Public-Private Partnerships (PPPs)

Workshop Series on Sustainable Financing for Development and Infrastructure

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November 2024

Financing instruments to bring private investors to infrastructure

- Risk mitigation instruments
- Capital markets
- Role and instruments of Multilateral Development Banks
- Role of National Development Banks

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- **Risk mitigation instruments**
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- We will cover PPPs in the rest of the module

Risk Mitigation Instruments

- Risk mitigation instruments are financial instruments that transfer certain defined risks from project financiers (lenders and equity investors) to creditworthy third parties (guarantors and insurers) that have a better capacity to accept such risks
- Useful for developing country governments and local infrastructure entities that are not sufficiently creditworthy or do not have a proven track record in the eyes of private financiers to be able to borrow debt or attract private investments without support
- Key message: Risk mitigation instruments are not a panacea; they do not make poorly structured projects, or borrowers with unpredictable prospects, bankable

Source: Ref. 5

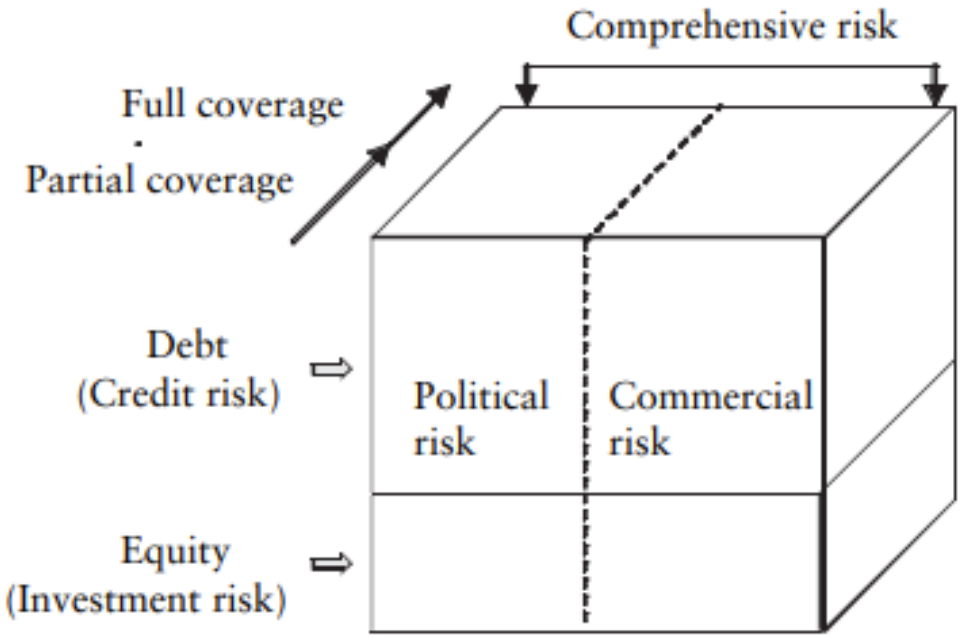
Advantages of risk mitigation instruments

- Developing countries can mobilize domestic and international private capital (debt and equity) for infrastructure
- Private sector lenders and investors will finance commercially viable projects when risk mitigation instruments cover those risks that they perceive as excessive or beyond their control and are not willing to accept
- Governments can upgrade their credit as borrowers, or as the guarantor for public and private projects, by using risk mitigation instruments of more creditworthy institutions, which, in turn, can lower their financing costs for infrastructure development
- Multilateral and bilateral institutions can leverage their financial resources by using risk mitigation instruments as opposed to lending or granting funds, thus expanding the impact of their support

Source: Ref. 5

Key parameters of risk mitigation instruments

- These instruments generally cover either credit risk or investment risk
- Some instruments differentiate between the "cause" of the debt service default or investment losses as either political risk or commercial risk
- Many instruments cover only a part of debt service default or investment losses.
- Partial coverage promotes risk sharing between the guarantor or insurer and the lender or equity investor.
- In the case of risk mitigation instruments for debt, full coverage (that is, 100 percent of principal and interest payments) may be available



