experts have noted that to make quality infrastructure a reality, key financing issues need to be addressed. Issues around financing infrastructure differ, however, between high- and low-income countries.

**In high-income countries:**

Although private sector lenders and investors are willing to invest in infrastructure, the finance costs associated with private finance are almost always higher than public sector finance, given that governments can raise capital more cheaply and over longer periods than private counterparts<sup>24</sup>. This means that projects financed with private debt and equity can lead to higher end user charges. To mitigate these costs, arrangers of finance will often seek to maximise inputs from public financial institutions which are able to raise and on-lend finance more cheaply. For example, in the UK, roughly 50 percent of the financing for offshore transmission assets comes from the European Investment Bank (EIB) – an AAA-rated institution – which passes on the benefits of its less expensive capital to borrowers<sup>25</sup>.

In many countries, while institutional investors do indeed have large volumes of capital under management, fragmentation of asset allocations means that individual institutional investors may only have limited resources available to finance infrastructure projects.

**In emerging markets:**

The ability of private banks to provide longer tenor, local currency finance is often limited. As a result, the tariffs required to deliver infrastructure financed by them is higher relative to what it could be if longer-tenor finance were available; projects and

users are also subject to considerable exchange rate risks where longer-tenor foreign exchange is required.

The local capital markets can be thin with limited private sector technical capability; in more developed contexts, both equity and debt capital markets have been the conduit through which infrastructure projects and companies looking for long-term efficient financing have been introduced to investors seeking out long-term assets (for instance, pension and insurance companies seeking to match their long-term liabilities).

**Across markets at all levels of development:**

Private lenders and investors with access to large sources of capital, including institutional investors, often lack the in-house technical capabilities to assess credit risks associated with individual infrastructure projects. In addition, regulation of such sources of capital means that investment outside of government bonds and traded stocks (especially for institutional investors in lower income countries) typically cannot exceed a certain proportion of their portfolios.

As several financial crises have shown (including the Asian financial crisis and the more recent global financial crisis), private sector debt lending can fluctuate with business cycles, meaning that during times of financial hardship, access to private sector lending can be limited as a result of institutions being less willing to lend to large and relatively illiquid transactions.

One way governments seek to address some of these challenges is to establish financial institutions with a specific focus on infrastructure. NIBs, which have varying degrees of government support, can often draw on the relatively high credit ratings of their host governments to offer finance with rates and tenors that make infrastructure more affordable to end users, while still allowing for commercial returns.

Source: CEPA analysis.

<sup>24</sup> While governments can raise capital more cheaply because they have higher credit ratings when they lend it on and do not charge a proper risk reflective margin, they are essentially providing subsidised finance or, put another way, project risk is being socialised amongst taxpayers.

<sup>25</sup> Note that the risk profile of the project – which should be taken into account in debt pricing – is not determined by who is providing the debt finance.

### 3.2 SUPPORTING PPPS IN HIGH-INCOME COUNTRIES

Depending upon the country in question, NIBs have played important roles in helping to catalyse third-party capital.

Traditional NIB providers of long-term debt have facilitated the successful implementation of PPP projects in several ways:

- Unless projects have some form of guarantee, **there is a need to understand quite complex project risks**, which even Ministries of Finance may not have the requisite capabilities to evaluate. NIBs are well positioned to build up these skills, managing taxpayer risks in an informed manner.
- **Reducing financing costs of PPPs relative to what they would have been if fully privately financed.** This can be helpful especially where comparisons are made between the costs of pure public finance (where no risk premium is added to public borrowing costs) and private financing, where the latter will always be more expensive. This extends to providing subsidies to qualifying projects where there is a compelling social or environmental case to do so.
- Even in countries with relatively well-developed credit and capital markets, **new types of projects and their associated risks can inhibit private investment.** The involvement of a NIB can help address investor and especially lender concerns, even where the NIB's position is as a senior lender (sometimes referred to as the halo effect); that is, without subordinating itself to others. This has been the case particularly with renewable energy projects (explored in more detail in the next section). Overall, however, it is illustrative of the important function of 'crowding in' private finance.

