The preceding sections have mapped out the evolution of the traditional NIB model. This evolution, along with the design of new interventions, has enabled the model to move beyond providing relatively inexpensive long-term debt to public borrowers, to supporting PPPs and the green economy by mobilising private capital at both the project and institutional (wholesale) levels.

This section discusses the key challenges that institutions have faced to date, and learnings on how these challenges can be overcome. Some lessons, such as the need for strong independent governance, span all NIBs to varying degrees, while other learnings apply to a sub-group of NIBs, such as how traditional NIBs can adapt current operations to increase support for PPPs and mobilising private finance.

5.1 GOVERNANCE AND MANAGEMENT OF NIBS

Aspects of good governance are linked to avoiding negative behaviour, such as institutional capture by different interest groups, cronyism and corruption, while also promoting positive behaviour, such as optimising the role of NIBs; ensuring that their specific missions remain relevant; and ensuring taxpayers receive value for money.

5.1.1 Operating within an agreed strategy and mandate

As with any public institution, it is important that NIBs have clear remits, whether these are time-limited or enduring. Strategies and mandates should be clearly articulated and outlined in order to ensure relevance, which can be achieved through NIB mission statements, strategy documents, investment policies and operating procedures. Tighter mandates are more likely to be successful than generalised ones, given that the latter can result in activities becoming overstretched and institutions being less able to address the most pressing market failures.

Strategies and mandates should also be kept under review and can, of course, be changed, but when they are, this should be after appropriate review and evaluation. Importantly, NIBs should always be in a position where they can clearly articulate their public sector mission.

5.1.2 Independent operational management

As public institutions, there will always be a temptation for governments to try to unduly influence their operations, especially in regard to the selection of supported projects and the NIB’s credit decisions. At worst, this can result in poor credit allocation decisions and, at the extreme, cronyism and corruption, leading to a range of problems for the institution concerned.

Hence, whilst government should have an active role in setting the NIB’s objectives and mission, it should not be involved in day-to-day operational activities. This should be left to investment professionals overseen by an independent, objective board, even where some or all representatives are government-appointed (which is the case with many NIBs). Such arrangements will allow NIBs to operate as intended within their remit, while also drawing on unconflicted professionals who are able to effectively deliver operations.
5.1.3 Appropriate management of subsidies

Although subsidies are governed by strict rules in some contexts, such as the European Union's State Aid rules, there are no such constraints in many countries. This can be potentially harmful in the context of PPPs, where the benefits of the subsidy can be captured by private sector interests rather than flowing to the intended beneficiaries, such as poorer customers.

Accordingly, subsidies should be used selectively and on a targeted basis, and they should be designed to minimise adverse impacts. One approach is to have bidders on projects compete for the level of subsidy, as is the case in reverse auctions, where the bidder with the lowest subsidy requirement wins the competition to build and operate the asset (as was seen in South Africa with the Renewable Energy Independent Power Producer Procurement (REIPPP) Programme). Another approach is to use redeemable grant instruments with the potential for claw-back when profitability turns out to be greater than initially anticipated. A third approach is that taken by the NAIF, under which subsidies can only be employed when a certain level of benefit is associated with their use.

5.1.4 Effective monitoring and reporting

It is one thing to have an ambition and strategy, it is another thing to deliver on it. It is, therefore, important that the activities of NIBs are actively monitored and regularly reviewed. This can be done, for example, by using established evaluation frameworks, such as the OECD Development Assistance Committee criteria, which assess Relevancy, Efficiency, Effectiveness, Impact and Sustainability, irrespective of whether the institution is in a developed or emerging market.

Such an approach can help ensure that the institution continues to deliver its mission. The results of these reviews should be published regularly to improve transparency. Having said this, the need for transparency and accountability should be appropriately balanced with the need to maintain commercial confidentiality.

5.2 THE IMPORTANCE OF GOOD PROJECT PREPARATION

Many NIBs have realised that it is often the lack of well-prepared projects that has created the greatest impediment to private financing of infrastructure. Often the skills and financial resources required for this do not exist within either line ministries or even specially established units. As discussed in Boxes 5.1 and 5.2, the DBSA and BNDES have both sought to address this gap.

Similarly, both PT SMI and PT IIF have the potential to be major catalysts in accelerating PPP preparation and implementation, although, as in many other emerging markets, they face challenges of limited capacity and expertise in what is a very public sector-driven PPP market. In Canada, when the CIB was established, it was made developer/custodian of the national infrastructure project pipeline.