Source: Ref. 5

Types of risks

- In the case of lending to a government or a sovereign entity (which finance infrastructure projects), the lenders evaluate the likelihood of the borrower making timely debt service payment
- A single-asset, greenfield private infrastructure project has additional risks:
  - construction risks (engineering feasibility, cost overruns, costs of delay, for example)
  - operating risks (demand or revenue risks, tariff mechanisms, operating cost overruns, equipment performance)
  - macroeconomic risks
  - legal and regulatory risks for investments in the country generally and with respect to the specific infrastructure sector
  - the contractual framework of the project
  - the creditworthiness of contractual counterparties
  - the sovereign government support offered, and
  - other credit enhancements available to the lenders

Source: Ref. 5

Types of guarantees (1)

- Credit Guarantees cover losses in the event of a debt service default regardless of the cause of default (both political and commercial risks are covered)
  - Partial Credit Guarantees (PCGs) cover "part" of the debt service. Multilaterals and a few bilateral agencies offer PCG instruments.
    - PCGs used by developing country governments or public entities (SOEs) to borrow in the international bank market or to support a bond offering in the international capital markets.
    - PCGs also used by subnational governments and other subnational entities, such as municipal utilities, as well as by private companies, to borrow domestically from commercial banks or issue bonds in the domestic capital market in local currency
  - Full Credit Guarantees or Wrap Guarantees cover the entire amount of the debt service in the event of a default.
    - Often used by bond issuers to achieve a higher credit rating

Source: Ref. 5

Types of guarantees (2)

- Export Credit Guarantees or Insurance cover losses for exporters or lenders financing projects tied to the export of goods and services. They cover some percentages of both political risk and commercial risk
- Political Risk Guarantees or Insurance cover losses caused by specified political risk events
  - They are typically termed Partial Risk Guarantees (PRGs), which may be termed as Political Risk Guarantees, or Political Risk Insurance depending on the provider
  - PRGs cover commercial lenders in private projects. They typically cover the full amount of debt if the debt default is caused by political risks specified under the guarantee.
  - PRI, or investment insurance, can insure equity investors or lenders. Coverage is generally limited to less than 100 percent of the investment or loan. PRI includes relatively standardized political risk coverage for:
    - currency inconvertibility and transfer restriction
    - Expropriation
    - war and civil disturbance

Source: Ref. 5

Types of guarantees (3)

- PRGs can cover against the previous list of political risks plus:
  - government contractual payment obligations (for example, termination payments or agreed subsidy payments)
  - government action or inaction having a material adverse impact on the project (examples include change of law, regulations, taxes, and incentives; negation or cancellation of license and approval; non-allowance for agreed tariff adjustment formula or regime)
  - contractual performance of public counterparties (for example, state-owned entities under an off-take agreement, an input supply agreement, or the like);
  - frustration of arbitration; and
  - certain uninsurable force majeure events.

Source: Ref. 5

Other risks that may be covered (1)

- Regulatory risk: the risk of losses as a result of adverse regulatory actions by the host government and its agencies (for example, a regulatory agency). For example:
  - The contract includes tariff increases to make the project financially viable. In countries suffering from macroeconomic shocks, these increases may not be feasible politically
  - In countries with a nascent regulatory framework and a regulatory agency without a track record, the government may opt to provide contractual certainty to regulations to attract private investment.
  - Regulations for infrastructure projects are often included in key contracts between a government and a private company (so-called regulation by contract).
- When these regulations are defined contractually, the regulatory risk may be mitigated using a partial risk guarantee (PRG), which could cover the government's contractual obligations, or by a breach of contract policy under political risk insurance (PRI)

Source: Ref. 5

Other risks that may be covered (2)