#### 3.2.1 Understanding project risks

There are significant differences in risk profiles between providing a credit to projects that the public sector stands behind, potentially with an explicit government guarantee, and project financings in which the loan is at risk from a range of different commercial and financial risks, which need to be allocated to different stakeholders in a transaction for the project to be bankable.

This greater complexity and risk have a number of implications. The first is the need for more commercial banking skills, as opposed to more traditional public sector project appraisal skills. These will typically come at a higher cost and it can be difficult to fit such employment market requirements within public sector pay scales. Hence, whilst NIBs as public institutions will probably not offer the same level of remuneration as commercial employers, there is a greater opportunity to offer the more enhanced packages often necessary to attract the requisite skill set.

Another requirement is to ensure that investment and loan decisions are made based on the correct criteria, free from political interference, avoiding problems of 'directed credit', where governments dictate, either directly or indirectly, which projects are to receive finance. This can be easier to achieve through a ring-fenced, stand-alone entity; however, it is also necessary to ensure that the right governance is put in place, including boards with the requisite credit/investment skills, probity and political independence.

#### 3.2.2 Reducing project financing costs

NIBs can channel their own highly efficient funding costs to the benefit of PPPs in the same way that they do for public infrastructure projects. Even where risk premia are then added into NIBs' loan products to reflect specific risks associated with lending to the private sector on a full risk basis, they can still price the same projects more competitively than fully private entities, due to their own funding costs being typically lower. And, if not more importantly, NIBs have the advantage of being able to offer very long tenors, which commercial banks often struggle to do.

It is important to note, however, that two recently established NIBs, namely the NAIF and the CIB - which are both focused on providing finance to PPPs, offering long tenor debt at competitive and even concessional rates - have, to date, not sought to raise finance from capital markets, but instead have focused on channelling budgetary resources to the most difficult projects, with the NAIF having been given a specific budgetary appropriation to do so.

**Box 3.2: NAIF**

The NAIF was set up and funded with appropriations from the Commonwealth of Australia's Consolidated Revenue Fund to support infrastructure in the less developed and less populated northern region of the country. In this model, the NAIF provides funds to states (Queensland and Western Australia) and the Northern Territory to on-lend to projects.

Specific subsidies – measured as a discount to market loan pricing – can be worked into the NAIF's loan pricing, but only where the public, as opposed to private, benefits justify it. In determining any concessions to offer a project, the NAIF Board must have regard to:

- the extent and mix of all concessions necessary for the project to proceed; and
- the extent of the project's public benefit (a ratio of public benefits to the scale of the subsidy is used to measure this).

Concessions must be the minimum the Board considers necessary for the project to proceed and can include:

- longer loan tenors (up to nearly 28 years under current Commonwealth borrowing conditions);
- lower interest rates (not below the Commonwealth bond rates);
- extended periods for interest capitalisation beyond construction completion;
- deferral of loan repayments or other tailored repayment schedules;
- lower or different fee structures to commercial financiers; and
- ranking lower than commercial financiers for purposes of cash-flow or enforcement of security.

Source: NAIF investment mandate.

A criticism often levelled at PPP infrastructure is that private financing is more expensive than pure public financing, in which governments raise capital from public bond markets and then on-lend or even grant it to projects. Part of this will nearly always be true in developed markets; that is, that governments' cost of funds will always be cheaper than the wholesale funding costs of commercial banks<sup>26</sup>.

To a degree, NIBs can help bridge the gap between public and private financing. On the one hand, they benefit from the ability of governments to raise capital more cheaply than private sector entities (although the subsidy inherent in this needs to be recognised) and, on the other hand, the capital on-lent has appropriate risk reflective pricing. Where there are additional affordability or positive externality considerations, additional grants can be used to soften financing costs, such as through explicit interest rate subsidies in blended financing approaches. The ability to do this, however, can be more limited in contexts such as the European Union, which takes a strict line to the associated state aid<sup>27</sup> implications of such approaches.

**3.2.3 Crowding in private investment**

A key role of NIBs is to crowd in additional private sector debt. This can be done in different ways. Sometimes it is limited to having a major publicly -owned entity participating in a transaction, leading to participation from other lenders who otherwise may not have considered involvement. Such involvement can also be seen as protection against adverse government actions, including reneging on commitments, as governments are much less likely to cause projects to suffer or even fail when they are exposed to them through their NIB.

