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The Role of Development Banks in Promoting Growth and Sustainable Development in the South

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Note

This report was prepared by the Unit on Economic Cooperation and Integration among Developing Countries, Division on Globalization and Development Strategies, UNCTAD. The report team consisted of Ricardo Gottschalk (lead contributor), Daniel Poon and Matias Mednik, and consultants CP Chandrasekhar and Stephany Griffith-Jones.

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Abbreviations

AfDB	African Development Bank
AIIB	Asian Infrastructure Investment Bank
AsDB	Asian Development Bank
BDEAC	Central African States Development Bank
BNDES	Banco Nacional de Desenvolvimento Econômico e Social
BOAD	West African Development Bank
CAF	Corporación Andina de Fomento
CDB	China Development Bank
EADB	East African Development Bank
EIB	European Investment Bank
IADB	Inter-American Development Bank
IDBI	Industrial Development Bank of India
JFC	Japan Finance Corporation
KDB	Korean Development Bank
KfW	Kreditanstalt für Wiederaufbau
NDB	New Development Bank
OECD	Organization for Economic Cooperation and Development
PTA	Preferential Trade Area Bank
SELIC	Sistema especial de liquidação e custodia
SMEs	Small and medium-sized enterprises
TJLP	Taxa de juros de longo prazo
UNCTAD	United Nations on Conference and Development

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A. Introduction

The world is entering the new post-2015 era of the Sustainable Development Goals. These include poverty eradication, education for all, inclusive economic growth, full employment, reduced inequality, climate change mitigation and sustainable use of the world's ecosystems. Economic transformation is critical to make these socioeconomic and environmental goals achievable and sustainable.

Africa's recent development provides a good illustration of the nexus between transformative growth and social goals. The region grew rapidly in the 2000s, but this growth did not create jobs, and was based on the expansion of the services sector, to the detriment of manufacturing. Between the late 1980s and late 2000s, the region saw strong de-industrialization taking place. As a result of a lack of structural transformation and the creation of good quality jobs and sustainable incomes, Africa missed many Millennium Development Goals, some by a large margin (UNCTAD, 2013; UNCTAD, 2014).

Economic transformation requires long-term investment to support the expansion of productive capacities, as well as infrastructure development that underpins industrial activities and reduces bottlenecks. Rapid, transformative growth will also require, from the developing world, a more autonomous development strategy, in light of the fragile world economic recovery and the uncertainty about developed country demand and capital as drivers of developing country growth (UNCTAD, 2016).

The financing needs to support the Sustainable Development Goals are formidable. Investment in infrastructure development alone, which is a key bottleneck to economic transformation and thus sustainable growth, faces financing needs at the global level that amount to $5 trillion–$7 trillion per year (Intergovernmental Committee of Experts on Sustainable Development Financing, 2014). For developing countries alone, figures point to an infrastructure financing shortfall of $1.0 trillion–$1.4 trillion per year (Bhattacharya and Romani, 2013).

This report discusses the role of development banks in promoting long-term development. Such banks have been a major feature of the development finance architecture for many years. The post-Second World War era saw the emergence of the World Bank and regional banks. Since their creation, these banks have played a fundamental role in funding global and regional public goods, and in providing long-term finance to developing countries. It is hoped that they will continue to do so by helping address the financing needs of the post-2015 era, together with other sources of financing for development, such as aid, which are part of global development finance. The large international development banks are, however, few in number. Despite their sizes, their aggregate lending is limited. In 2015, the World Bank and the three main regional banks – African Development Bank (AfDB), Asian Development Bank (AsDB) and Inter-

American Development Bank (IADB) – lent in aggregate only $69 billion (banks' annual reports).

The lack of financing is not due to a shortfall in global savings. Currently, the stock of financial assets worldwide is $218 trillion, and annual global savings are $22 trillion (Intergovernmental Committee of Experts on Sustainable Development Financing, 2014). Most of these are held in the form of developed country assets that offer low returns. Parts of these savings could be channelled towards long-term investments in the real economy. To this end, existing and new development banks are needed to bridge finance from end-savers to development projects. Such bridging should be done by development banks at all levels – national, regional and international – in order to provide the financing needed in the developing world. Development banks can thus be key players for development by providing long-term financing directly from their own funding sources, by tapping into new sources and by leveraging additional resources, including private, through the co-financing of projects with other partners.

The time is ripe to promote development banks. At the national level, the global financial crisis in 2008 has opened space for national policymakers to selectively break with the Washington Consensus policy package and an opportunity to support pro-development finance initiatives. At the regional and South–South levels, there is a new momentum of initiatives for the creation of Southern banks, which could tap into global savings, especially those that originate in the South. Taking advantage of such opportunities is fundamental to supporting future development in the South.

This report first details the rationale for national development banks and developing country experiences with such banks in the past. It then discusses regional and subregional banks, which can play a critical role, especially in supporting smaller countries that may face greater obstacles in setting up development banks at the national level. Finally, it discusses the recently created Southern banks, both regional and cross-regional. The report concludes by noting that the new development banks are greatly needed and should not be seen as a threat to long-established international financial institutions. In fact, they have already started operations in collaboration with established institutions, as new partners for development. In the process, they are helping to form a strong network of development banks in which different institutions collaborate with each other through co-financing but also in various other forms, creating important synergies and achieving, collectively, greater effectiveness.

B. National development banks

B.1 Rationale for and definition of national development banks

A standard argument for why development banks should be promoted is that such banks can fill the gaps left by private financial institutions, which are often geared towards commercial activities. The main gap is usually insufficient finance for economic transformation. The latter typically involves large-scale projects with long maturation periods, which require long-term finance and thus imply risks that banks are unwilling to undertake. In addition, many large-scale projects generate positive externalities and therefore social returns that are greater than private returns. The provision of long-term finance is also lacking due to the funding of financial institutions, which is often short-term. That is, long-term finance requires maturity transformation, which involves a risk that banks usually prefer to avoid. For these reasons, development banks are designed and mandated to fulfil this role. At the national level, development banks can be instrumental not only in addressing market failures, such as the lack of provision of long-term finance due to the risks and uncertainties involved, but as a critical tool in supporting a proactive development strategy.[1]

This section discusses country experiences that show that development banks have played such a role, as they have acted as institutions that not only were able to remove bottlenecks but also had the capacity to anticipate future needs arising from rapid and transformative development (Hermann, 2010).

Concretely, development banks provide finance for long-term investment, including in capital-intensive industries. In addition, such banks provide both lending and equity participation, meaning that they have a clear interest in the close monitoring of projects, thus developing a special form of relationship banking. That is, the banks have a hands-on approach whereby they not only provide close project monitoring but also are in a position to nominate directors to the boards of the companies to which they lend and in which they have an equity stake. Moreover, developing banks have in-house technical expertise that allows them to participate in decisions involving choices of technology, scale and location. Development banks can also help raise capital elsewhere by underwriting the issuance of equity securities. Underwriting implies a leverage capacity, but is not limited to this latter feature. Development banks can leverage resources by attracting other lenders that do not have the same technical capacity to assess a project's viability and potential, as well as by providing guarantees. In addition, development banks can play a countercyclical role, helping sustain overall investment levels and protect the productive structure of a country during economic downturns. Protecting existing industries is

[1] As Mazzucato and Penna (2014) state, development banks are not only about correcting market failures but, rather, creating and shaping markets and strategic policies for development.

important in facilitating a more rapid recovery and because doing so facilitates the emergence of new and innovative industries critical for economic transformation, given the complementarities between new and established industries (Hermann, 2010, based on Gerschenkron, 1962:10).

A World Bank survey defines a development bank as “a bank or financial institution with at least 30 per cent State-owned equity that has been given an explicit legal mandate to reach socioeconomic goals in a region, sector or particular market segment” (Luna-Martinez and Vicente, 2012:4). In a report by IADB on public development banks, the latter are defined as financial institutions “from the State whose mandate consists of promoting socioeconomic development through the financing of activities, sectors or specific economic segments” (Olloqui, 2013:14).

The number of development banks worldwide is difficult to ascertain, due to definitional and data-related problems. Their emergence and rapid expansion in the developing world initially occurred in the 1950s and 1960s to support socioeconomic development, yet economic liberalization and reforms in the 1980s and 1990s led to a significant reduction in their numbers. Estimates by IADB show that 250 development banks were privatized between 1987 and 2003, while many others were restructured or liquidated (Olloqui, 2013). Privatization most likely implied a change in their goals towards profit seeking and the support of commercial activities. However, despite the privatization and liquidation of some development banks since the 1980s, other such banks have been created since then. The World Bank survey noted above covered 90 banks; 39 per cent of these banks were created between 1990 and 2011. Their presence in the financial system thus remains significant, as they account for 25 per cent of total banking assets around the world (Luna-Martinez and Vicente, 2012).

This report focuses on financial institutions that have a clear mandate to support developmentally oriented projects and a funding base whose liabilities are predominately long term and thus aligned with bank mandates. These features matter more than, for example, ownership, which is emphasized in the World Bank and IADB definitions noted above. Deposit-taking public banks geared towards commercial activities are not addressed, however important their role may have been in extending loans to social ends or, more recently, in providing countercyclical financing in a number of developing countries in the wake of the global financial crisis. In the discussions on country experiences, the banks under analysis are often, but not in every case, those that are publicly owned; have a funding mix in which long-term liabilities often dominate the funding base; can resort to central bank financing to address liquidity needs arising from maturity mismatches; and have a clear mandate to support long-term projects that generate both economic and social benefits.

B.2 Country experiences with national development banks

Financial institutions that have supported a big industrialization push in the past, pre-date the development banks that were created in developing countries after the Second World War. In Europe, late industrializers in the nineteenth century, such as France and Germany, greatly benefited from institutions that provided not only capital but also entrepreneurial skills and technological expertise. These constituted vital elements in their process of industrialization (Gerschenkron, 1968).

In France, Crédit Mobilier, founded by the Péreire brothers, played that role while, in Germany, universal banks became heavily involved in the country's industrial development by providing maturity transformation and other services. During periods of liquidity problems, due to their maturity transformation activities, these banks had access to last-resort lending from the German central bank. The universal banks were private, joint-stock banks that were also instruments of the State, acting on its behalf in return for large-scale liquidity support (de Cecco, 2005:355). Gerschenkron (1968) states that the role these banks played was hugely transformative. They supported the build-up of thousands of miles of railroads, drill mines, factories, canals and ports. Above all, these banks conceived far-sighted plans, decided on major technological and locational innovations and arranged for mergers and capital increases (Gerschenkron, 1968:137).

Development banking, in addition to having played a major role in the past when countries were experiencing industrial take-off, continues to play such a role. That is, such institutions do not necessarily disappear once development crosses a certain threshold. A clear example is that of the publicly owned Kreditanstalt für Wiederaufbau (KfW) in Germany, established in November 1948 to support the reconstruction of the country. Despite its initial mandate, KfW has evolved as an important component of long-term financing for infrastructure and has continuously revised the focus of its activities. Currently, KfW is a promotional bank for the German economy and a development bank for developing countries (Grünbacher, 2004).

In its initial years, KfW was geared to meeting the financing needs of large firms in core industries, and was responsible for financing 15 per cent of net real capital formation in 1950. However, as industrialization gained momentum, and banks once again took on their financing role, the attention of KfW shifted to small and medium-sized industries. By 1985, KfW financed a considerable share of investment by small and medium-sized firms; 45 per cent of the total investment by firms with annual revenues less than 5 million Deutsche Mark and 20–25 per cent of investment by firms with revenues of 5 million–100 million Deutsche Mark (Harm, 1992). Over time, KfW moved on to financing infrastructure and environment-related projects in Germany and development aid projects in developing countries. Finally, following reunification, reconstruction in the former German Democratic Republic also became an important part of the mandate of KfW. Currently, KfW is involved in the areas of investment finance (e.g. structural investment programmes in eastern Germany), export and project finance and financial cooperation with developing countries. In each, KfW serves as a tool of policy for the State, showing that development banking can be used to meet different objectives.