- Devaluation risk:
  - With massive devaluation, public and private utilities may not be able to pass through increased costs to users, leading to serious financial problems or loan defaults.
  - This issue arises in countries without well-established and liquid long-term debt markets and without market-based currency hedge products (cross-currency swaps, for instance) – Multilaterals have been developing products to help
  - Devaluation risk has been contractually mitigated by allowing for tariff indexation of foreign currency cost components to foreign exchange rates.
  - PRGs or certain breach of contract policies of PRI providers can help

Source: Ref. 5

Other risks that may be covered (3)

- Subsovereign risk:
  - This is the credit or payment risk of lower-level (state, provincial, municipal) government entities
  - In investment-grade developing countries, private monoline insurers provide *wrap guarantees* for municipal bonds of sufficiently creditworthy municipalities.
  - MDBs lend to subsovereign governments either through or with the guarantee of the relevant sovereign government
  - EBRD and IFC provide loan and partial credit guarantee support (including local currency) to selected subsovereign governments and entities based on their own credit
  - IDB and MIGA provide PRGs and PRI for municipal concession projects
  - PRI providers, which specialize in covering a country's political risks, generally require "legal links" to the sovereign government to cover subsovereign risk

Source: Ref. 5

Examples of Risk Mitigation Instruments (RMI) use and discussion

- The first guarantee: 215 BC, Roman empire's guarantees of private supplies to troops in Spain at war with Carthage
- South Africa: City of Johannesburg – RMI from IFC and DBSA
- Chile: Rutas del Pacifico (highways) – RMI from IDB
- India: Tamil Nadu Pooled Financing for Water and Sanitation – RMI from USAID

Source: Ref. 5

South Africa: City of Johannesburg (1)

- Johannesburg: 3.2 M, 16% of country's GDP
- How best to finance the city's long term capital expenditure plan: water, city streets, and distribution of electrical power?
- Not enough affordable financing to solve many problems: service backlogs, deferred maintenance, and failure of infrastructure systems to keep pace with population growth
- City wanted to diversify its financing sources and wanted to match funding tenors with the life of the assets
- Solution:
- Use of a partial credit guarantee (PCG) provided by the IFC (AAA international) AND the Development Bank of Southern Africa (AAA local)

South Africa: City of Johannesburg (2)

- These guarantees increased city bond's credit rating three notches to AA(zaf) by Fitch Ratings
- They also allowed an extension of the bond's final maturity to 12 years (compared with six years on its own)
- The PCG was sized at 40% of outstanding principal shared equally with DBSA on a several basis.
- The guarantee covered principal and interest falling due and payable to bondholders on any given payment date, subject to guarantee limits
- First structured municipal bond in South Africa - US$153 million
- Oversubscribed 2.3 times!

Chile: Rutas del Pacifico (1)

- Rutas del Pacifico S.A. (the Company) is a single-purpose company
- Owned 50% a Chile company and 50% a Spanish company
- Won concession contract for the Santiago Valparaíso - Viña Del Mar toll road project
- Client: Chile's Ministry of Public Works
- Services: engineering, construction, upgrade, operation, and maintenance of the existing 109 km and 30 km of new highways
- Concession: 300 months
- Project combined proven revenue generation capacity of existing highway with the future benefits of new toll paying customers for the new highway segments

Chile: Rutas del Pacifico (2)

- At time of the bond issue, 70% of highway rehabilitation completed.
- Contractor covers all cost overruns
- The Ministry's contract provides annual toll increases on the road indexed to the consumer price index.
- Unique feature: concession was awarded based on the lowest present value of revenues.
- This was a predetermined amount of revenues that can accrue to the Company
- The term of the concession is either 300 months or the date by which the maximum revenue value is reached, whichever is shorter.
- This provision provides a fixed return for the sponsors and limits the Company's upside revenues

Chile: Rutas del Pacifico (3)