As financing institutions, NIBs have a good understanding of what is required in the preparation process to make projects bankable, making this a natural area for NIBs to support governments.
5.3 MOBILISING PRIVATE CAPITAL

5.3.1 Minimising market distortions

As discussed, a particular objective of supporting PPPs and green finance has been to crowd in private finance. However, where NIBs limit their financial products to traditional senior loans, without working at opportunities to involve third-party private capital, there is less potential to do this. Providing senior debt is the least risky position in a project financing and is therefore a natural entry point for private sector lenders. More catalytic interventions include providing subordinated debt, partial credit guarantees or creating secondary financing opportunities for the private sector through exiting operational assets.

On the whole, however, there are few examples of these more innovative approaches – the provision of cheap, long-term senior debt still tends to dominate lending and investment portfolios.

Given the potential to distort and undermine markets, such as through crowding out the private sector, there are additional best practice considerations when it comes to thinking about NIBs which are set up to support PPPs. The objective of a NIB should be to add additional value and minimise market distortions, whilst at the same time promoting the development of national credit and capital markets. It should not be about institutional self-perpetuation through specific interventions in particular sectors once these are no longer required. At the extreme, even the continued existence of the institution itself within the public sector, once it is no longer required, should be kept under review.

Box 5.3 outlines ways in which NIBs can minimise market distortions.

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Box 5.1: The DBSA’s leading role in South Africa’s Renewable Energy Independent Power Producer Procurement (REIPPPP) Programme

The REIPPPP Programme is a program to rebalance the country’s energy mix that feeds into the national grid in order to reduce dependence on fossil fuel. The DBSA has been intimately involved in the REIPPPP from the outset. Launched in 2011, the DBSA collaborated with the Department of Energy and National Treasury to set up the program and the IPP Office – responsible for designing and managing all aspects of the REIPPPP, including the agreements between the government, Eskom, IPPs, and commercial parties and their empowerment partners. The DBSA oversees the appointment of staff and the office operations, as well as the procurement of consultants, goods and services required of the IPP Office. The DBSA provided the initial funding for the IPP Office as a loan recoverable at financial close.

Box 5.2: BNDES’ leading role in project preparation

BNDES has a unit focused on project structuring for privatisations, concessions and PPPs to assist at various stages of the process, from the planning to signing of contracts. The Investment Partnership Program allows BNDES to analyse the financing and structuring of projects in the program, and provide lines of finance after the project is bid out. All public infrastructure projects implemented through partnership agreements signed between the government and the private sector are included in the program, as are projects in the National Privatization Program.

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50 There may also be issues around creating contingent liabilities with respect to guarantees. Whereas a loan can be made to be profitable by charging a risk-adjusted margin over funding costs, the profitability of guarantee business is more complex. To be profitable, it is necessary to leverage the capital of guarantee business, which means that outstanding exposures end up being greater than the capital supporting them. This creates a contingent liability. This may conflict with domestic as well as external requirements (such where the country is part of an International Monetary Fund program).
Seek to provide financial products aimed at catalysing private investment, such as subordinated debt (which sits between senior debt and equity in a financial structure).

Rather than provide senior debt directly, use partial credit guarantees to risk share with private lenders and investors, including the provision of back-end guarantees which cover the final year of a tenor and liquidity products (such as put options whereby the option holder can exit a performing asset if it has a sudden need for greater liquidity) to encourage private sector financing.

Where subsidies are being deployed, target subsidies where they are most required — so-called ‘smart subsidies’. This is easier to do where the subsidy is explicit and therefore separable from the loan provided. A problem with forms of blended financing, such as interest rate subsidies, is that there is no incentive for the equity in a transaction to refinance out the public money (which typically happens once a project is operational and therefore less risky). However, when used in a disciplined manner, an element of subsidy in innovative products can increase catalytic impact.

Limit financial interventions to the phase of the project development cycle where it is most needed. Where all finance is being provided on a market, rather than concessional, basis, this is typically during the project development and construction phases, with private capital (particularly institutional) being more widely available for operational assets. The potential for the NiB to exit at this point should ideally be considered, rather than holding the asset to term. A particularly thorny issue that can militate against this, however, is the trade-off between developing markets through absorbing risk and the need for self-sustainability, with NiBs wishing to maintain the highest quality assets (that is, those which can be easily exited) on their balance sheets.

Finally, while NiBs which are focused on financing public infrastructure projects are likely to be enduring, different considerations come into play when considering private sector interventions, especially those focused on what may be temporary reasons for a public sector intervention. In such circumstances, institutions should have ‘mission accomplished’ provisions established in their enabling legislation and/or charters, so that they are wound up in an orderly manner once their objectives have been fully achieved. These provisions can also include the possibility of a divestment of the institution in question (as occurred with the GIB).