In developing countries, development banks have emerged and evolved over time to play a similar role, namely providing long-term capital to support growth and economic transformation. That is, such banks are key in those countries embarking on accelerated economic growth and thus facing challenges in terms of financing for capital-intensive projects and maintaining institutions that can anticipate new needs, overcome technical and entrepreneurial limitations and help coordinate multiple investments taking place simultaneously. However, although in most cases such banks have shared such common goals and functions, they can be seen as a diverse group in terms of ownership, funding structure and the types of projects and activities they specifically support.

In terms of ownership, development banks tend to be fully owned by the State, yet in a significant number of cases, the private sector owns up to 49 per cent of the total shares of such banks and, in a few cases, over 50 per cent (Luna-Martinez and Vicente, 2012). In Brazil, the country's main development bank, Banco Nacional de Desenvolvimento Economico e Social (BNDES), has always been fully owned by the State. At the other end of this continuum of degree of ownership, the Industrial Development Bank of Turkey has from the start been fully owned by the country's private banking system although, as documented by Fry (1972), the Government had, at least initially an important role in influencing its functioning (see box).

The Industrial Development Bank of Turkey

The Industrial Development Bank of Turkey, which is wholly privately owned, is the largest development bank in Turkey. The bank, established in 1950 with World Bank support, was initially owned by six commercial bank funds that together invested 20 million Turkish lira, of which 64 per cent came from İş Bankası. During Turkey's First Five-Year Development Plan (1963–1967), the Industrial Development Bank of Turkey accounted for as much as 12 per cent of private capital formation in the manufacturing sector (Fry, 1972). Further, as did many other development banks, the Industrial Development Bank of Turkey both provided loans and invested in the equity of the private firms that it supported.

Though privately owned, the Industrial Development Bank of Turkey was closely linked to the Turkish State, deriving resources from the Government and the World Bank, and making loans and investments based on consultations with the State Planning Organization. Interest rates on such loans were kept low, and the Industrial Development Bank of Turkey was not permitted to accept deposits and could not issue bonds in the market, since that would imply a mismatch between the cost of funds and the interest charged on its loans. This made the Industrial Development Bank of Turkey largely a vehicle to implement the State's polices of promoting manufacturing and influencing the allocation of investment, despite the fact that, as noted, it was not publicly owned.

Currently, State-owned development banks in Turkey include İller, Eximbank and Kalkınma, each holding 1 per cent or less of the total assets of the financial system (Marois and Güngen, 2014; table 1). Partly due to reliance on foreign aid and government support, the share of Turkey's State development banks in the total assets of the financial system is small. Moreover, over time, the importance of the development banks has declined. Development and investment credits have declined from a peak of around 25–30 per cent of all credits during the 1960s and 1970s, to 10.2 per cent in the early 1980s, when financial liberalization began, and to less than 5 per cent more recently (Öztürk et al., 2010).

The funding structures of such banks is diverse and can take different forms, such as the following: deposit-taking from the public; resources from financial institutions, including multilateral organizations; debt issuance in national and/or international capital markets; equity issuance; institutional savings; and government transfers. The World Bank survey shows that 41 per cent of the surveyed institutions take deposits, 89 per cent borrow from other financial institutions or issue debt in local markets, 40 per cent receive budgetary transfers from the Government and, importantly, 64 per cent benefit from government guarantees on the debt they issue. The exact funding mix is important in determining their ability to pursue their socioeconomic goals. For example, half of the banks surveyed by the World Bank provide credit at subsidized interest rates and two thirds claim that financing for such subsidies comes from government transfers. In some cases, subsidy financing comes from cross-subsidization.

Development banks may have broad or specialized mandates. Those with broad mandates often provide finance for a wide range of sectors and activities that are in line with their mandate of supporting a country's socioeconomic development. Within their broad mandates, such banks are able to diversify risk over time and build technical expertise in different areas. Specialized banks focus on specific sectors, such as agriculture or export activities, or on specific market segments, such as small and medium-sized enterprises (SMEs). Their exact funding mix greatly influences the way in which their resources are mobilized, that is, the kinds of projects they fund and the interest rates they charge on their loans. Banks that have a greater reliance on market sources of finance tend to give greater weight to market considerations when funding projects, and less so to their social and developmental benefits.

The following subsection discusses developing country experiences with development banks, focusing on individual banks in larger developing economies, beginning with Brazil, whose main development bank, BNDES, was created first, in the early 1950s. Next, the experience of the Republic of Korea is discussed, focusing on the Korean Development Bank (KDB), created a couple of years later. The next subsection discusses India's experience, with a focus on the Industrial Development Bank of India (IDBI), created in the mid-1960s. The final subsection discusses the experience of China, whose main development bank, the China Development Bank (CDB), was created in the 1990s.

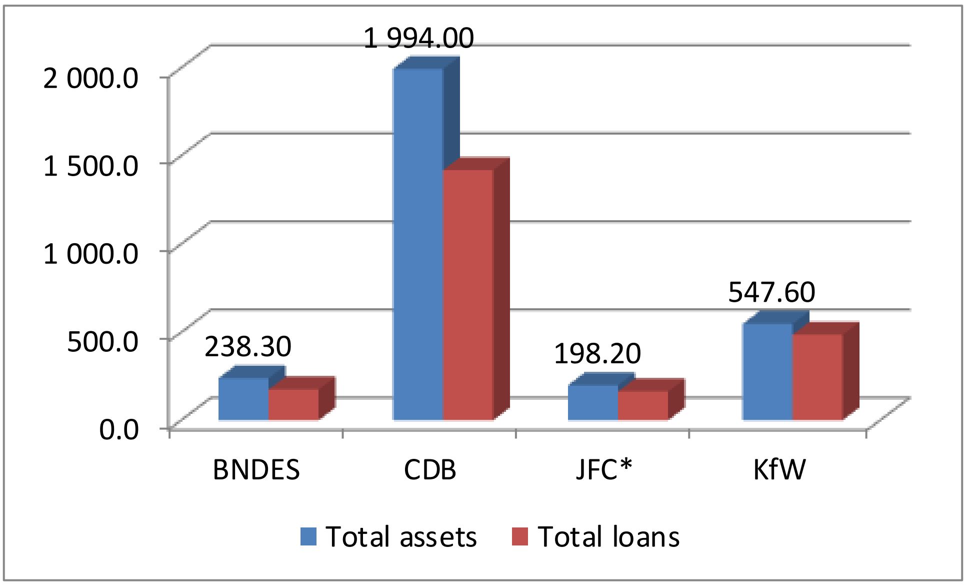
B.2.1 Brazil

Brazil has a strong network of development banks, at the centre of which stands BNDES. In 2015, BNDES was the third largest national development bank in the world, after CDB and KfW and ahead of the Japan Finance Corporation (JFC), in terms of both assets and loans (see figure 1). BNDES has expanded rapidly, particularly since the mid-2000s. In 2007–2014, loan disbursements increased from R$96 billion to R$188 billion at constant prices, a growth of 96 per cent in real terms. In 2014, such disbursements were equivalent to 3.4 per cent of Brazil's total gross domestic product (GDP). More importantly from a growth perspective, disbursements accounted for 12.1 per cent of Brazil's total fixed capital formation. Moreover, if total investments from all projects supported by BNDES are considered, total contributions reached 21.4 per cent of total fixed capital formation. The significant amount of investment in projects supported by BNDES is evidence of its strong leverage capacity.

Figure 1

Selected national development banks: Total assets and loans, 2015

(Millions of dollars)



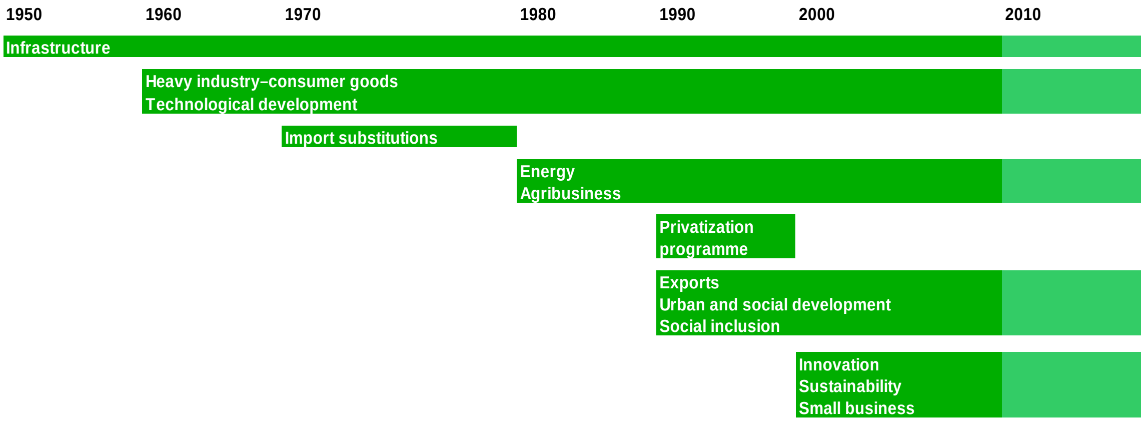
Source: UNCTAD secretariat calculations, based on banks' annual reports.

* As at 31 March 2016.

Created in 1952, the initial focus of BNDES was on financing infrastructure as part of the country's drive towards modernization and industrialization. Later in the decade, its focus broadened to support the country's capital goods industry and then, in the 1960s and 1970s, other industrial sectors (Armijo, 2013). Another important shift over the years has been its focus from public to private companies. Since the 1990s, BNDES has also supported the exporting sectors (with a focus on capital goods and engineering services) and, more recently, the internationalization of large national corporations. A further development has been the inclusion in its portfolio, of loans to SMEs (see figure 2), which have been expanding over time, and reached 31.4 per cent of total disbursements in 2014 (BNDES, 2014). The participation of micro and small enterprises alone increased from 19 to 24 per cent of total disbursed loans (BNDES, 2015).

Figure 2

Brazil: Targeted sectors and areas since the creation of Banco Nacional de Desenvolvimento Economico e Social, 1950–2010



Source: BNDES, 2014.

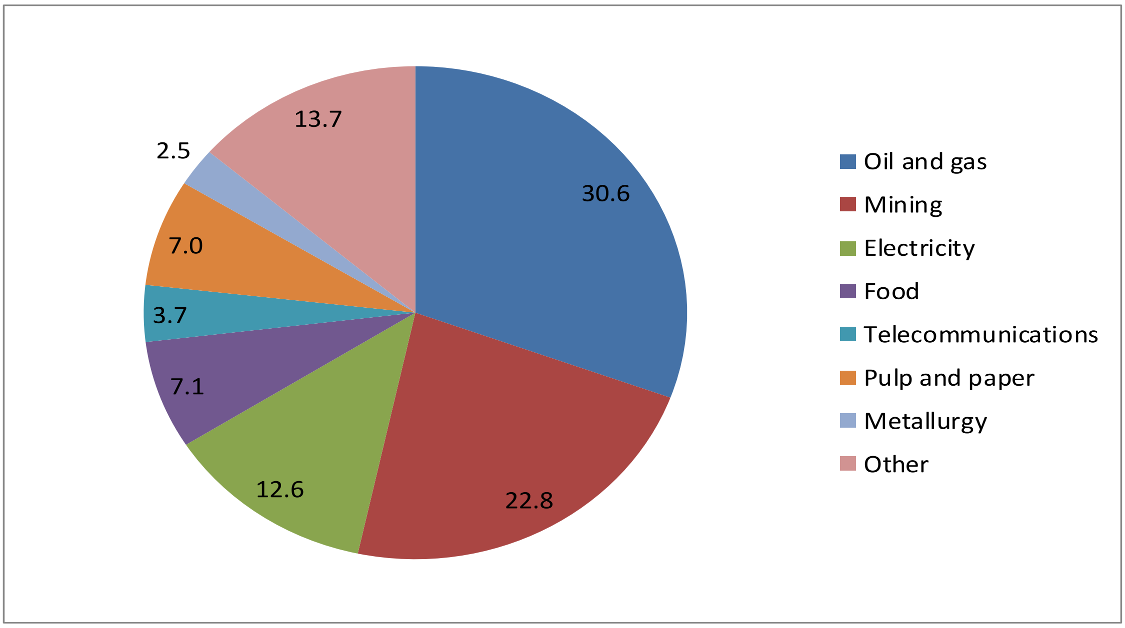
The sectoral distribution of the BNDES portfolio is quite diverse, albeit with a dominance in oil, gas and mining, which account for over 50 per cent of the total. The other sectors in the portfolio include electrical energy, food, pulp and paper, telecommunications, metallurgy, consumer goods, transport and siderurgy (see figure 3). In terms of corporate priorities, in 2014, companies associated with the capital goods industry received 39 per cent of total BNDES disbursements, while those linked to infrastructure received 23 per cent, those linked to socioenvironmental areas received 25 per cent and those linked to innovation received 3 per cent.[2]

[2] The total does not equal 100 per cent as companies may be included in different categories, such as both innovation and regional development (BNDES, 2015:38).