- Bond amount: US$288 million
- Maturity: final maturity 22 years and principal amortization starting in 2 years
- Local pension funds and insurance companies are highly conservative, concentrating on investing in high investment-grade, primarily local-scale AAA-rated paper
- IDB created and implemented an innovative “multilateral wrap” model:
  - Coguarantee mechanism, with the IDB being the guarantor of record with bondholders
  - First cooperation of a multilateral institution with a private monoline insurer, in this case FSA, which coguaranteed the remaining amount and benefited from the IDB’s preferred creditor status.
- Rating National Scale: Humphreys (Moody’s affiliate) AAA; Feller Rate (S&P affiliate) AAA

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Capital markets

- Traditional funding sources, governments, commercial banks and development finance institutions, are not able to fully meet the demand for infrastructure.
- Infrastructure assets have long tenors and predictable cash flows, which are a good match for the long-term liabilities of the pension funds, retirement plans and life insurance companies, which are the institutional investors most interested in infrastructure debt
- How to make this work?

Source: Ref. 6

Challenges for institutional investors in infrastructure

- Not enough “bankable” projects
- The availability of long-term bank financing and its pricing
- The level of development of the capital markets, and in particular the existence of a government bond market that can serve as a benchmark for pricing
- The size of the domestic institutional investor base and their investment regulations
- The appetite of foreign institutional investors for long-term domestic assets in local currency, the availability of currency swap for hedges
- The availability of credit enhancements
- Neutral tax regimes, vis-à-vis other asset classes

Source: Ref. 6

The experience in Advanced Economies

- Companies or vehicles that want to raise funding in the capital markets have two distinctive avenues to do so: a public or a private offering, each subject to different regulatory treatment.
- In AEs, the private placement market is the capital market of choice for infrastructure bond issuance.
- publicly offered project bonds unattractive for anything other than very large credits (over US$200 million) in the post-construction stage (what are often called “brownfield projects”)
- Reasons? time and costs of authorization by securities regulator, need to preserve confidentiality of sensitive information regarding the infrastructure projects, and for early financing the need for certainty in pricing
- Infrastructure debt funds in the AEs are also generally placed under a private offering regime. These funds are usually organized as private equity funds.

Source: Ref. 6

The experience of Emerging Market Economies (EMEs)

- The experience of most EMEs with the use of the domestic capital markets for infrastructure financing is relatively recent
- Many EMEs have developed specific frameworks for the issuance of capital markets instruments that could help mobilize institutional investors to infrastructure financing
- In Brazil, Colombia, Costa Rica and Turkey, these frameworks relate to collective investment schemes which were amended for schemes specialized in infrastructure, including infrastructure debt funds.
- In practice, the instruments are being placed through public offerings
- In some countries a “hybrid market” has been developed
  - Hybrid issuance frameworks are primarily designed for institutional investors
  - They balance the interest for more flexibility for secondary market trading with the need to ensure certain level of disclosure and trade reporting for market transparency

Source: Ref. 6

Debt instruments for infrastructure financing in selected EMEs

Country	Instrument
Brazil	Project Bonds
	Infrastructure Debentures
	Infrastructure Debt Funds
Colombia	Project Bonds
	Infrastructure Debt Funds
Costa Rica	Project Bonds
	Infrastructure debt funds
Indonesia	Project bonds
	Infrastructure debt funds
Mexico	Project Bonds
	Infrastructure debt funds
Peru	Project Bonds
	Infrastructure debt funds
South Africa	Project Bonds (with recourse)
	Infrastructure Debt Funds
	Listed Project Bonds
Turkey	Project bonds
	Infrastructure Funds