In other instances, capital can be crowded in by the NIB subordinating itself or adopting junior positions within the project financing structure, relative to pure private sector capital. This provides extra protection to private sector lenders.

<sup>26</sup> However, it is incorrect to compare the costs of private financing, in which a full risk premium is included by the lender to take account of the risk of borrower default, with public sector loans, in which no risk premium over and above the costs of government borrowing is included in the public loan costs.

<sup>27</sup> "State aid is any advantage granted by public authorities through state resources on a selective basis to any organisations that could potentially distort competition and trade in the EU. The definition of state aid is very broad because 'an advantage' can take many forms. It is anything which an undertaking (an organisation engaged in economic activity) could not get on the open market. State aid rules can (among other things) apply to the following: grants; loans; tax breaks, including enhanced capital allowances; and the use or sale of a state asset for free or at less than market price." Extracted from the UK Government State Aid Guidance (2015). [Online]. <<https://www.gov.uk/guidance/state-aid>>.

As set out in Box 3.2, this is something that the NAIF in Australia has specifically sought to do by being able to offer subsidies in the form of adopting junior debt positions within a financing structure.

The CIB in Canada and the NAIF in Northern Australia have an overarching objective of supporting regional economic development and coordinating different levels of government to identify a pipeline of investment opportunities. Both institutions have only been established in the last two years and, accordingly, the NAIF has made only a handful of commitments, whilst the CIB has made only one as of December 2018.

Their principal rationale is to target support on projects which may be commercially marginal, but which have significant positive externalities. Whilst they aim to ideally crowd in third-party private finance, in certain circumstances the NAIF can provide 100 percent of a project's debt. Because their remit is to support economic development, both are focused on greenfield infrastructure or infrastructure with new elements. Both institutions have a mandate to focus on revenue-generating infrastructure (i.e. 'user pay projects') and to generate a positive return for taxpayers. However, from the evidence, it appears that both of these NIBs may also be used as a policy tool to subsidise projects that would not otherwise attract financing, rather than demonstrating that such projects can be commercially viable. The main similarity in approach is that both institutions offer concessional finance to projects that would not otherwise be viable, where there is an evident public interest in supporting the project.

For example, both institutions can offer concessionality by offering debt at below market rates, by tailoring repayment structures to specific project circumstances, or by taking subordinate positions in the financing structure. In this way, they are taking on a greater share of risk in order to keep user charges low.

There are also some important differences between the CIB and the NAIF, although it is important to highlight that both institutions are still maturing and their respective mandates may continue to evolve. In terms of products, the NAIF is a debt-only facility which (as discussed) can lend up to 100 percent of a project's debt, providing there is appropriate risk sharing. The CIB can take higher-risk equity positions, but can only provide support of up to 49 percent of the total project value, thus it cannot completely crowd out the market and the project must still be structured to appeal to private investors.

### 3.2.4 Project preparation

Given NIBs' roles as a centre of expertise for infrastructure projects, and their ability to assess infrastructure investment proposals and to structure investments, they are often given the complementary role of custodian of their country's project pipeline.

The CIB appears to be recruiting in-house expertise to develop and coordinate a pipeline of infrastructure projects, to act as a centre of expertise on infrastructure projects involving private-sector investment, and to advise other levels of Canadian government. Presently, it appears that NAIF's remit is limited to collating a pipeline of infrastructure opportunities in its regions of focus, rather than building expertise that can be utilised nationally.

The Global Infrastructure Hub has also developed a leading practice reference tool on Governmental Processes Facilitating Infrastructure Project Preparation<sup>28</sup>, which highlights the role of the National Infrastructure Fund (Fondo Nacional de Infraestructura, or FONADIN), under the National Development Bank for Public Works and Services in Mexico, in supporting project preparation.

## 3.3 SUPPORTING PPPs IN EMERGING MARKETS

All of the above attributes are highly relevant, if not more relevant, in the context of emerging markets. However, in contexts where credit and capital markets are less developed, NIBs can play a dual role of addressing the financing challenges to which this gives rise, as well as helping in the longer-term development of capital markets.