Figure 3

Brazil: Loan distribution of Banco Nacional de Desenvolvimento Economico e Social, by sector

(Percentage)



Source: Coutinho, 2013.

BNDES provides both loans and investment in the equities of firms, and most loans are made indirectly through the country's private banks. Over the years, BNDES has built strong technical expertise, and often takes the lead in the design of large infrastructure projects. In loan packages, it crowds in private finance, thereby leveraging private capital for such projects. A recent example is the Belo Monte hydroelectric dam project in northern Brazil, in which a private investment bank participated through co-financing (Armijo, 2013).

Importantly, BNDES has shown over the years a great degree of adaptability and flexibility to changing domestic and international circumstances. On the domestic side, BNDES has, since its creation, changed its portfolio of loans in response to new financing needs arising as a result of the development process itself. For example, it did so to support an emerging capital goods industry, as noted above, given the continued lack of long-term financing from private banks set against the growing needs of an increasingly complex and diversified economic structure. On the international side, BNDES has provided financing to firms that, throughout the 1980s, no longer had access to international financial markets, whose lending had dried up as a result of the debt crisis. During the global financial crisis, BNDES played a countercyclical role by providing the resources for the Government's stimulus programme and liquidity to corporations that faced a credit drought from private banks in the wake of the crisis.

Since the early 2000s, BNDES has also expanded its international operations. This has been part of the willingness of the Government of Brazil to support regional economic integration, as well as to take advantage of growing markets and business opportunities abroad. With regard to the former, BNDES has provided loans to countries such as Argentina to finance economic infrastructure. With regard to the latter, it has helped strengthen Brazil's economic links with fast-growing developing regions, particularly Africa. Loans from BNDES have also bolstered the internationalization of large Brazilian corporations. In Africa, BNDES has extended loans to large national construction companies investing in infrastructure-related and other projects.

To support this growing and diversified role and give it flexibility to respond to new demands, BNDES draws on varied funding sources, which include bond issuance, resources from multilateral organizations, deposits from the Government of funds from privatization, transfers from the treasury and compulsory worker savings, including a fund based on company contributions set up on behalf of workers (Fundo de Amparo ao Trabalhador).

Since its creation, the role of BNDES as a provider of long-term credit in Brazil has been considered extremely positive, particularly in view of the fact that the country's private banking system has historically focused on short-term loans. The strong prominence of BNDES in recent years, associated with a growing portfolio of loans, support to national champions and a countercyclical role, has increased its visibility at both the national and international levels. This has put BNDES in the spotlight, making it a role model for countries considering setting up development banks, but has also led to some criticism with regard to how its operates and its portfolio of loans.

One criticism is that a large portion of the funding that comes from worker savings and from the treasury – the latter through the special programmes PAC, or accelerated growth programme, and PSI, or sustainable investment programme – is provided after BNDES has been charged the TJLP, or taxa de juros de longo prazo, which is a long-term interest rate set well below that of SELIC, or sistema especial de liquidação e custodia (special system for settlement and custody), the central bank monetary policy target rate and a benchmark for Brazil's credit system. As the Government borrows at the SELIC rate and lends to BNDES at the TJLP rate, there is an implicit subsidy that is ultimately paid by the taxpayer. To the extent that BNDES provides credit at rates lower than that of SELIC, part of the subsidy is transferred to the borrower.

A second criticism is that BNDES loans are concentrated on large private companies. In 2014, 40.7 per cent per cent of loan disbursements were to SMEs and medium–large companies, while 62.8 per cent were to large companies (BNDES, 2014). Critics argue that large companies could raise long-term finance elsewhere, for instance in international capital markets, as they are already internationalized or at least have a strong presence in export markets, and are involved in industries in which Brazil has a strong comparative advantage in the international markets, such as food processing and beverages, pulp and paper and other industrial commodities. However, SELIC is among the highest short-term interest rates in the world in real terms; the cost of short-term domestic credit in Brazil is thus exceedingly high. Therefore, only a few projects would be profitable at long-term market interest rates. The main challenge in Brazil is the absence of a yield curve necessary for the provision of both short-term and long-term credit. Thus, although there is a cost involved in long-term BNDES credit, this type of operation fills a critical financing gap. Although loans are provided to large companies, they are at lower costs than loans that such companies might be able to obtain in international markets, and this implicit subsidy is justified as part of the Government's strategy to promote national champions that are able to compete in global markets (Armijo, 2013).

Finally, despite the effective role of BNDES in supporting long-term credit in Brazil, overall investment levels in the country are below 20 per cent of GDP, which is lower than investment rates in various other developing countries and insufficient to support accelerated growth. However, the absence of BNDES loans would imply even lower investment rates and greater capacity constraints in the economy. Given the characteristics of Brazil's financial system, with banks concentrating their business in short-term, commercial loans, it is difficult to suggest that BNDES has crowded out long-term finance. As has been noted, BNDES has crowded in private finance and, through its equity operations, contributed to liquidity and the growth of the country's capital markets.

B.2.2 Republic of Korea

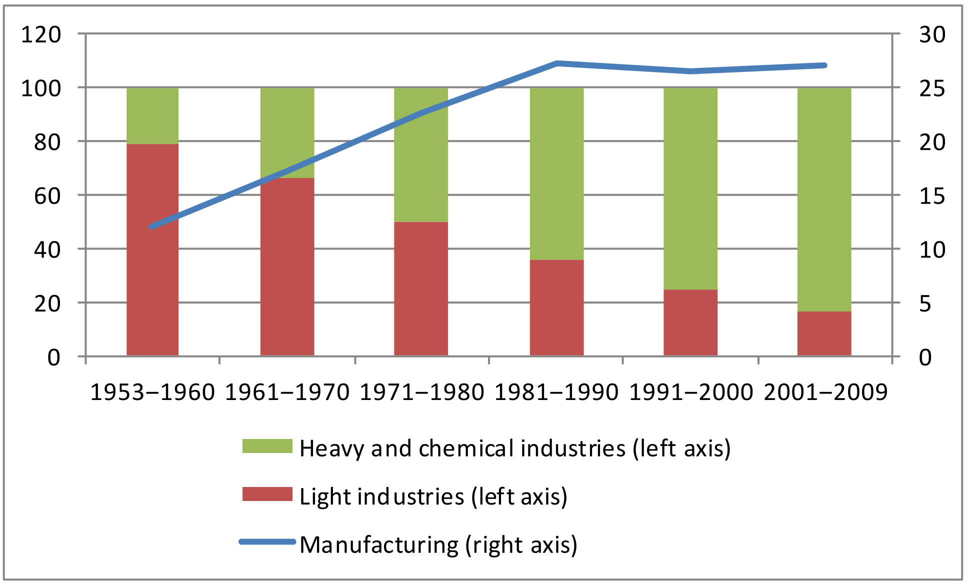
The Republic of Korea is a well-known example of a late-industrializing country in which development finance played an extremely important role in the country's industrialization process. A key characteristic of this process was the speed with which economic transformation took place. In a context of fast output growth,[3] rapid changes were witnessed in the sectors and industries driving the growth process. In 1953–1960, the share of manufacturing in gross value added was 12 per cent, and reached 23 per cent in 1971–1980 and 27 per cent in 2001–2009. Within the manufacturing sector, light industries were predominant in the 1950s, responsible for nearly 80 per cent of all value added in the sector. However, after that date, the sector started to progressively lose ground to the heavy and chemical industries, which grew rapidly, especially from the early 1970s onwards. The value added of the latter in total manufacturing was 64 per cent in the 1980s, 75 per cent in the 1990s and 83 per cent in the 2000s (see figure 4).

[3] Annual GDP growth rates were on average 8.4 per cent in the 1960s, 9.0 per cent in the 1970s and 9.7 per cent in the 1980s (Kim and Koh, 2010: table 3.1).

Figure 4

Republic of Korea: Share of manufacturing in total gross value added, and share of light and heavy industries in total manufacturing

(Percentage)



Source: UNCTAD secretariat calculations, based on Kim and Koh, 2010, table 3.2.

A similar shift took place in the structure of the exports of the Republic of Korea. In 1961, the top 10 export items were nearly all primary products (e.g. iron ore, coal, live fish and rice). Together, they accounted for 62 per cent of total exports. In 2008, the top 10 export items were all manufacturing products (e.g. ships and ship components, mobile telephone equipment, automobiles, semiconductors, flat display screens and computers), most of which were high value added, and accounted for 61 per cent of total exports (Kim and Koh, 2010, table 3.3).

The development finance system that was gradually established from the 1950s onwards helped the Government of the Republic of Korea ensure an adequate flow of credit at favourable interest rates to existing and new industries. In the 1950s, support was provided to existing industries such as those producing consumer goods geared to domestic markets, within an import substitution strategy. In the 1960s and 1970s, the strategy shifted towards exports and to the establishment of the heavy and chemical industries. With the support of a highly controlled financial system, over time, firms from these and other industries were able to invest in frontline technologies, which led to successful upgrading and then to the capacity to acquire larger shares of world markets for manufactures.

Rapid capital accumulation was critical to economic transformation. Between the mid-1970s and the onset of the Asian financial crisis in 1997, investment rates stayed consistently in the range of 30–40 per cent of the country’s GDP. The Government of the Republic of Korea played a central role in this process, by investing heavily in physical infrastructure (e.g. power plants, express highways and seaports), by establishing key industries (e.g. fertilizers, cement, oil refining and steel and iron) and by providing finance in support of export-oriented industries (Kim and Koh, 2010).

KDB was at the centre of the development finance system that supported government policy and transformative growth. Created in 1954, it was built on the assets and facilities of the Industrial Bank, which in the late 1940s had been virtually the only provider of long-term credit in the economy. The main roles assigned to KDB were to provide medium-term and long-term loans to the industrial sector and to help develop the national economy (KDB Act, Law No. 302, promulgated on 30 December 1953).

In addition to KDB, other development finance institutions were established in the Republic of Korea. To finance the agricultural sector, in the early 1960s, the agricultural cooperatives and the Agricultural Bank were consolidated into the National Agricultural Cooperatives Federation. In the same period, the Industrial Bank of Korea was created, with the aim of providing for small and medium-sized industrial units. In 1967, the Korea Development Finance Corporation was created, with the mandate to support the development of private enterprises through the provision of medium-term and long-term financing and equity participation, as well as technical and managerial consulting services. In 1976, the Export–Import Bank of Korea was established. The institutions created to support industrial development all provided long-term credit drawing on funds mobilized through borrowing from Government, international financial institutions and foreign banks, and by issuing securities. They were not normally permitted to accept deposits from the public, especially in the form of demand deposits, a feature that distinguished them from conventional banks.[4]

However, the development finance system that was put in place to provide financial resources for rapid economic development was not limited to such development and specialized banks. In the early 1960s, commercial banks also supported development. They did so both directly, by providing policy loans, and indirectly, by providing resources to development and specialized banks for on-lending operations. As part of the overall financing architecture, the Bank of Korea came under the control of the Government, which served as a mainstay of the whole system in its critical role as provider of liquidity and guarantees.

The main feature of the financial system of the Republic of Korea was the guarantee scheme, created in the 1960s to facilitate borrowing abroad, to support indigenous technology and industrial development as opposed to relying on foreign technology and firms (Vittas and Cho,

[4] Other specialized financial institutions created in the 1960s include the National Federation of Fisheries Cooperatives (1962), Citizens National Bank (1963), Korea Exchange Bank (1967), Korea Trust Bank (1968) and Korea Housing Bank (1969) (Cho and Kim, 1995; Koh, 2010).