Source: CEPA analysis

As challenges change over time, maintaining strong engagement with the private sector is important to understanding concerns and assessing whether NiBs need to adapt their practices.
5.3.2 Leveraging NIB capital structures

A clear advantage that many NIBs have over international DFIs in emerging markets is the ability to lend long-term and efficiently in local currency. This niche is clearly something that should be built on by NIBs in emerging markets, tapping into local capital markets. Most transactions will require at least some long-term local debt, with many NIBs being in a unique position to provide this.

An interesting question with regards to how NIBs mobilise third-party capital is how the sources of a NIB's capital can be used to ensure the NIB is being truly catalytic. Against this, the NAIF and the CDB are new institutions that, at present, are fully funded by fiscal transfers. This creates something of an interesting conundrum. On the one hand, the absence of the need to maintain a credit rating should, in theory, make them freer to deliver greater innovation in their financing solutions, particularly where they can assume more risk without having to fully price it (a lack of risk-taking sometimes being a criticism of some DFIs who can be very conservative in order to preserve their high credit ratings). On the other hand, the absence of capital market discipline increases the risk of poor lending decisions, a risk that needs to be carefully managed.

For institutions with established credit ratings, often due to the implicit or explicit guarantees provided by their sovereign governments, an interesting area for consideration is the extent to which the NIB's capital raising should always be guaranteed and the extent to which this impacts which projects do and do not receive finance. Box 5.4 below discusses this in more detail.

**Box 5.4: Should NIB capital raising be guaranteed?**

It is clear that NIBs can play a significant role in raising long-term local currency financing for infrastructure projects. This is an important niche which NIBs are arguably uniquely positioned to fill.

What is less clear is whether or not the financing raised is transferring the risk, that governments have when they raise the finance themselves through raising public debt, to the providers of that private capital, either wholly or even in part. It is important to remember that part of the role of PPPs is to transfer financing obligations and risks away from governments to private capital providers, reducing government contingent liabilities.

Different NIBs raise a mix of explicitly guaranteed and unguaranteed debt, but through the same vehicle (unlike say, the IBRD and International Finance Corporation (IFC), in which the former raises debt which is protected by callable capital provided by country members for on-lending to sovereigns, but where capital raised by the latter is at risk and is on-lent to projects that typically do not have support from the host sovereign). Moreover, even where there is no explicit guarantee, the ratings agencies tend to assume an implicit guarantee.

This raises questions of whether the current model is optimal, or whether good practice would be to segregate guaranteed and unguaranteed capital. The advantage of the current approach is that the cost of finance is benefiting from an implicit guarantee, but this raises the question of whether this then promotes overly conservative behaviour, in order to minimise risks to credit ratings and help to ensure that the implicit guarantee is never tested. Or should there be a more formal split between capital which ultimately takes underlying project risk and sovereign-guaranteed capital which might provide for a better matching of risk profiles?

Source: CEPA analysis.

Having a formal split between guaranteed and unguaranteed capital could allow third-party capital providers to invest in resources that appropriately reflect their risk appetite, while also allowing NIBs greater freedom to undertake potentially catalytic activities. This will, in turn, involve a consideration of the unique circumstances of the country context, as this separation may not result in raising the capital required for unguaranteed segments, since those lending to these windows will be relying on the credit quality of the NIB, as opposed to the guarantees provided by the host government.
5.4 RESTRUCTURING AND REFOCUSING NIBS

Many of the challenges and ‘lessons learned’ discussed above are linked to institutions being relatively large and sometimes unwieldy, with mandates to support wide-ranging national economic and social policies. Many of the NIBs considered were initially created to undertake public financing of infrastructure, and then moved into private financing of PPPs and green economy projects. This is an entirely different business which poses additional technical and governance challenges to which the NIBs in question have had to adapt. These include the need to develop more commercial financing skills, the need to avoid crowding out private capital with cheaper public finance, and the greater governance burden involved when the private sector is a beneficiary, particularly when subsidies are involved.

In addition, not only have the NIBs been tasked with mobilising third-party capital at the project level, but they have also been asked to be more innovative in their own capital market operations and to be less reliant on direct fiscal transfers and indirect guarantees of their funding requirements, as has occurred with BNDES.

Lending and investment decisions are much more complex when NIBs are lending to PPPs which face a whole range of different risks, such as construction, technology performance, market, financial, regulatory, etc., than when they are essentially lending directly to the public sector, in which the latter essentially assumes such risks. This requires an entirely different set of skills, which may be more difficult to attract to work for the public sector than traditional public servants. The fact that NIBs are separate institutions from the mainstream public sector can help with this.