In addition, particularly in emerging markets, the model has been adapted to include the provision of equity investment as well as debt. In these countries, NIBs also often play a role in developing infrastructure project pipelines.

### 3.3.1 Addressing credit and capital market gaps

One of the key challenges faced in emerging economies is the inability of domestic credit and capital markets to provide long-term, competitively priced, local currency debt to PPP infrastructure projects. This often leads to a reliance on foreign exchange financing in which currency depreciation risks cannot be adequately hedged, resulting in governments and/or customers having to bear these risks.

<sup>28</sup> Available at <https://www.gihub.org/project-preparation/>

NIBs can help address this challenge in a number of ways:

- As specialist vehicles, they can act as conduits for sovereign loans raised from development partners to be channelled to projects, often in forms, such as subordinated debt, which can mobilise third-party capital.
- Whereas local institutional investors and banks may be unwilling to lend to infrastructure projects directly, especially where they do not understand the risks involved, they may sometimes be more willing to invest in a state-backed entity.
- NIB capital will most likely be provided in local currency and at a relatively efficient price, which can help affordability and currency matching.

In turn, issuing bonds in capital markets can help with their deepening and widening.

#### Provision of long-term debt financing in foreign exchange and local currency

A minimum of 60 percent of the financing for typical PPP infrastructure projects in emerging markets is debt. As with public infrastructure, the provision of long-term debt at efficient rates is crucial to delivering affordable projects. Even where private sector operators are more efficient than public ones, the all-in costs of the project are likely to be greater than pure publicly financed projects, unless subsidies are used to offset more expensive private sector-provided debt and equity. It is likely that NIB-provided debt will still be cheaper and likely longer term than debt provided by the private sector, whether this is provided in a foreign or local currency.

Whereas the many international DFIs who are active in emerging markets provide most of their debt in foreign currency, the government backing of many NIBs, whether *explicitly* through guarantees or callable capital, or even *implicitly* (that is, it is believed that

governments would step in if they encountered problems) also enables them to issue bonds more efficiently than private sector lenders. This is a way of addressing the perennial ambition in many emerging markets of providing long-term local currency debt to infrastructure projects. For example, as of 2018, over 98 percent of the DBSA's debt finance has been provided in Rand and similarly, 86 percent of BNDES' net loan portfolio is in Reales<sup>29,30</sup>. In India, the Indian Infrastructure Finance Company has also been a provider of long-term Rupee-denominated debt.

Most long-term lending to projects by NIBs takes the form of senior debt. This is the least risky part of a financing structure, as it has a first call on project or business revenues relative to other forms of finance, and also ranks first in the event of an insolvency event. A typical way in which NIBs seek to mobilise senior debt from private sector lenders is through an A/B loan structure<sup>31</sup>.

It can be the case, however, that such approaches are insufficient. By providing subordinated debt, a NIB can create strong incentives to both equity and debt providers, as it provides an additional layer of protection to lenders and does not dilute returns to equity to the extent that additional equity would do. This can be even more catalytic where it does not seek a full risk reflective return; however, this level of concessionality needs to be funded, either through cross-subsidies from the rest of the portfolio or through separately funded interest rate subsidies.

Institutions such as the IDCOL in Bangladesh were initially set up to provide subordinated debt to PPP and private infrastructure projects, in which the Government of Bangladesh invested the proceeds of an International Development Association (IDA) credit in the IDCOL, which funded subsidised USD subordinated debt. From this, the IDCOL has evolved into a financial institution capable of providing both local and foreign currency long-term debt to projects.

29 BNDES. Management Report (2018). [Online.] [https://www.bndes.gov.br/SiteBNDES/export/sites/default/bndes\\_en/Galerias/Download/management\\_report2018-1s.pdf](https://www.bndes.gov.br/SiteBNDES/export/sites/default/bndes_en/Galerias/Download/management_report2018-1s.pdf).

30 DBSA. Integrated Annual Report. (2017-2018). [Online]. <<https://www.dbsa.org/EN/InvestorRelations/Pages/DBSA-Annual-Reports.aspx>>.