Source: Ref. 6

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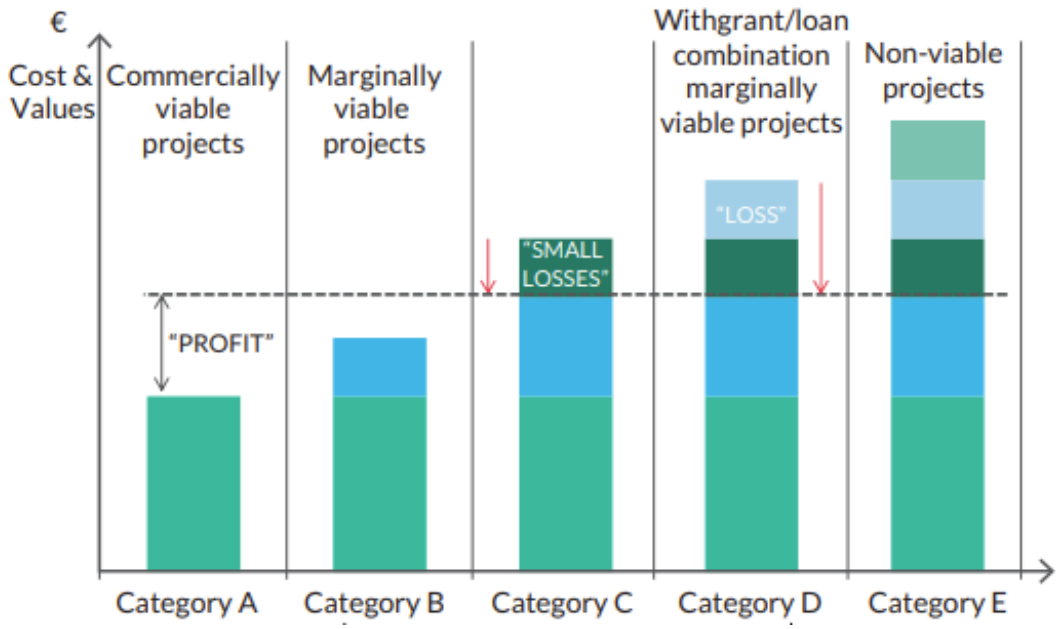
Roles and instruments of Multilateral Development Banks (MDBs)

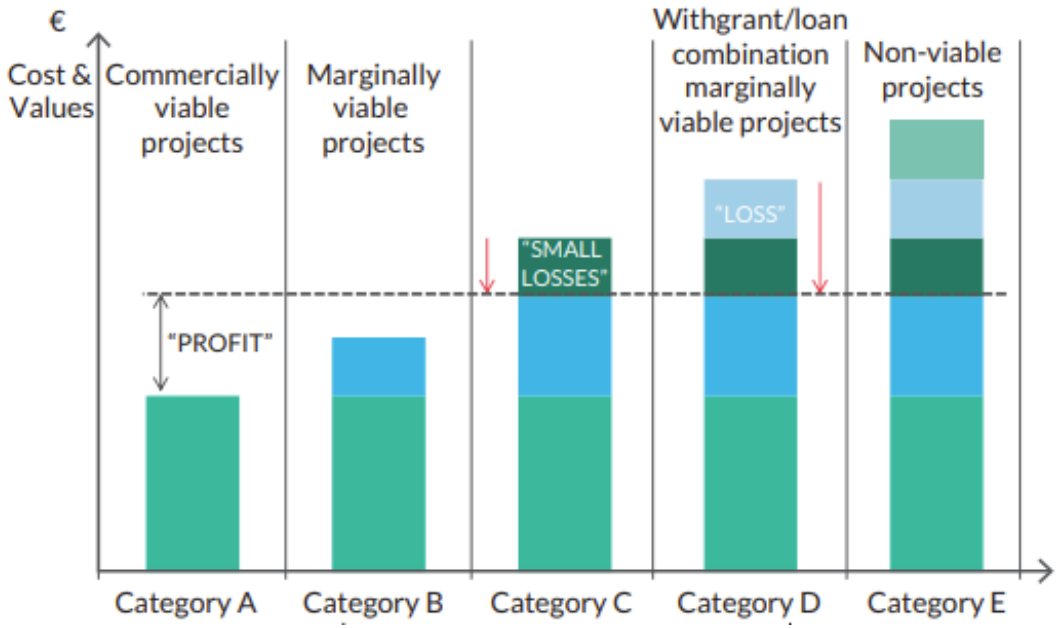


First, a simplified typology of infra projects:

- (A) Projects that are sufficiently viable and profitable to attract private financing
- (B) Projects that are commercially viable, but below private profit expectations (sometimes very high for higher-risk developing countries)
- (C) Projects that are close to a break-even point and could become viable with a low-intensity subsidy (e.g., provided via cheaper financing from a development bank)
- (D) Projects further away from a break-even point, which could be moved to a break-even point with a higher intensity of subsidy (e.g., provided by a grant/ loan combination or a combination of grants with other financial instruments)
- (E) Projects far away from a break-even point. Grant financing is the only option

Source: Ref. 7

Roles and instruments of MDBs (2)



- World Bank and major RMDBs focus on (B)–(E)
- Other MDBs (CAF, EIB, AIIB) focus on (B)–(D)
- Projects in category (D) could only be funded if developed countries provided grants, from special funds, e.g., GCF with a climate mitigation purpose

Source: Ref. 7

Roles and instruments of MDBs (3)

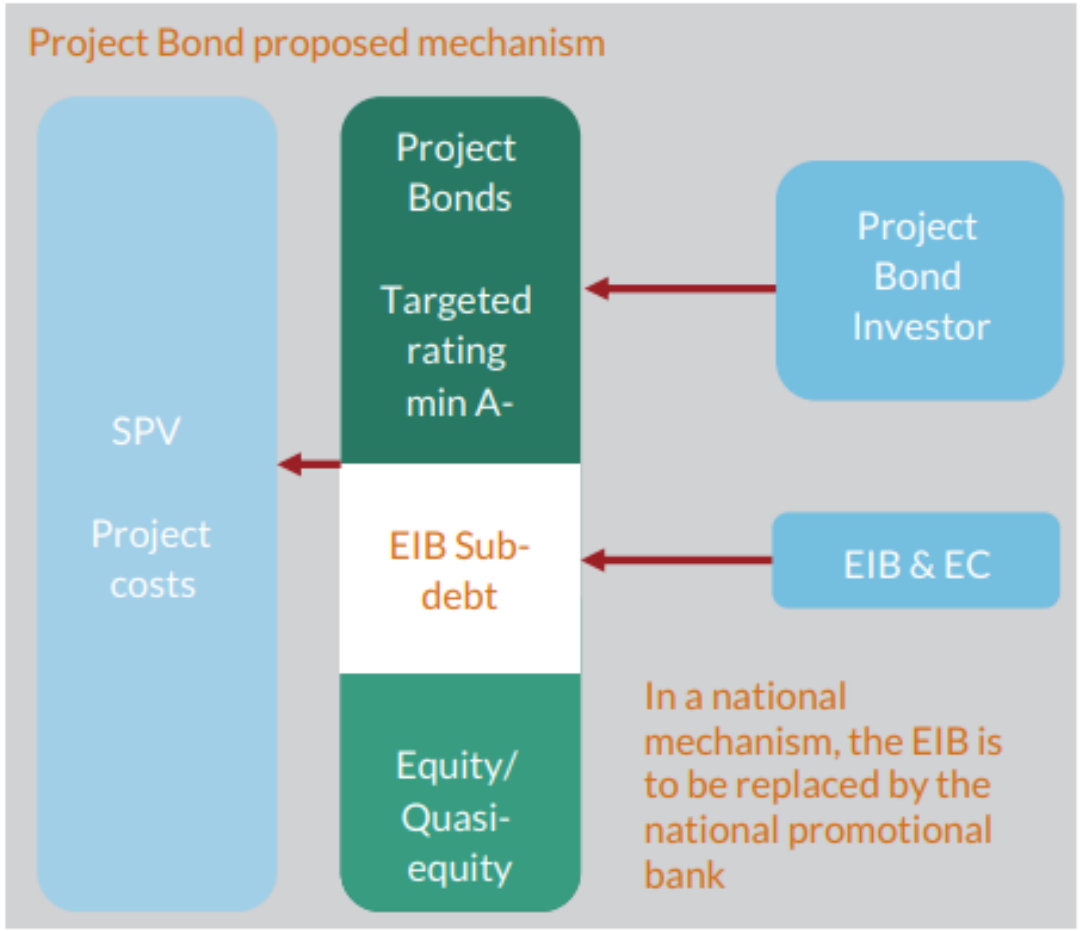
- Certain phases of infrastructure projects, such as the construction phase and final phases of projects (very long maturities), are particularly difficult to fund through the private sector -> key role for MDBs
- Greatest needs for MDBs:
  - large-scale, long-term loans, reflecting the size of the infrastructure projects
  - equity instruments
  - Guarantees -> safer from an MDB perspective if they are at least partly funded ex-ante, and if the risks for which guarantees are provided are clearly capped
  - Some pilots looking at project bonds (see next slide)