1996; Cho and Kim, 1995). KDB could borrow abroad and provide guarantees for foreign borrowing by the country's firms. Specifically, firms wishing to borrow abroad obtained approval from the Economic Planning Board, which was ratified by the National Assembly. Therefore, the Bank of Korea issued a guarantee to the foreign lender and KDB issued a guarantee to the central bank. Thus, while the borrower was committed to repaying the loan and carrying the exchange risk, the cost of the external loan was reduced due to KDB, and especially the Bank of Korea, warranting the operations (Cole and Park, 1983).

The development finance system of the Republic of Korea was therefore well coordinated, with the Bank of Korea working closely with commercial and development banks and specialized financial institutions to support an agreed development strategy. Policy-based loans accounted for about 50 per cent of total credit available in the economy during the 1970s, and for 30 per cent in the 1980s (Cho and Kim, 1995), thus demonstrating that the entire financial system was development oriented.

The Korean Development Bank: An adaptive role

In order to fulfil its role as a provider of long-term loans for the development of the industrial sector and the national economy, KDB went through successive transformations, adapting its functions and repositioning itself in response to changing circumstances and the different stages of development that the Republic of Korea experienced over time.

During its first years, KDB was tasked with funding the restoration of industrial facilities and reconstruction of basic infrastructure (Cho and Kim, 1995; KDB, 2013). In performing this task, its prominent role in the financial system of the Republic of Korea was soon established. By 1955, the bank accounted for over 40 per cent of total bank loans and, at one point, for 70 per cent of the equipment loans and 10 per cent of the working capital loans made by all financial institutions (Sakong and Koh, eds., 2010). In the 1950s, 50 per cent of KDB funds came from the Government's fiscal loans programme and another 37 per cent was raised by issuing bonds.

The strategy switch from import substitution in the 1950s to export promotion from the early 1960s onwards brought about the first adaptation of the role of KDB to new policy priorities. The constitutive act of KDB was amended for the first time, to raise its capital and allow it to develop a set of policy instruments that was the core of the export credit programme. The provision of payment guarantees for foreign borrowing (see above) was one of the key policy instruments of the export promotion strategy, as it allowed export-oriented firms to access foreign capital at considerably lower interest rates (Cho and Kim, 1995). In order to fund its activities, KDB started to issue industrial finance bonds (KDB bonds).

In the 1970s, the Government's development strategy was reoriented towards the heavy and chemical industries, as noted above. To support this new strategy, it established training centres to help form a skilled workforce and research institutes to generate research and development activities. On the financing front, it enhanced the role of development and specialized financial institutions, as vehicles that provided long-term credit at low interest rates. KDB, in particular, refocused its role to finance new industries, in addition to the energy sector and export-oriented industries. To strengthen the lending capacity of the development and specialized banks, the Government created a National Investment Fund in 1974, and deposit-taking banks and insurance companies were required to lend a certain portion to this Fund. The Fund then transferred these resources to development and specialized financial institutions, in the form of long-term loans at low interest rates. In 1974–1991, 80 per cent of its lending was allocated to such institutions. In 1974–1981, when the larger heavy industries were being established, 62 per cent of the Fund's total lending was allocated to KDB (Koh, 2010). As an additional funding source, KDB issued foreign currency bonds.

In the 1980s, the successful establishment of the heavy and chemical industries allowed for the support of new industries further up the value chain, such as the automobile and electronics industries. Once more, KDB reoriented its funding, towards these industries. In the same decade, KDB began to prioritize lending to SMEs and to support industrial restructuring.

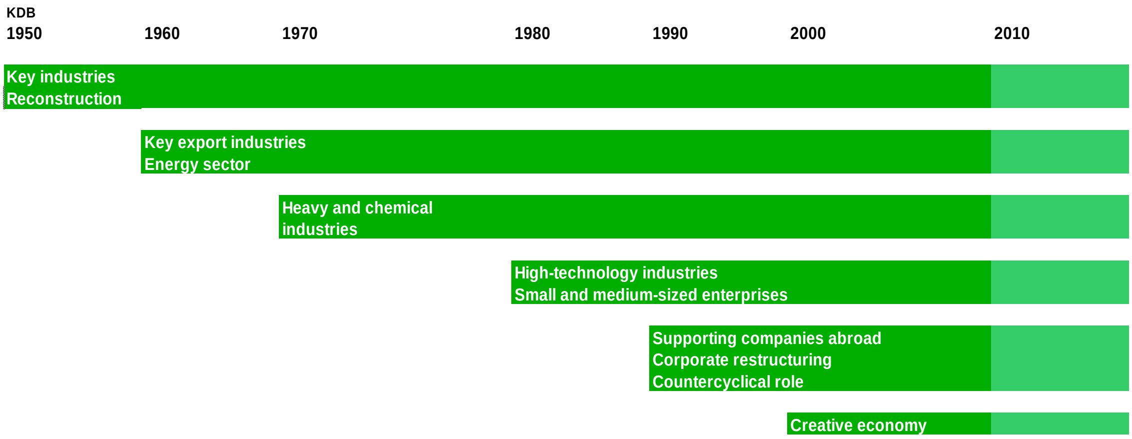
In the 1990s, KDB was the main supplier of funds to high-technology industries, and began to expand its international and investment banking business in order to become a globally competitive investment bank. The aim was to support companies of the Republic of Korea operating abroad, underwrite corporate bonds and support merger and acquisition projects. The Asian financial crisis in 1997 called for a renewed role for KDB, moving beyond its strategic role of picking winners with the capacity to add value throughout an export chain to encompass a countercyclical role in order to help the country overcome the credit crunch (Amyx and Toyoda, 2006). In addition, it participated in the process of ample corporate restructuring in the economy of the Republic of Korea following the crisis (KDB, 2013). During the global financial crisis in 2008, KDB again played a critical countercyclical role.

More recently, plans have been designed to redirect KDB towards the future economy (Financial Services Commission, 2013). In order to help accomplish this task, in 2013 and 2014, KDB launched several initiatives to support both SMEs that promote a creative economy and entrepreneurs and companies that develop new technologies. Such initiatives included a creative economy financing scheme to provide investments and loans for SMEs that promoted a creative economy, a Techno Banking fund that focused on intellectual property, a pioneer programme to provide support to future-oriented start-ups and SMEs and a growth accelerating programme to provide venture companies and start-ups not only with funding but also with networking opportunities and mentoring support (KDB, 2013; KDB, 2014). The greatest recipients of new investments in start-ups have been industries of cultural content, information technology, biotechnology and manufacturing.

The push towards a creative economy and technology aims to reduce the dependency of the economy of the Republic of Korea on the manufacturing sector. However, this reorientation, with the support of KDB, does not preclude the historical role of KDB of supporting massive infrastructure projects, which it maintains (see figure 5). For example, in 2014, KDB, with other partners, committed nearly $2.2 billion to Power Energy Fund III of the Korea Infrastructure Investments Asset Management Company, the largest infrastructure fund in the country's history (KDB, 2013).[5]

Figure 5

Korean Development Bank: Targeted sectors and areas since its creation, 1950–2010



Source: KDB, 2013.

In the 2000s, plans were put forward to privatize KDB. The arguments in favour of privatization were that KDB was inhibiting the development of the financial system of the Republic of Korea, and that privatization was an expected end point for a bank that was expanding by incorporating new banking activities (e.g. investment and insurance) and becoming progressively internationalized, with subsidiaries and branches in different parts of the world, as part of a strategy to transform it into a global investment bank. However, such plans have recently been reversed, and privatization is no longer on the government agenda. The latest plans are to streamline KDB activities and to reassert its role as the country's key provider of finance for development (KDB, 2014; Financial Times, 2013).

[5] The original value of KRW 2.45 trillion was converted into dollars using the exchange rate of the day of the investment agreement, 14 June 2013.

B.2.3 India

India is another example of a country whose development finance institutions have had a central role in its development strategy. Its first development finance institution was the Industrial Finance Corporation of India, set up in July 1948 to provide long-term financing for India’s industries. State financial corporations were then created, coming into effect in 1952, to support State-level SMEs with industrial credit. In 1955, the Industrial Credit and Investment Corporation of India was created as the first development finance institution in the private sector, with the support of the World Bank in the form of a long-term foreign exchange loan and backed by a similar loan from the Government of the United States of America. The establishment of other specialized financial institutions followed, including the Agriculture Refinance Corporation, Rural Electrification Corporation and Housing and Urban Development Corporation. Finally, IDBI was created in 1964, coming into existence as an apex lending institution, together with the Unit Trust of India as an investment institution, both starting as subsidiaries of the Reserve Bank of India.

The build-up of a system of development finance institutions in 1948–1964 can be characterized as the first phase of development banking in India. Once fully in place, the role of India’s development finance institutions gradually grew in importance, as providers of long-term financing to different sectors of the economy of India. In 1970–1971, disbursements by all development finance institutions amounted to only 2.2 per cent of India’s gross capital formation, but grew steadily, to reach 10.3 per cent in 1990–1991 and 15.2 per cent in 1993–1994. This period, from 1964 to the mid-1990s, can be characterized as the second phase of the evolution of India’s development banking. In this phase, the number of development finance institutions further expanded, with the establishment of the Industrial Investment Bank of India in 1971, National Bank for Agriculture and Rural Development and Export–Import Bank of India in 1982 and Small Industries Development Bank of India in 1990 (Organization for Economic Cooperation and Development (OECD), 2015).

Following the balance of payments crisis in 1991, India took steps towards the liberalization of the country’s financial sector and external accounts, starting a third phase in which the importance of development banking declined, particularly after 2000–2001. This occurred as liberalization resulted in the conversion of some development banking institutions into commercial banks, as well as in the decline of the amount of resources mobilized by other financial institutions. As a result of this liberalization process, by 2011–2012, financial assistance disbursed by development finance institutions amounted to only 3.2 per cent of gross capital formation. As a proportion of the financial system as a whole, between the early 1970s and late 1980s, their loans accounted for over two thirds of total disbursals. Between financial liberalization in the early 1990s and early 2000s, this share declined to 30 per cent; after 2004, it declined further, to 1.7 per cent.

Two notable examples of conversion from development finance institutions into commercial banks have been the Industrial Credit and Investment Corporation of India in 2002 and IDBI in 2004. The counterpart of this process has been the growing role of domestic and foreign private firms in the financial sector. Following liberalization, they were granted greater flexibility in mobilizing resources, and in lending and investing resources. At the same time, with the transformation or closing down of the larger development finance institutions, small industry-focused financial institutions such as the Small Industries Development Bank of India have taken on a growing role, along with investment institutions such as the Unit Trust of India.

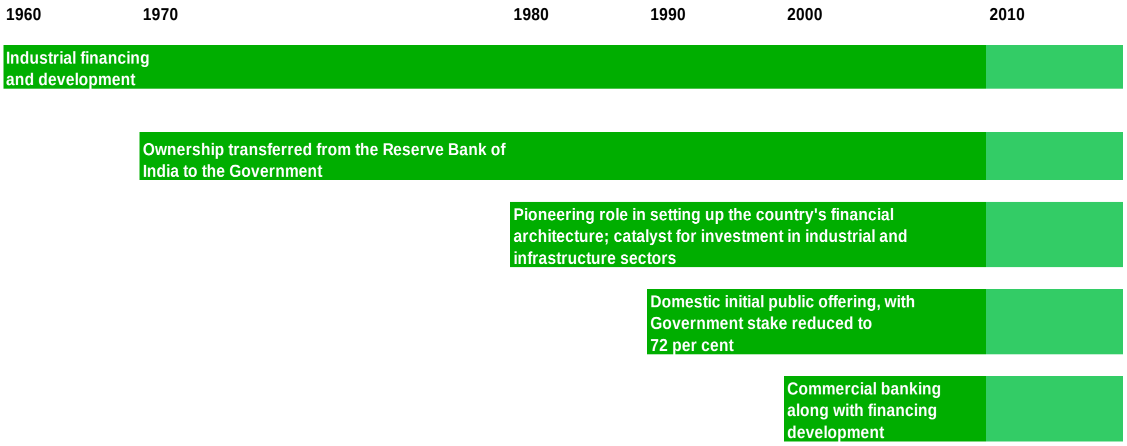
The importance of development finance institutions in India is clear from the fact that their contribution to total capital formation has grown significantly over the years, with 70 per cent of the total directed to the private sector and taking the form of loans, as well of underwriting and direct subscriptions of shares and debentures. Aggregate disbursals as a ratio of net capital formation in the private sector rose from 24 per cent in 1970–1971 to 80 per cent directly before the 1991 crisis. This provision of long-term industrial finance was a major source of support for investment in the country, and constituted an important method by which to address the limitations of the financial system that prevailed prior to independence. The sectors that development finance institutions have targeted over the years are wide ranging, and include manufacturing, services, agribusiness, construction, energy and infrastructure, in addition to social sectors such as health and education (OECD, 2015).