31 See Annex A for a definition of A/B loan structures.

### **Box 3.3: The Infrastructure Development Company Limited in Bangladesh**

In 1997, the Government of Bangladesh established the IDCOL, and in the following year it was licensed as a non-bank financial institution. Since its formation, the IDCOL has played a significant role in bridging the financing gap for infrastructure, particularly for renewable energy projects in Bangladesh.

The IDCOL is managed by an independent Board of Directors made up of four senior government officials, three representatives from the private sector, and a full time Executive Director and Chief Executive Officer. It is staffed with financial and market analysts, engineers, lawyers, IT experts, accountants and environmental and social safeguard specialists.

The IDCOL provides project finance, corporate finance, debt and equity arrangements, grants and technical assistance, training and capacity building, and advisory services.

The IDCOL also supports government and regulators in developing policies favourable to PPPs and private participation in infrastructure more widely.

The existing IDCOL portfolio is very concentrated in renewable energy, with approximately 72 percent of the total loan provided to the renewable energy sector – approximately 96 percent of that is invested in the solar home system program.

The IDCOL provides long-term Bangladeshi Taka (BDT) and USD loans to viable private-sector owned projects that meet its sector eligibility criteria. In energy efficiency and renewable energy, it provides BDT loans, with the exception of large grid-tied renewable energy independent power producer (IPP) projects which in some cases can qualify for a USD loan.

While the IDCOL generally lends on commercial terms it can provide concessionary finance where projects demonstrate significant positive environmental impacts, i.e. solid waste management, effluent treatment plants, battery recycling plants, etc.

Source: IDCOL website. [Online]. <<http://www.idcol.org/>>

### **Equity financing**

Although the traditional model initially focused on providing debt to projects, there are now several NIBs which have extended their operations to incorporate equity finance, either in addition to debt or exclusively. In terms of the former, it has become common to do so through a subsidiary. Equity gaps in PPP finance occur when project developers are unable to provide or raise sufficient risk capital from third parties to fulfil the equity component of a given transaction.

India has had several NIB debt providers, including Infrastructure Leasing & Financial Services Limited and the aforementioned Indian Infrastructure Finance Company (established in 2006). However, growth of the PPP market in India has been hindered by a lack of equity, which has created financing gaps.

As a result, the NIIF was created in 2015 with an anchor contribution from the Government of India, and is an equity-only vehicle that is a patient long-term investor in commercially viable infrastructure projects, either existing or greenfield. It aims to be catalytic and market-driven, by crowding in private sector funds from institutional sources, both domestic and foreign. These include sovereign wealth funds, multilaterals, and pension and insurance organisations, to create a USD 3 billion platform with three distinct funds and investment policies, as discussed in Box 3.4.

Targets for investment include PPPs, with the NIIF's emphasis being put on long-term collaboration and close working relationships with the Government of India. To date, the NIIF Master Fund has made an anchor investment with DP World into warehousing and logistics and, in April 2018, the NIIF launched a Green Growth Equity Fund with the UK. Given its mode of operation and co-finance approach, the NIIF will aim to crowd in private funds and boost performance of stalled or stressed assets; it will also provide due diligence to its partners. It is one of a series of measures and reforms designed to revive the Indian PPP infrastructure market.



**Box 3.4: The NIIF equity investment platforms**

The NIIF is an investor-owned fund manager, with an anchor investment from the Government of India, and participation from institutional investors and Indian private financial institutions. The NIIF manages three funds with individual investment strategies. All the funds are registered as Alternative Investment Funds with the Securities and Exchange Board of India and each are in the process of raising capital from domestic and international institutional investors. The NIIF has a USD 3 billion commitment from the Government of India and commitments from institutional investors; as a result, the NIIF can operate at scale and provide patient capital.

The NIIF investee funds, companies and projects adhere to an environmental, social and governance (ESG) framework – requiring upfront due diligence of investments opportunities and ongoing monitoring.

The three NIIF Funds are as follows:

1. The Master Fund primarily invests in core brownfield infrastructure with predictable cash flows (e.g. roads, ports, airports, power, etc.) The investee businesses have a long track record and are often operating in regulated environments or under concession or long-term agreements.
2. The Fund of Funds invests with experienced fund managers who have a track record of success. The NIIF will often act as the anchor investor, and then the fund managers will raise further funds from institutional investors. The Fund of Funds is very diverse in terms of sectors, products and investment styles.
3. The Strategic Fund is aimed at investments earlier in the target companies' lifecycle (development/growth). The sectors of focus are those of economic and commercial importance to India's medium- and long-term ambitions.