Source: Ref. 7

Roles and instruments of MDBs (4)

Example: Project Bonds for the Connecting Europe facility

Goal: attract private investors to big infrastructure (only budget is insufficient)



- **Purpose:**
  Build up EU infrastructure to meet future demands
- **Target Group:**
  Projects of Common Interests in the area of transport, energy, and ICT
- **Combined Approach:**
  Mezzanine/sub-debt exploits risk buffer from EU (first loss piece)
- **Volume CEF:**
  EUR 23,2 bn transport (EUR 21,7 + 0.4 bn)
  EUR 5.1 bn energy (EUR 9,1)
  EUR 1.0 bn for ICT (EUR 9.2 bn)

Source: Ref. 7

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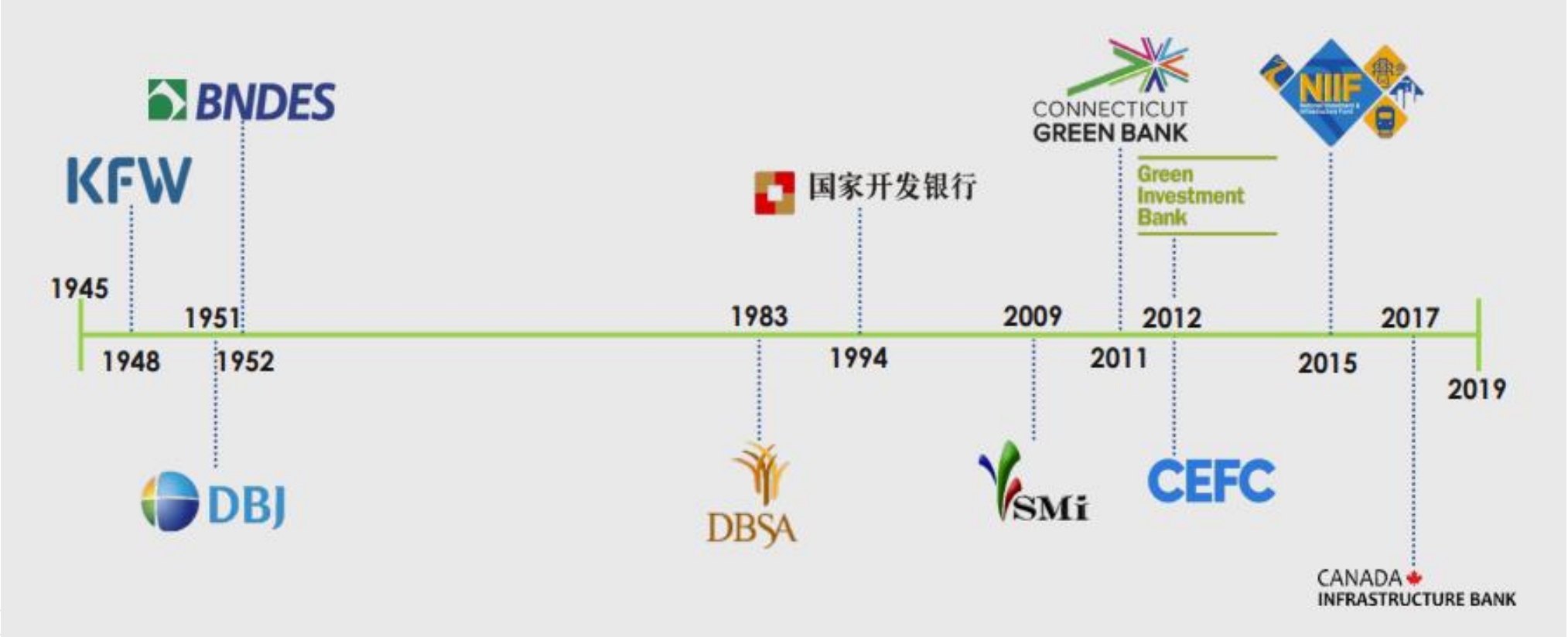
National infrastructure investment banks – a common institution that continues to be used