There is also the risk that a NIB ends up doing too much, as it is pressured to meet a whole range of different policy objectives. As the repository of financial resources and human resources skills within the public sector is scarce, it is understandable that governments turn to their respective NIBs to solve a range of different problems. Where this is not done in a structured and disciplined manner it can lead to risks of mission creep and overload, where the NIB is pushed and/or pulled into doing things that are beyond its capabilities. Such broad mandates might work within a pure public sector context, but not where private finance is involved.

An aspect of playing a more commercial role is therefore focus and prioritisation. The way these problems have been dealt with has involved a mix of re-scoping and refocusing activities, as observed in the cases of BNDES and DBSA described in Box 5.5 and Box 5.6 on the following page.
Research suggests that there can be a pattern in how many of the challenges outlined above can manifest, requiring a rethink and refocus on core priorities.

The experience of BNDES is the same as for many national development banks.

Figure 5.1: The Lifecycle of National Development Banks

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Establishment</th>
<th>Development</th>
<th>Engine for Growth</th>
<th>Developed Financial Markets</th>
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</thead>
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<tr>
<td>Provision and credit origination</td>
<td>Provision and credit origination</td>
<td>From provision to indirect mechanisms</td>
<td>Indirect mechanisms (guarantees, equalization)</td>
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| Risks | Lack of scale; agency issues; funding issues | Cronyism; agency issues; picking losers | Cronyism; crowding out; picking losers | Cronyism; crowding out; picking losers |


BNDES provides interesting insights into how a large institution has reorganised itself to focus on new and emerging priorities.

The case study of BNDES highlights the ongoing transformation from a dominant, direct finance, business model, with some two-thirds of all BNDES funds being provided by the federal government and then allocated with concessionality, in a wide range of national economic development programs and sectors, including infrastructure, to a model that is based on prioritisation, additionality and crowding-in private sector investment, both domestic and foreign. The latter model emerged after 2015, following a period of increasing fiscal constraints. The hitherto widespread use of concessional, long-term senior debt as an ‘adjustment variable’ to make PPP/concession infrastructure projects viable is no longer a policy option. In future, greater reliance will have to be placed on leveraging through co-financing and syndication, use of guarantees and capital markets instruments and other forms of de-risking, allowing greater participation of institutional investors. Prior to this change in policy, it is arguable that commercial banks and other institutional investors had less opportunity to engage in infrastructure financing in Brazil.

The BNDES lessons in PPPs include the need for a high quality, operational pipeline of projects. This, in turn, requires in-house expertise and technical support. Funding of PPPs is also heavily influenced by market structures, particularly in capital markets, and the ability of governments to provide concessional loans. BNDES is now being required to repay treasury funds and diversify to non-public sources of finance, particularly through raising debt in capital markets over increasing tenors. Another area of recent improvement is an enhanced legal and regulatory environment, more internationally competitive procurement and greater transparency in bidding. The broad access to projects at the federal, state and sub-national level has also been advantageous and promoted inclusion. BNDES has successfully acted as the government’s program manager or agent, with presidential and line ministry commitment, and this has been retained as an enabling platform in the new operational policies. BNDES has also moved to connect with emerging green finance through global facilities and multilateral banks and DFIs.

Source: CEPA analysis.
Similarly, the DBSA has also gone through an exercise of refocusing its activities to improve its relevancy and effectiveness.

**Box 5.6: Refocusing at the DBSA**

The DBSA has a program of change similar to BNDES. The DBSA’s new corporate strategy emphasises leverage of domestic and international investors — both traditional and green — and the role of the DBSA as a catalyst between the public and private sector, with greater emphasis on development impact, integrated infrastructure systems solutions and sustainability. Through a mix of convening power, partnerships, capital markets instruments and earlier stage project involvement, it aims to catalyse some USD 7.5 billion in infrastructure projects annually by 2020, of which it would directly finance some 25 percent or less. The share of PPPs in this is unknown, but major rail and other transport flagship projects have all suffered delays and political interference. Trust in a standard PPP operating model is not yet widespread in South Africa, particularly at the state and municipal level where the DBSA has a network of established clients.

It is too early to judge the effectiveness of the new DBSA, whose recent problems reflect national economic and political difficulties, but it has a trusted third-party status in terms of sub-national clients, management of government funds and programs, and working relationships with multilateral banks, DFIs and financial institutions in the private sector. It has also played an active role in providing debt finance to Black Economic Empowerment Groups and loans to Community Trusts; the latter allowed local equity stakes in the highly successful roll-out and management of the REIPPP Programme, which is credited with opening up the South African renewable energy market to private investment. It has shown an ability to scale-up projects into programs and replicate pilots into standard, bankable projects. It has made substantial progress in mobilising green finance, and is looking to add more innovative products and instruments.