Among development finance institutions in India, IDBI has been a leading financial institution. It has provided finance to all major industries, including manufacturing, energy, information technology and health, and has played a catalytic role in India’s industrial and infrastructure development. As an apex institution, it had the role of coordinating the activities of other development finance institutions, providing an overall strategy and direction to the various banks supporting the development of Indian industries. Until 1982, when the Export–Import Bank of India was created, IDBI also had an international finance division to support companies engaged in foreign trade. In terms of institutional initiatives, IDBI was responsible for setting up the Small Industries Development Bank of India as a subsidiary charged with catering to small-scale industries, the Export–Import Bank of India and key financial market institutions such as the Securities and Exchange Board of India and the National Stock Exchange (Pathak, 2009).

IDBI has therefore played a critical role as an institution builder, contributing to the major transformation of India’s financial landscape. IDBI itself has gone through substantial changes. It was a subsidiary of the Reserve Bank of India at the time it was created, but became independent in 1976, when its ownership was transferred to the Government of India. In the 1990s, part of its ownership was transferred to private owners. Since the early 2000s, it has been transformed into a universal bank, engaged in both retail and investment bank activities. Figure 6 provides a timeline of the changes IDBI has experienced over the decades since its creation.

Figure 6

Industrial Development Bank of India: History, 1960–2010



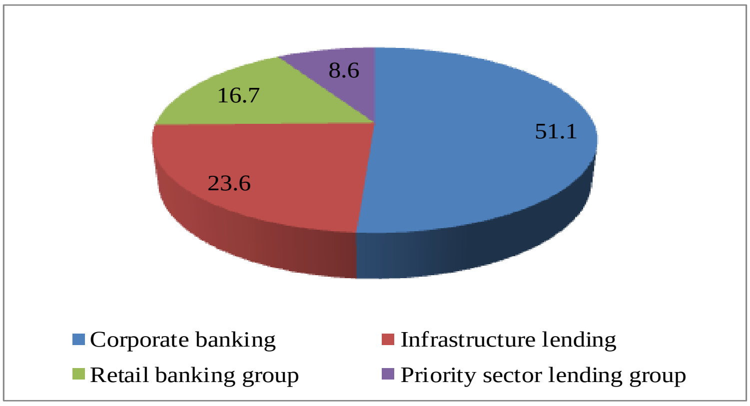
Source: IDBI, 2013.

In the financial year 2013, the total assets of IDBI were approximately $60 billion and total advances were $36 billion. As a universal bank, 51 per cent of its total advances are accounted for by its corporate banking group, 24 per cent by infrastructure lending, 17 per cent by retail banking and 8 per cent by the priority sector lending group (see figure 7). These numbers indicate that, despite the recent changes in its structure and its broadened activities, IDBI retains a developmental role. According to IDBI (2013), it remains India's leading provider of infrastructure lending.

Figure 7

Industrial Development Bank of India: Advances, financial year 2013

(Percentage)



Source: IDBI, 2013.

Given the nature of and role envisaged for development finance institutions in India, the Government and the Reserve Bank of India have played an important role in providing them with financial resources, which have accounted for a significant share of total resources mobilized by all India's development finance institutions (Kumar, 2013), especially the leading institution, IDBI. Access to State funding prior to the liberalization reforms meant that the development finance institutions were in a position to mobilize resources at interest costs that were much lower than if they had relied on market sources. This also allowed them to lend at rates that were reasonable from the point of view of the industry and infrastructural sectors. This made them the first port of call for finance for Indian business, which substantially benefited from the financial support provided in the years before 1990.

Thus, in the first two phases of the development of banking in India, the nature of the development finance institutions, their mandates and the way they obtained resources marked them out as entities that were part of a dirigiste regime. During those years, the Government of India followed a highly interventionist development strategy, with controls on trade and foreign investment, the regulation of investment choices and decisions, strong exchange rate management and a large public sector. The pattern of financing of investment began to change in the late 1980s, when the availability of foreign finance from private financial markets (as opposed to the bilateral and multilateral development aid network) opened up, largely because of changes in the international financial system. This access was seen as providing an opportunity to pursue a more outward-oriented development strategy, based on all-around liberalization and deregulation. The balance of payments crisis of 1991 served as the trigger for that transition.

A possible criticism of development banking in India is that big business groups were able to garner a disproportionate share of the disbursals made by these institutions. Another is that the Government did not use its influence to exert control over the firms with which development finance institutions were involved. The latter, as providers of equity and credit to companies, were eligible to have nominees on the boards of directors of such companies. However, in most instances, nominees had passive roles on such boards, sometimes aligning their positions with the incumbent management in battles for corporate control. This meant that, in cases where there was evidence of mismanagement, the proactive and corrective role that should have been expected from the nominees of development finance institutions was absent. This was a major failing, as the nominees could have played a role in setting social, environmental and governance standards and overseeing their implementation. Further possible criticisms are the inability of the banks to process loans in a reasonable time frame and to provide loans to projects lacking quality, along with the need for them to reorient their financing towards new industries (OECD, 2015).

India currently stands as one of the fastest growing economies in the world. To sustain rapid growth, the country has to address large infrastructure investment needs. As stated by the Deputy Governor of the Infrastructure Group of the State Bank of India Capital Markets, infrastructure is “one of the most critical sectors of the economy” of India and one of the country’s roadblocks to higher growth (Reserve Bank of India, 2015:1). A recent study puts infrastructure financing needs at $586 billion over the next five years from 2015, mainly in power, roads and urban infrastructure. Banks are expected to be the largest source of finance, meeting 70 per cent of total needs, with bonds markets providing the remaining funding (The Economic Times, 2015). In view of the recent financial reforms in India, whereby most development banks have been transformed into commercial banks, the question remains whether the banking system in India, in particular IDBI – which is now a universal bank – is prepared to meet these financing challenges.

B.2.4 China

Development banking in China emerged a few years after the country’s financial system was transformed from a mono-banking system, in which the People’s Bank of China was the sole bank, to a plural banking system. In 1984, four State-owned specialized banks were created, by means of separation from the People’s Bank of China, to undertake commercial banking functions, while the latter focused on its role as the central bank.[6] In their initial years, these banks provided within their respective specializations financing for a range of activities, from rural and agricultural sectors to foreign trade, construction and the business of State-owned enterprises, thus playing a dual role of commercial and development banks.

However, in 1994, further reform of China’s financial system was undertaken and the four specialized banks became known as State-owned commercial banks. At the same time, three policy banks were created to separate development lending from commercial lending, namely, CDB, the Export–Import Bank of China and the Agricultural Development Bank of China (Martin, 2012:8–10; Okazaki, 2007:13–14). The reform included the creation of several laws setting out the legal foundations of the financial sector, such as the Commercial Bank Law in 1995 that sought to bolster the independence of the State-owned commercial banks, although still stipulating that these should act under the guidance of national industrial policies (Okazaki, 2007:14). Further financial reforms were then undertaken, spurred by the start of negotiations

[6]The four specialized banks were Agricultural Bank of China, financing rural and agricultural sectors; Bank of China, financing foreign trade and investment; People’s Construction Bank of China, renamed the China Construction Bank in 1996, financing construction and fixed-asset investment; and Industrial and Commercial Bank of China, financing the business activities of State-owned enterprises.

for China's accession to the World Trade Organization and the onset of the Asian financial crisis in 1997.

In the late 1990s, the banking system in China was burdened with non-performing loans amounting to 40 per cent of outstanding loans (Ma and Fung, 2002:1). In response, the State-owned commercial banks were required to enhance their balance sheet management practices. While they gained some autonomy to allocate credit to projects and enterprises as they saw fit, the People's Bank of China limited the total amount of credit they could provide and created guidelines to keep any increase in their lending over a certain period within levels it considered appropriate (Okazaki, 2007:19). Moreover, capital equivalent to 3 per cent of China's GDP was injected into the banks and non-performing loans were reduced through the creation of four asset management companies, which purchased RMB 1.4 trillion, or 21 per cent, of the loan balance of the State-owned commercial banks at year-end 1998. Furthermore, the State-owned enterprises were restructured in order to restore their financial health.

Given this set of initiatives to strengthen banks and restructure State-owned enterprises, China's development banks became increasingly prominent as providers of long-term investment financing. The bulk of the Agricultural Development Bank of China's book was directed to providing credit for agricultural production. Export–Import Bank of China loans were mostly directed towards financing China's imports and exports. In accordance with its original mission, CDB provided long-term loans and lines of credit to large-scale infrastructure and industrial projects, including strategic projects such as Three Gorges Dam, Shanghai Pudong International Airport, Beijing Capital Airport, municipal subway systems and much of the nation's high-speed railway network (CDB, 1999; Martin, 2012:16–17; Downs, 2011:18).

As shown in the table, CDB annual reports reveal that the sectorial distribution of CDB loans has changed over time, but has predominantly focused on infrastructure sectors of various kinds. In 2001, electrical power, railways and roads received significant portions of CDB loans. By 2014, roads still received just under one fifth of outstanding CDB loans, while public (mainly urban) infrastructure such as metropolitan subways and new economic zones attracted another 17 per cent of loans. Meanwhile, the percentage of loans to other sectors that include projects involving environmental protection, renewable energy and conservation more than doubled after 2001, to over 34 per cent of total loans in 2014. In geographic terms, outstanding CDB loans outside China increased from 4.7 per cent in 2001 to 16.5 per cent in 2012 and then declined slightly.

China Development Bank: Outstanding loan balance by industry, selected years (Percentage)

	2001	*2006*	*2012*	*2014*
Agriculture	0.0	2.0	2.2	3.1
Coal mining	0.0	1.2	1.3	1.4
Electrical power	36.7	17.1	11.4	10.1
Petrochemicals	4.2	1.7	7.3	6.8
Public infrastructure	9.6	34.9	20.6	17.0
Railways	14.4	2.7	7.2	8.1
Roads	15.9	18.7	17.2	18.1
Telecommunications	3.3	3.3	1.4	1.0
Other	16.1	18.5	31.5	34.4
Total	100	100	100	100

Source: CDB annual reports.

CDB in particular thus gained prominence at a time when the State-owned commercial banks had a new mandate to focus on commercial loans, which restrained their role in policy-directed lending to capital-intensive national infrastructure projects with long gestation periods. This gave CDB a niche that placed the bank at the centre of the high-investment growth strategy pursued by the Government of China, which reflected an understanding by the Government of the importance of long-term development financing. Backed by resources and political leadership, these initiatives made it possible to transform CDB into one of the most dynamic and successful financial institutions in China, and made it a crucial part of the overall reforms in China's financial sector, regarded as critical to China's re-emergence as a global power (Downs, 2011:7–8).

Unlike the State-owned commercial banks, CDB is not a deposit-taking institution. The bank raises resources by issuing long-term bonds carrying a zero-risk weight for capital requirements. The bonds are acquired by banks in China, which regard them as assets with risk-free returns on their depositors' funds. This bond structure allows CDB to provide loans with substantially longer terms than those offered by commercial banks (Downs, 2011:15–16, 18). In 2003, CDB bond issuance overtook that of the Ministry of Finance for the first time, as the bank increasingly took on a larger share of infrastructure projects.