Source: NIIF website. [Online]. <<https://niifindia.in/>>.

**Increasing financial innovation**

Once established for a period of time, NIBs become more sophisticated in terms of the financial products that they offer. This is particularly marked in the cases of the largest BRICS-based (Brazil, Russia, India, China and South Africa) NIBs, but there is increasing financial innovation in other emerging markets too, much of it aimed at finding different ways of mobilising private finance. For instance, in Indonesia, PT IIF announced in mid-2017 that it would be developing additional PPP financial instruments, including bridging finance, equity and take-out financing (in which it provides a commitment to refinance a project if the initial lenders wish to exit). A recent USD 200 million loan from the World Bank should assist this innovation.

In future, PT IIF may increasingly take a private sector and PPP lead, as PT SMI is being readied to take over the Indonesia sovereign wealth fund (Pusat Investasi Pemerintah, PIP), extend financing directly to local governments and extend its sector coverage to industry and agriculture. In doing so, it will transform to the premier Indonesian DFI (Lembaga Pembiayaan Pembangunan Indonesia).

**Capital market development**

In addition to providing long-term finance for projects, the ability to raise capital and to invest in any debt issues from infrastructure projects can help with capital market development. In particular, where issues are not fully guaranteed by host governments, this can transfer a degree of risk to private sector investors, thereby not increasing its contingent liabilities in the same way as if it were guaranteeing debt issues. This could provide an effective channel of finance from institutional investors, through the NIB to projects, rather than through government. This is important as the investors are still bearing risk (even though this may be relatively low) rather than the government having to bear the full contingent liability of a project going wrong, as in the case of pure public financing. More widely, the approach could form a useful way of channelling conservative institutional finance, on a risk basis, into infrastructure, where such investors would be unwilling to countenance direct investment in projects. However, it appears that most emerging market NIB bond issues continue to be supported by explicit government guarantees.

Even where bond issues are guaranteed by host governments, the ability to raise long-term local currency finance is a particular niche that remains challenging, including for the international DFIs, and is, accordingly, a potential unique selling point of NIBs. This role is observed most often as a feature of NIBs in the more developed BRICS countries, but NIBs in countries such as Indonesia are also beginning to issue local currency bonds.

As set out in Box 3.5, in the case of CDB, there have been both capital market capital raisings, as well as a securitisation of its loan book, in which institutional investors can be expected to take risk where there is an opportunity to invest in operational, rather than greenfield, assets.

#### **Box 3.5: Capital market innovation by CDB**

CDB proactively seeks to diversify financing sources and channels to projects, 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.

Capital market activity includes asset-backed securities, some CNY 38 billion (USD 5.6 billion) issued in 2017 with an aggregate total of CNY 300 billion (USD 44 billion). These include poverty alleviation bonds and performance guarantees for PPPs. It 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.

Source: CDB website and CEPA analysis.

In Indonesia, several bond market issues in rupiah have been made in local capital markets, albeit with a significant degree of credit enhancement, the proceeds of which have been invested in projects, as described in Box 3.6.

#### **Box 3.6: PT SMI bond issues and investments<sup>32</sup>**

##### **Bonds**

In July 2018, PT SMI issued Indonesia's first government-backed green bonds under a shelf registration issuance scheme worth IDR 3 trillion (USD 209 million)<sup>33</sup> :

Series A – Principal: IDR 131.5 billion (USD 9 million), Coupon: 7.55 percent per year, Tenor: three years, Repayment: Bullet payment of 100 percent principal at maturity.

Series B – Principal: IDR 223.5 billion (USD 158 million), Coupon: 7.80 percent, Tenor: five years, Repayment: Bullet payment of 100 percent principal at maturity.

The Green Bond issue had a local rating of AAA (id) (Triple A). At the same time, PT SMI issued Sukuk Bonds which had the same rating.