Some examples



Source: Ref. 8

An evolving role for national infrastructure development banks

- Long-term finance providers for public infrastructure – original mandate: raise capital efficiently to support the provision of public infrastructure
- Mobilizing private finance for infrastructure – modified mandate or new institutions created
- Support for green infrastructure – new institutions created like UK's Green Investment Bank (GIB) and Australia's Clean Energy Finance Corporation (CEFC)

Source: Ref. 8

On mobilizing capital

- Historically, NIBs raise low-cost capital for infrastructure using significant government backing (paid-in and callable capital, explicit or implicit credit guarantees)
- Strong NIBs can issue uncovered bonds, relying on their own credit ratings or have engaged in secondary financing approaches by securitizing some of its assets
- Constraints in capital raising linked to host governments' own fiscal space
- NIBs offer local institutional investors a conduit to invest in infrastructure, either through NIB bonds, or through equity funds managed by NIBs – first step to mobilize local currency financing for infrastructure

Source: Ref. 8

Growing sophistication of NIB instrument

- Traditional product: senior long-term loans to central governments, municipalities and public utilities
- Gradual move to subordinated loans -> strong incentives for both debt and equity providers with the additional layer of protection to senior lenders while not diluting equity returns
  - Useful if the additional risk is not fully priced (that is, subsidized through dedicated public resources)
- Project preparation support -> NIBs as public sector institution with a clear mandate and with their expertise on infrastructure finance, can alleviate project development bottlenecks
- Future areas:
  - Partial credit guarantees
  - Better subsidy targeting
  - Limit financial interventions to project development and construction phases where it is most needed -> private and institutional capital more interested in operational assets
  - NIBs uniquely positioned to offer long-term, local currency products

Source: Ref. 8

Danger of crowding out private investment in infrastructure – what to do?

- Focusing on additionality
- Operating within an agreed strategy and mandate
- Independent objective operational management
- Careful decision making when providing subsidies so they are targeted, catalytic and impactful
- Transparency (but able to manage tensions when NIBs need to keep commercially sensitive information confidential)

Source: Ref. 8

NIB role in the green economy and net zero commitments

- Some NIBs are developing skills in green financing (with emphasis on renewable energy):
  - both taking a lead in greenfield financing and
  - refinancing existing green portfolios through the issuance of green bonds
- Other countries have created new “green NIBs”
- Common success factors:
  - In-house expertise
  - Clear focus on emerging technologies to demonstrate viability
  - Flexibility to invest across the capital spectrum
  - Leverage the ‘halo effect’ of NIB participation -> signal government commitment and support to new sector for private sector to engage

Source: Ref. 8

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