By 2015, the total assets of CDB were estimated at $1,994 billion, against the $548 billion in assets of KfW in Germany and $198 billion in assets of the JFC (see figure 1). As the figures on the distribution of loans suggest, the strong expansion of CDB has reflected the broadening of its practices into providing credit to local government investment corporations for urban and other projects; supplying loans for global energy investments by State-owned enterprises as part of China's going out strategy; and supporting economic diversification through renewable energy and telecommunications equipment firms.

Borrowing by local government investment corporations from CDB has been a way for local governments to circumvent restrictions put in place that do not permit them to run budget deficits or sell bonds. These restrictions, created in 1994, were part of the efforts of the People's Bank of China to address local government sources of inflationary pressures. Local government investment corporations, created with injected capital in the form of land-use rights, budget revenues and existing assets such as roads and bridges, have raised bank loans using such assets as collateral. The funds were then used by local governments to finance investment in infrastructure projects (Lu and Sun, 2013:4; Shih, 2010:27). Income generated from land sales has been used to guarantee the timely payment of interest on local government investment corporation-issued bonds, often backed by local government guarantees using future fiscal revenues. In 2014, central authorities began pilot schemes that allowed selected cities to sell local government bonds.

CDB loans to local government investment corporations also have a seal of approval effect on crowding in other State banks and financial institutions, to further extend lending to projects that CDB supports. In this way, CDB financing may be considered seed money for projects that commercial bank may be unwilling to provide (Gao, 2010; Sanderson and Forsythe, 2013:5). An International Monetary Fund study examining the exposure of China's banks to local government investment corporations shows that, in 2011, CDB held 66 per cent of loans to such corporations, while other State banks held smaller shares, and that when their shares were combined, they reached 24 per cent of the total (Lu and Sun, 2013:14). A World Bank technical assistance report examining the experience of Chongqing municipality with local government investment corporations provides a list of the primary financing sources for such corporations, of which CDB is the first source, followed by State-owned commercial bank loans, which tend to offer stricter terms (maturity and interest rates) than CDB loans. However, as the report states, "the excess liquidity and tight competition has been slowly closing the gap between terms offered by CDB and commercial banks" (World Bank, 2009:31).

CDB has supported China's going out strategy as a provider of funds for energy companies and State entities in countries such as the Bolivarian Republic of Venezuela, Brazil, Ecuador, the Russian Federation and Turkmenistan. In most cases, loans are secured by revenue earned from the sale of oil at market prices.[7] These loans are characterized by their large size (up to $21 billion), long terms (of up to 20 years) and short period of negotiation (less than two years) (Downs, 2011:1). In addition, CDB has provided loans for economic and social infrastructure projects, as well as manufacturing in developing countries in Africa and Latin America. Other, more recent, initiatives include planned contributions to the new One Belt, One Road strategy, which involves large infrastructure investments across Asia, along with continued financing in Africa, Asia and Latin America through South–South cooperation agreements. Such international loans and initiatives therefore aim to secure global oil supplies while also promoting the expansion of China's firms into foreign value-added markets, as part of China's new role as an emerging superpower on the global stage.

To carry out China's strategy to develop renewable energy technologies and, more broadly, to internationally expand and build competitive global brands and firms, CDB has, since 2010, strongly increased credit to clean energy and energy-saving projects in China. According to Bloomberg New Energy Finance, in 2010, CDB loans, estimated at $14.7 billion, were higher than those of other development banks in that year; the European Investment Bank (EIB) lent €8 billion (or $10 billion) for clean energy projects, while BNDES lent $3.2 billion. In all, since 2010, CDB has made available at least $47.3 billion in credit lines to support China's solar and wind companies (Sanderson and Forsythe, 2013:149,150–151).

As in the renewable energy sector, the Government of China has since the late 1990s provided support for domestic telecommunications companies, as part of a drive to develop a robust and self-sustaining indigenous telecommunications equipment industry that can compete against foreign companies such as Cisco, Nokia Siemens, Alcatel-Lucent and Sony Ericsson, among others. China's networking and telecommunications company Huawei, for example, has had access to State credit, which has been pivotal to the company's growth. In 2004, CDB provided Huawei a $10 billion five-year credit facility for international expansion (with an extra $600 million from the Export–Import Bank of China). By 2009, CDB had increased its support to $30 billion, which allowed the company to win a contract in 2010 to provide network equipment to Brazil.

A possible criticism is that CDB, and China's banking system more generally, have become overexposed to local government investment corporations, particularly after the global financial crisis, due to the countercyclical role they provided in the aftermath of the crisis. At the onset of

[7] A loan-for-oil agreement generally entails a loan agreement and an oil-sale agreement that involves the State-owned banks and oil companies of two countries. CDB extends a $1 billion loan to an oil-exporting country such as Ecuador, while Ecuador's State oil company commits to shipping hundreds of thousands of barrels of oil to China every day for the duration of the loan. Oil companies in China buy the oil at market prices and deposit their payments into the CDB account of the State oil company of Ecuador. CDB, in turn, withdraws funds from the account to repay itself for the initial loan. Often, repayments are subsumed into larger oil-supply contracts, thus allowing both parties to contend that only a portion of revenues from oil sales will go to repay the loan and interest (Gallagher et al., 2012:14).

the crisis, China's central Government announced a RMB 4 trillion fiscal stimulus package, whereby it formally endorsed a surge in the creation of and borrowing by local government investment corporations, then estimated at more than 8,000 in number, which financed over three quarters of central and local stimulus projects. The main concern is that local governments may be unable to repay these loans, leading to a pile-up of non-performing loans and requiring a bailout of the banking system further ahead (Shih, 2010:26–27; Lu and Sun, 2013:5). Although it is not uncommon to hear of excesses related to investment projects with no apparent demand or possible future revenue generation, and that not all financing from local government investment corporations went to credible projects, it is reasonable to believe that a fair amount actually went towards productive purposes and infrastructure and not simply to the property and real estate sector, or in support of consumption patterns, as occurred in the United States prior to the global crisis.

B.2.5 Summary of main features of national development banks

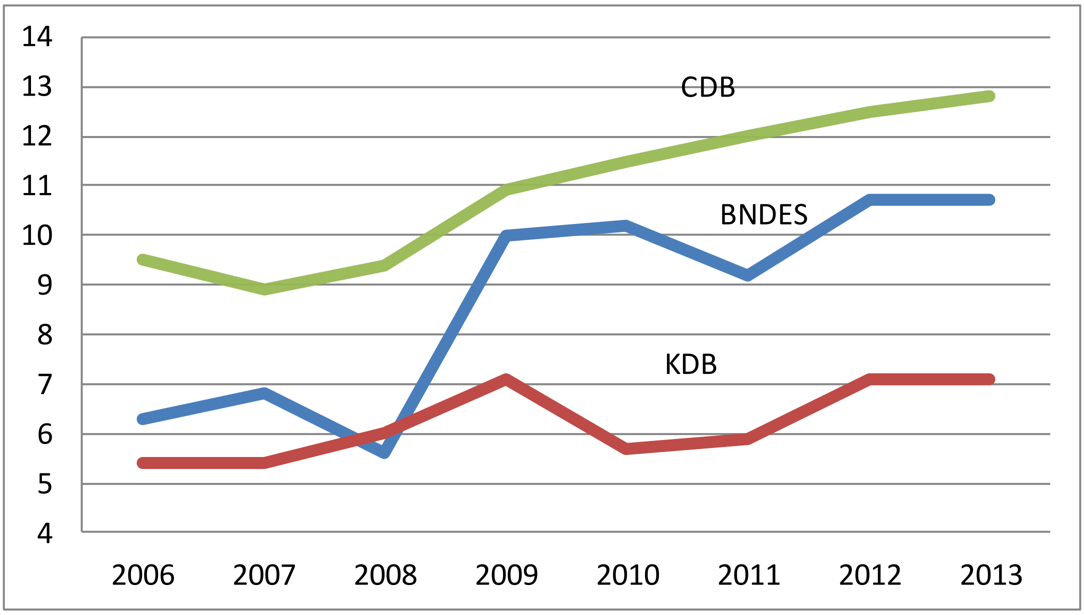
The discussion of the development banking experiences in Brazil, the Republic of Korea, India and China shows that their main national development banks – BNDES, KDB, IDBI and CDB – have been key institutions for financing development and structural change. All of the banks supported industrialization in their countries, with the possible exception of CDB, since the latter was created in the 1990s and therefore at a time when China's industrial base had already been established. To support industrialization and development more broadly, all of the banks have had a diverse funding base, including debt and equity issuance, resources from other financial institutions and government transfers. A further common characteristic among the banks has been their broad mandates, with engagement in a wide range of sectors and activities. Over the years, they have supported large infrastructure projects and the creation and expansion of heavy industries. More recently, they have refocused their strategies towards supporting innovation, small businesses and clean energy projects.

The national banks analysed have also played a countercyclical role when their countries have faced major financial shocks, such as KDB during the Asian financial crisis and BNDES, CDB and KDB during the global financial crisis (see figure 8). This role not only helped to sustain the levels of economic activity and employment in the national economies, but also to turn the important growth engines of these economies to other crisis-affected countries.

Figure 8

Gross loan–gross domestic product ratio, 2006–2013

(Percentage)



Source: UNCTAD secretariat calculations, based on banks' annual reports, the International Monetary Fund World Economic Outlook database and the World Bank.

It may also be seen that these banks do not operate alone. They are part of a development finance system built over many years. This is an important aspect of understanding how much these banks can achieve and what their overall impacts might be. Development banks in isolation can usually only go so far in promoting economic transformation. Thus, to maximize reach and macroeconomic impacts, they often operate with the support of a country's central bank and in collaboration with other development finance institutions. In some instances, the development bank itself helps build up a country's financial architecture, as has occurred in India, with IDBI. In others, development finance is not only about development banks or development finance institutions working together, but is about the entire financial system supporting development. The experience of the Republic of Korea has been notable in this respect.

There is no single configuration for financial sectors to adopt in order to achieve successful economic transformation. Each country builds a development finance system on the basis of its set of existing resources, constraints and development strategies. The analysis of the national banks also shows that development banks are not created merely to address market failures. Addressing market failures such as a lack of sufficient provision of long-term finance is important, but development banks have been created to do more. They are instruments of the State, to promote ambitious development strategies, which require careful planning and coordination. In that context and building on their in-house expertise, such banks play a proactive role in helping anticipate bottlenecks, identify needs and indicate the new industries that should be built or expanded.

A recent trend among national development banks is that they have not been operating only within national borders. A number of them have established international operations, which have been put in place to support their national companies abroad, as well as regional productive integration and, in some cases, a country's international development programmes. Such initiatives follow in the steps of KfW, which has been the financing arm of Germany's international development cooperation programmes.

Since the 1980s, financial liberalization worldwide and the greater availability of international private capital have put pressures on national Governments to liberalize their financial systems. The development finance systems in the countries in this analysis have not been unaffected by such trends. In India and the Republic of Korea, both leading development banks – IDBI and KDB – have undergone deep changes from their traditional developmental role to become universal banks. To the extent that this process of change goes too far, their ability to provide long-term financing on a large-scale might become seriously impaired, especially if they are fully privatized. Thus, despite possible changes, it is important to maintain the capacity of these banks to provide long-term finance, and that they continue to be a key component of the development finance architecture of their countries.

C. The role of regional and subregional development banks

Development banks can be effective development levers in both large countries (e.g. China and India) and small countries (e.g. the Republic of Korea in the 1950s). However, it is important to acknowledge that poor, small countries may face greater obstacles in setting up such banks, due to funding and technical constraints. Such countries would therefore benefit from regional concerted efforts to set up subregional banks and/or enhance existing ones. Financing for development could be maximized with the strengthening of a network of development banks at different levels – national, subregional, regional and multilateral (cross-South), since these banks could play somewhat different yet overlapping roles and, at the same time, explore complementarities between them.