In November 2018, PT SMI announced it would issue a IDR 828.5 billion (USD 58 million) bond, the series A bond worth IDR 635 billion (USD 45 million) with a coupon of 8.2 percent (tenor – one year) and series B valued at IDR 193.25 billion (USD 13.7 million) with a coupon of 8.7 percent (tenor – three years). SMI had planned to offer up to IDR 1.5 trillion (USD 106 million) in 2018 with IDR 671.75 billion (USD 47.6 million) still on underwriter securities guarantee.

PT SMI had also issued bonds in both 2017 and 2016.

##### **Investments**

PT SMI has invested in two toll roads (Palembang-Indralaya and Cikopo-Palimanan); two steam power plants (Tenayan and Molotabu Steam); a gas power plant (Tanjung Uncang); a container terminal (Palaran); a drinking water supply system (Umbulan); and a hospital (Karangasem).

Source: CEPA analysis.

32 Press Release - PT SMI Supports Sustainable Development by Issuing the First Green Bond in Indonesia. (July 2018). [Online]. <<https://www.ptsmi.co.id/press-release/pt-smi-supports-sustainable-development-by-issuing-the-first-green-bond-in-indonesia/>>.

33 Jakarta Post - Sarana Multi Infrastruktur issues green bonds and sukuk. (July 2018). [Online]. <<http://www.thejakartapost.com/news/2018/07/10/sarana-multi-infrastruktur-issues-green-bonds-and-sukuk.html>>

### 3.3.2 Project preparation and technical assistance requirements

Another area where some NIBs have taken a role is in developing project pipelines and helping governments to structure and bid out PPP opportunities.

It has been argued by McKinsey<sup>34</sup> and others that a major success factor associated with infrastructure banks is the creation of a robust and well-prepared or 'bankable' project pipeline. The main aim is to improve project quality and accelerate investment transactions and delivery, while limiting negative political interference. Examples of this activity include:

- In China, CDB has invested strongly in project preparation and structuring, with client local governments and state enterprises active in the Belt and Road Initiative (BRI) and/or other bilateral country cooperation agreements.
- In South Africa, the DBSA has also moved to expand and enhance its project preparation capability and has been granted technical assistance funds from different donors to do so.
- In Mexico, the National Infrastructure Fund (Fondo Nacional de Infraestructura, or FONADIN) was established in 2008 to accelerate private participation in Mexico's infrastructure sectors, where it has been successful in providing high-quality project preparatory assistance, as well as financing for infrastructure.
- In Indonesia, PT SMI seeks to address a major capacity shortfall in providing project preparation services.

As set out in Box 3.7 below, BNDES is also active in this area.

#### Box 3.7: BNDES' role in project preparation

BNDES contributes funding to complement the government and accelerate PPPs in municipalities, as well as at the state and federal level. A facility has been created for the exclusive purpose of preparing, structuring and transacting a priority pipeline of PPPs, including concessions and privatisations<sup>35,36</sup>. This has Presidential commitment and includes an investment advisory committee and secretariat to fast-track a robust, fully structured and planned project pipeline. At present, there are some 150 nominated projects with a value of over USD 50 billion in transport, energy, telecommunications and water/sanitation. These include large urban investments, as well as investments in smaller municipalities. Consultants are hired for the project preparation and advisory work; the cost of this is recoverable from the successful bidder. If the project does not proceed, the sponsor (municipality or state-owned enterprise) has to repay the project preparation costs.

Source: CEPA analysis

34 McKinsey & Company. Creating an infrastructure bank: Principles of success (April 2017.) [Online]. <<https://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/creating-an-infrastructure-bank-principles-of-success>>.

35 Brazil launched the Program of Partnerships and Investments in 2016 managed by BNDES, which enabled national, state, and local governments to access funding for TA to develop PPPs. In 2017, another state fund of 180 million Brazilian Reais (USD 56 million) was established to finance technical and specialised services for structuring PPP and concession projects. The fund is administered by Caixa Economica Federal.

36 World Bank Blog. Promoting bankable PPPs in Brazilian municipalities. (April 2018), [Online]. <<http://blogs.worldbank.org/ppps/promoting-bankable-ppps-brazilian-municipalities>>.