Looking forward, much will depend on high level political commitment to PPP models, improvement of the enabling environment, and the ability of the DBSA to provide additionality, despite the financial sustainability constraints imposed on it by the Treasury. The lessons suggest it needs to gear up its early stage project preparation capacity building expertise and capacity, both internally and with its largely sub-national public clients. The DBSA has experience of operating assets at the municipal level, in direct and social infrastructure, and the latter remains the primary sector focus of the DBSA. In the new normal, the DBSA has had to demonstrate its effectiveness as a project generator and catalyst in infrastructure, with limited financial assets but within a relatively well-developed capital market.

Source: CEPA analysis.

A key lesson learned is that if a NIB does not stay at the forefront of infrastructure financing developments, it runs the risk of reducing its relevancy, in that the solutions being provided become inappropriate to the problems being encountered. At the extreme, if NIBs do not take into account and adapt to potential for private finance, they can crowd out and stymie market development.

51 Including its relatively small USD 6.5 billion capitalisation.
5.5 ESTABLISHING NEW INSTITUTIONS

A particular focus of this Guidance Note is to support governments seeking to set up new NIBs. Therefore, some questions that require detailed thought prior to taking the decision to establish a new intervention are discussed in Box 5.7 below.

Box 5.7: Questions to answer when considering establishing a new NIB

First, what is the nature or the gap, failure or barrier that is being addressed? Is it transient – for instance, related to a short-term interruption of financial markets – or is it likely to be prevailing? This will have implications for the nature of any intervention and whether it needs to be short-term or long-term in nature. It can often be tempting to see financing constraints as key barriers, when often the problem can be more related to funding (that is, an inability to pay for the infrastructure/limited affordability), policy, regulatory or other barriers. The classic issue is one of whether problems lie in the supply of finance or whether the problems lie with the projects themselves.

Second, what type of solution is likely to best address the problem(s) identified? Again, this may not always involve a financing solution. There can be issues around project design or structure that are causing the bankability issue, for instance, inappropriate risk transfer (for example, lenders may not be willing to accept traffic risk on a toll road project; however, they may be willing to lend to alternative project structures, for instance, in the case of availability-based structures). Even where it has been established that a financing solution is required, it is important to establish what type of finance is the problem; for instance, is it a debt or equity problem?

Third, is a new institution necessary in order to provide the solution? As the establishment of any new institution is likely to be both expensive, as well as time-consuming, to set up, it is important to justify any new intervention by establishing why existing institutions are either not capable of addressing the challenge(s) identified or can only do so sub-optimally. There may be other institutions that already exist, including those within the private sector that can be worked with rather than setting up something new. This is particularly relevant when addressing short-lived problems.

Source: CEPA analysis.

52 In availability-based PPP structures, the private sector is responsible for building and maintaining an asset to an acceptable standard, it does not have to assume demand risk.
It is useful to consider the questions in Box 5.7 in the context of a number of new entities, which have all been established to support private financing:

- **Targeting underserved geographies and communities.** Both the NAIF in Australia and the CIB in Canada are recently established new NIBs. Unlike the traditional model, neither has sought to raise non-government capital at the NIB level; rather, they have been focused on making government-provided risk capital available to mainly greenfield or expansion PPPs, where it is believed that the private sector will have little interest due, for instance, to geographical remoteness and the additional costs associated with this. Both have the ability to provide concessional finance where a need for it can be justified, for instance, in terms of addressing any additional costs faced by projects in these contexts. Ideally, the aim is to crowd in private sector debt finance, but the NAIF has been able to provide 100 percent of a given project’s debt requirement (relative to 49 percent for CIB) when this has helped expedite project implementation. There are, however, limitations on the use of subsidy to ensure it can only be used where absolutely justified.

- **Supporting unproven renewable technologies.** The GIB in the UK and the CEFC in Australia were established to focus on the additional challenges of renewable energy, but have provided commercially based financing. In particular, the fact that they have been taken out of projects through successful re-financings has demonstrated the viability of the projects that they have supported. The GIB has recently been privatised/divested by the UK Government, demonstrating that NIBs do not have to exist as public entities forever.

- **A shortage of risk capital for infrastructure.** The NIIF in India has focused specifically on addressing the financing gap in equity capital, in an approach which has sought to use Government of India resources to crowd in third-party equity from the private sector, donors and sovereign wealth funds into a series of different vehicles.