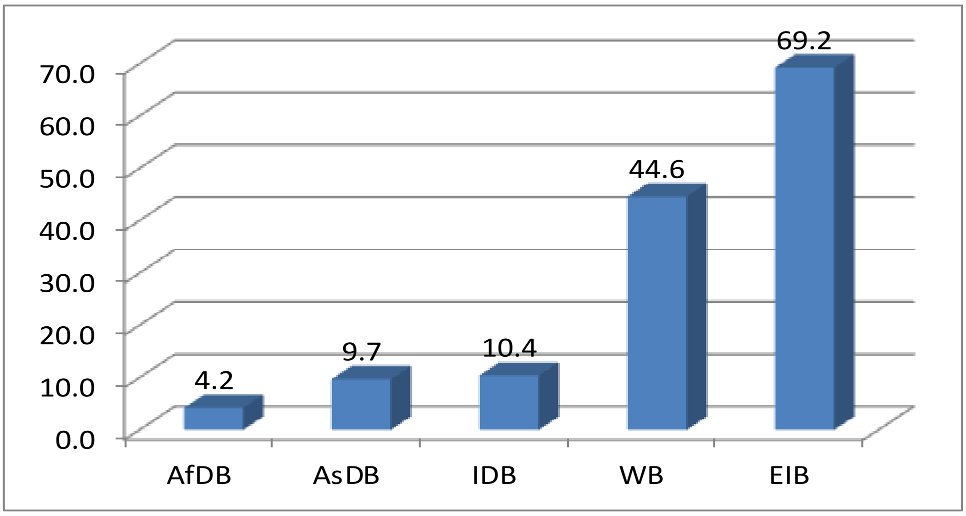
Regional development banks have played a vital role in financing long-term projects around the world. The long-established regional development banks – AsDB, AfDB, IADB, EIB and the Islamic Development Bank – have helped fill important financing gaps, especially in large-scale infrastructure projects and, more recently, in social and environmental projects. These financing gaps exist due to the limited financing capacity of national (and subnational) Governments to undertake large projects, and the private sector's inability and/or unwillingness to undertake long-term, large-scale projects perceived as too risky. The financing gap, and the resulting underprovision of long-term, large-scale projects, was particularly acute in the 1980s and 1990s in various parts of the developing world, especially in Latin America and the Caribbean and sub-Saharan Africa, due to the fiscal adjustment policies that many Governments undertook during the period (Estache, 2010).

Among the regional development banks, EIB was, in the 1950s, created with the clear mandate of financing infrastructure to support regional integration. As a consequence, EIB has allocated in the past a significant proportion of its total loans to infrastructure – initially, 48 per cent of total bank loans and, later, 44 per cent of the total (Griffith-Jones et al., 2008). Currently, EIB is the largest multilateral lender (see figure 9), providing finance and expertise to further European Union policy goals, with over 90 per cent of its activity taking place in Europe. Strategic infrastructure is among its current priorities. Most EIB financing is through loans, which often represent 30 per cent of the total financing of a project, though this share sometimes reaches 50 per cent. In addition, since the global crisis, EIB has played a vigorous countercyclical role to help sustain income and investment levels across Europe and protect the region's infrastructure and productive capacity from the effects of a deep economic downturn. The role of EIB as a financing provider is related to its role in leveraging, through blending resources from other financing sources (e.g. the European Union budget and the private sector), which implies a large multiplier effect. In addition, EIB has the role of advisor, to assist not only in the area of project financing but also in project design and management, to facilitate project implementation and execution (EIB, 2015).

Figure 9

Gross disbursements of regional development banks, 2015

(Billions of dollars)



Source: UNCTAD secretariat calculations, based on banks' annual reports.

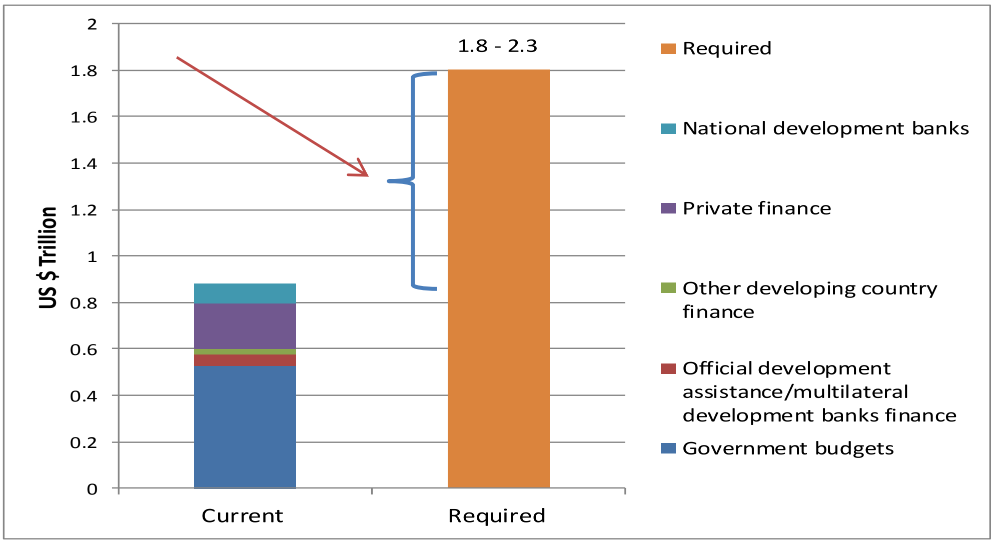
Among the other regional banks, AfDB and AsDB both have a focus on infrastructure, while IADB places greater emphasis on social projects (Ocampo, 2006). However, financing from these regional institutions has not been sufficient to meet the needs of developing countries. Moreover, unlike EIB, lending for regional public goods, which include regional infrastructure projects necessary for regional productive and trade integration, has been only a small portion of the total loan portfolio of these regional banks (Birdsall, 2006).

In the area of infrastructure in particular, the financing gap in the developing world is huge, as noted earlier in this report (see figure 10). To meet the growth and development needs of developing countries, infrastructure spending would have to increase to a level of \$1.8 trillion–\$2.3 trillion per year by 2020, from the current level of \$0.8 trillion–\$0.9 trillion per year. That is, there is a need for an increase from 3 per cent to 6–8 per cent of developing country GDP. National Government budgets contribute about 60–70 per cent of current spending in infrastructure, the private sector between 20–30 per cent and official development assistance and the multilateral development banks about 5–8 per cent (Bhattacharya and Romani, 2013).[8] Private sector investment is not only relatively low, but also concentrated in the energy, transport and information and communications technology sectors (Estache, 2010).

Figure 10

Financing gap in investment for infrastructure by 2020 in the developing world

(Trillions of dollars)



Source: Bhattacharya and Romani, 2013.

[8] More recent estimates by Bhattacharya et al. (2015) put the infrastructure financing needs of developing countries in 2016–2030 in the range of \$3 trillion–\$4 trillion per year. These new estimates take full account of the additional need to make investment sustainable, that is, consistent with a low-carbon growth path.

Developing countries face massive infrastructure needs, and the financing gaps are equally vast. Although private sector investment in infrastructure has grown since the early 1990s (Fay et al., 2011), continued future growth is limited by a number of factors, the main factor being perceived and actual excessive risk due to asymmetries of information. Lenders do not have sufficient information to price risk appropriately, or for monitoring. In addition, infrastructure projects tend to be long term, which increases perceived risks and uncertainty about future returns. Moreover, such projects tend to generate social benefits that are greater than private benefits, a gap that is not internalized in private sector profit calculations, as noted earlier. Infrastructure projects that are regional further affect the willingness of the private sector to invest, due to the complexity of the regulatory framework for cross-border projects and the political risks involved.

In this context, in which market failures exist, regional development banks can play a critical role not only in providing financing for infrastructure directly, but also as market makers, by creating and providing financing instruments that better share risks between creditors and borrowers and through time. Regional development banks can also help mitigate informational deficiencies facing the private sector by providing a share of screening, evaluating and monitoring and, where needed, their own money, thus partnering with private investors in co-financing. A partnership between regional development banks and the private sector may take different forms. For example, regional development banks may provide long-term lending, while the private sector provides more short-term resources, or the former may provide a guarantee to cover regulatory and contractual risks, while the latter covers market risks. Regional development banks, above all, can play a leading role in regional infrastructure projects, as EIB has done over the years. Such projects generate positive externalities in the form of benefits that are shared by neighbouring countries. While, this creates challenges for cross-border coordination and collective action, regional development banks are well positioned to undertake such actions, due to their accumulated knowledge and experience, as well as instruments at their disposal to overcome coordination problems (Griffith-Jones et al., 2008).

Regional development banks, in addition, can help address the need for low-income countries to have access to loans for financing infrastructure projects at subsidized rates. In 2013, their concessional lending amounted to approximately $20 billion, which represented 30 per cent of their total loan portfolios (see figure 11).[9] Subsidized loans may be feasible even if a bank does not have a developed country as one of its shareholders. To the extent that such banks generate profits and do not distribute dividends, they can use their profits to expand their capital bases, as well as to subsidize loans to low-income country borrowers. Regional development banks,

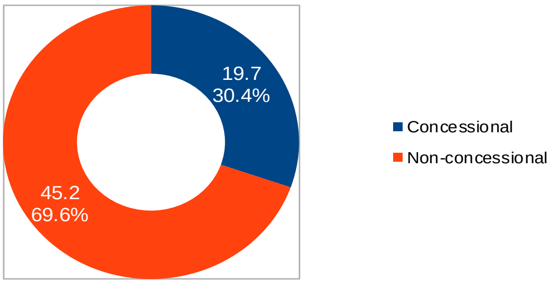
[9] This refers to total multilateral lending by the World Bank, AfDB, AsDB, IADB and European Bank for Reconstruction and Development.

however, are few in number, and their aggregate lending capacity is somewhat limited. Therefore, important financing gaps are left, in the area of infrastructure as noted, and in projects for cross-regional integration, not to mention more generally in the area of non-infrastructure-related economic, environmental and social development.

Figure 11

Multilateral lending by type of loan, financial year 2013

(Billions of dollars)



Source: OECD, 2015.

Subregional development banks: A growing role

Subregional development banks have partially covered financing needs in the developing world, as highlighted in this report.

In Latin America and the Caribbean, such banks include the Central American Bank for Economic Integration, the Caribbean Development Bank and the Andean Development Corporation (Corporación Andina de Fomento (CAF)). The latter, now known as the Development Bank of Latin America, was created with a mandate to promote sustainable development and regional integration among its founding member countries, the Bolivarian Republic of Venezuela, Colombia, Ecuador, Peru and the Plurinational State of Bolivia. Membership has gradually expanded since the bank's creation, to include most Latin American and Caribbean countries, as well as Portugal and Spain. CAF supports the strengthening of its members' national productive sectors, particularly the development of value-added products and services, as well as job creation and the promotion of access to social services, including education, health, water and sanitation. In 2013, loan approvals by CAF surpassed $12 billion – a similar amount to the total loans of IADB (CAF, 2014). Although CAF is owned mostly by developing countries, it has a fairly large capital base, which, together with the excellent record of repayment on its loans, has contributed to its investment grade status from the international rating agencies – a rating that is higher than that of most Latin American countries. Its clear and focused mandate, lean management structure, rigorous economic evaluation of projects, rapid approval process and loans being granted without conditionality, help to explain the success and consistently high credit rating of CAF (Griffith-Jones et al., 2008).

In Africa, AfDB is an important source of external long-term finance. Africa also has a large number of subregional banks, including the East African Development Bank, West African Development Bank, Central African States Development Bank, Eastern and Southern African Trade and Development Bank (commonly known as the Preferential Trade Area Bank) and Development Bank of Southern Africa (wholly owned by South Africa but serving the Southern Africa Development Community, with a focus on large infrastructure projects). However, these banks have a limited capacity to provide finance for large development-oriented projects on a scale that meets the needs of their respective subregions (see figure 12). This may be explained by their small capital base, and by the fact that most of their shareholders are the borrowing countries themselves, which have limited financial resources to substantially expand these banks' capital bases.

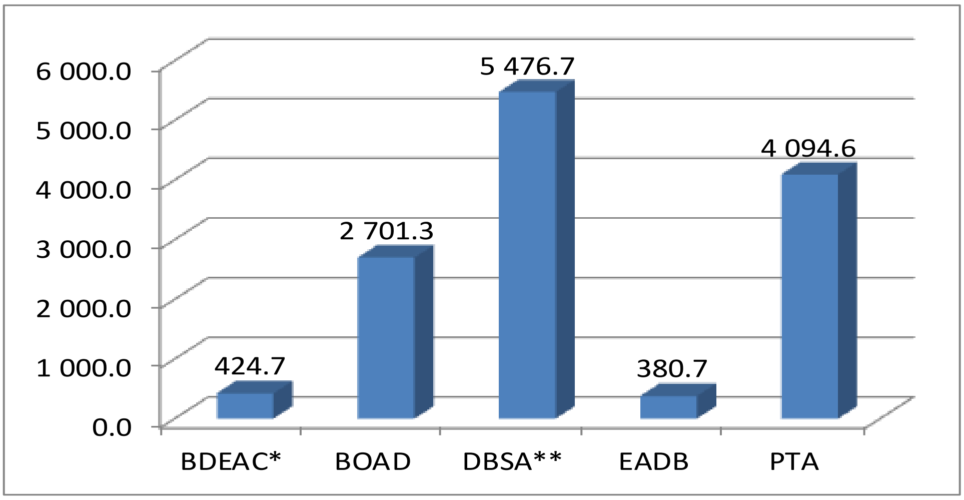
In Asia, AsDB plays a major role in financing long-term projects, including infrastructure, as there is a lack of subregional banks.

Subregional banks that include non-borrowing developed (or emerging) countries, as well as institutional owners such as other, larger banks, tend to have a greater capacity to lend to member countries and therefore meet their core mandates. Thus, although the creation of new subregional development banks can potentially help support development, it is important that the factors constraining such banks' capacity to lend are addressed and actions undertaken to help mitigate the barriers to greater lending capacity for large-scale projects that are vital to further transformative development in the developing world.

Figure 12

African subregional development banks: Total assets as at December 2015

(Millions of dollars)



Source: UNCTAD secretariat calculations, based on banks' annual reports.

* 31 Dec 2014.

** 31 Mar 2016.

To enhance the lending capacity of subregional development banks, especially those operating in Africa, one method may be to attract part of the large foreign reserves and sovereign wealth funds of a number of emerging and other economies, to be invested in such banks, thereby enhancing their capital structure and enabling them to fully meet their mandates. Some subregional development banks already have emerging countries such as China as shareholders, which means that the institutional set up is already in place to expand their capital base.

The importance of subregional development banks cannot be underestimated, above all in the face of initiatives towards achieving regional productive integration and regional value chains. These are key aspects of development regionalism, a pattern of development that, through industrialization or other means, aims at the strategic and sustainable integration of different developing countries and regions in the global economy (UNCTAD, 2011). Progress on such forms of development requires complex financing mechanisms, which such banks are particularly able to provide, as noted above.

D. The potential financing role of cross-South multilateral banks

A system of development banks that provides financing to support growth and development should include South-led multilateral banks alongside multilateral, regional, subregional and national banks. Recent initiatives to design and set up such banks have been aimed at addressing the shortage of long-term capital for investment in crucial infrastructure areas and capital-intensive industries essential for development. These initiatives include the recently created New Development Bank (NDB), set up by the group of countries known as BRICS (Brazil, the

Russian Federation, India, China and South Africa), the Asian Infrastructure Investment Bank (AIIB) and the Bank of the South. The decisions to create these institutions were partly motivated by the disillusionment of developing countries with the governance structures, patterns of lending and conditionalities associated with lending by the Bretton Woods institutions and by some of the leading regional development banks.

NDB was established at the Sixth Summit (Fortaleza, Brazil, July 2014) with the specific mandate of "mobilizing resources for infrastructure and sustainable development projects in BRICS and other developing economies" (BRICS, 2014a, paragraph 11). This focus is justified in light of the large number of unmet needs in these areas, as highlighted above. Following the agreements reached at the summit, the headquarters of NDB was established in Shanghai, China, in July 2015. The first president is from India, the first chair of the board of governors is from the Russian Federation and the first chair of the board of directors is from Brazil (BRICS, 2014a).[10] The creation of NDB occurs alongside the establishment of a BRICS contingent reserve arrangement and other recent Southern initiatives such as the establishment of the Bank of the South.[11]

The establishment of NDB is a timely and welcome initiative, not only for the reasons indicated above but also for its potential role in strengthening a network of development banks at different levels and of helping fill the financing gap for infrastructure and development more broadly. It is timely, given the current levels of global liquidity available as a result of asset purchase programmes by the central banks of advanced countries and, more fundamentally, due to the large amount of foreign reserves held by China and other emerging economies, savings that are partly placed in sovereign wealth funds and invested in low-yield assets from developed countries. Such savings could be better employed to finance the huge unmet investment needs of the South, which could yield much higher returns. As NDB starts to operate with its initial subscribed capital, it can constitute an important vehicle for channelling part of these savings to financing much-needed investment for the promotion of sustainable development in the South.

NDB was established with an initial authorized capital of $100 billion (and a subscribed capital of $50 billion). Each member State contributes an equal equity share and has an equal vote, with no veto power. In the second quarter of 2016, the bank approved its first projects, comprising

[10] The Sixth Summit was a follow-up to the two previous BRICS meetings, at which the idea of a BRICS bank had been discussed and its creation agreed upon. At the Fifth Summit, in Durban, South Africa, an initial agreement was reached to establish a BRICS-led development bank (BRICS, 2013). The Delhi Declaration of the previous year had proposed the creation of a BRICS bank for the first time (BRICS, 2012).

[11] In 2009, the Bank of the South (Banco del Sur) was established with a promised initial capital of $20 billion to promote economic development and regional integration in South America. Thus, contrary to what the bank's name suggests, the bank is not designed to serve the global South but, rather, is a subregional entity, whose founding member countries are all from South America (Argentina, Bolivarian Republic of Venezuela, Brazil, Ecuador, Paraguay, Plurinational State of Bolivia and Uruguay).

four projects totalling $811 million, most of which are in the area of renewable energy.[12] These project approvals were in line with the declaration of the Seventh Summit (Ufa, Russian Federation, July 2015), which expected NDB to start its first investment projects at the beginning of 2016 (BRICS, 2015). Following these approvals, in July 2016, NDB issued three billion yuan-denominated bonds, equivalent to $448 million, on the China Interbank bond markets. This first bond issuance is part of the bank's initial strategy to explore local currency bond issuances not only in China but also in the capital markets of the other BRICS countries (Wu, 2016).

The following subsection explores the specific features NDB might have in terms of scope, capital and governance structures and geographical coverage, as its operations continue to expand in the coming years.

D.1 New Development Bank

Scope of lending and other instruments

The scope of sectoral and country-specific lending of NDB was specified at the Sixth Summit, with a focus on infrastructure and sustainable development.

The quality of loans to infrastructure and other projects should be an important priority for NDB, as it will maximize the developmental impact of such projects and minimize the risk of default. The latter can help NDB obtain a good rating and improve it over time. Moreover, the ability to earn profits will help NDB expand its capital base and therefore increase lending in the future. Another important issue is related to the degree of financial sophistication of the instruments used. The more complex the products, the longer they take to be designed and implemented. While "plain vanilla" loans can be issued more quickly than more complicated loan structures, transactions involving equity take even longer, although they have desirable features, such as capturing part of the upside if projects are profitable. Therefore, it might be desirable to start with simple products, since these can help build a portfolio of assets more quickly.

Capital level and capital and governance structures

NDB has an initial subscribed capital of $50 billion, of which 20 per cent ($10 billion) is paid-in capital (BRICS, 2014b: article 7 (c)). Its total lending capacity will depend on the ratio of a loan to total available capital. The latter includes paid-in capital plus reserves, retained profits and surplus capital. It does not include callable capital, as the latter is not used as a base for lending. As the bank's reserves, retained profits and surplus capital will start building up only when it starts operating, the initial lending capacity of the bank will depend on its paid-in capital. Thus,

[12] The four projects initially approved were $300 million to Brazil via on-lending operations involving BNDES in the area of wind and solar energy; $81 million to China for solar power; $180 million to South Africa for power transmission lines; and $250 million to India, also for energy projects of various sorts (Batista Jr., 2016).

assuming a leverage ratio of a loan to total available capital of 2.4 (the same ratio as for CAF), then the initial stock of loans of NDB would be $24 billion. Assuming that the average loan maturity is 10 years, the average annual loan level could be $2.4 billion.

Once retained profits begin to be earned after a certain number of years, capital will increase. For example, with a return on lending of 5 per cent, profits could initially be $0.12 billion. If this is retained and added to available capital, after 10 years, available capital could reach $14 billion and the total stock of accumulated lending could reach $34 billion.[13] After 20 years, the total stock of lending could reach $86 billion and total available capital increase to $36 billion. By that time, therefore, annual lending may have risen to almost $9 billion. Moreover, given that the sovereign debt of all BRICS countries is investment grade, this is likely to permit a higher gearing ratio, which could mean even higher lending levels.

In terms of capital structure, in addition to BRICS countries, developed countries may become shareholders (as envisaged by the bank's articles of agreement) and thus contribute to higher ratings and higher lending levels. The latter would take place through two channels, namely, a higher rating would permit higher leverage, and more capital from additional shareholders would expand the capital base. In addition, if China increased its proportion of capital, given its higher rating relative to the other BRICS countries, this could also contribute to a higher rating and, thereby, leverage for the bank. Other emerging and developing countries could also participate as members and thereby contribute to expanding the capital base. Even though such countries might have lower individual ratings, they could contribute paid-in capital, which would not affect the bank's rating. Thus, if both developed countries and developing countries contributed capital, this could allow for a larger capital base and a greater loan-provision capacity. If total capital doubled to $100 billion (20 per cent of which would be paid in), NDB could provide in its first 10 years loans of around $50 billion in total (or $5 billion annually). As before, if accumulated profits were retained, then, after 10 years, NDB would be lending $7 billion annually. Assuming leverage to be double that of CAF, annual lending capacity could reach an annual amount of $14 billion and, after 20 years, reach $34 billion, while the stock of total loans could reach almost $350 billion. Thus, after 20 years, the total lending capacity of NDB would be not far below the current total level of lending of the Word Bank, which reached $45 billion in 2015. Since development banks do not finance more than 50 per cent of a total project cost – EIB, for instance, provides only one third of the financing for a given project – NDB would leverage a total of $68 billion annually.

The participation of developed countries would be welcome, and would not alter the bank's governance in a fundamental way. According to the NDB articles of agreement, the BRICS

[13] Accumulated profits and addition capital would reach that amount after 10 years through compound interest.

countries retain decision-making power, even if other countries are included as shareholders.[14] At the same time, the participation of other developing countries would give voice to most borrowers and therefore improve the bank's governance, thereby helping reduce the current power asymmetries in global governance.

Geographical coverage and links with other banks

In terms of geographical coverage, it would be desirable for NDB to have a balanced portfolio of loans that include both middle-income and low-income countries, as this mix can help provide benefits of geographical diversification and make the bank more creditworthy. In order to lend to low-income countries, a subsidy element might be included, whereby loans to this group of countries are made concessional. The creation of a trust fund, funded by developed countries, could support such loans.

Finally, it is important to view NDB as part of a network of development banks cooperating with each other, to create synergies and tap into complementarities between banks. Modalities of cooperation for regional and national development banks include co-financing with such institutions on larger projects. For national development banks, the first loans based on on-lending operations are welcome. Other modalities of cooperation may also include technical cooperation, once NDB is well established, with regional or national development banks in poorer regions.

D.2 Asian Infrastructure Investment Bank

The memorandum of understanding to establish AIIB was signed in October 2014 in Beijing, with operations formally launched in January 2016. There are currently 57 members, the majority of which are from within the Asian region (see http://www.aiibank.org/). A significant share of the authorized capital stock of $100 billion is the contribution from China, giving the country veto power on decisions such as structure, membership and capital increases, which require at least 75 per cent of votes. In order to reflect the regional character of AIIB, its regional members are majority shareholders, holding approximately 75 per cent of shares. The bank's creation reflected the recognition of the importance of infrastructure to the development of Asia, and the need for significant additional long-term financing for building infrastructure in the region. While AsDB estimates Asia's infrastructure financing needs at around $720 billion per year in 2010‒2020, its own annual loan approval amounts to only $10 billion (see figure 9). Its main funding mechanism will be through bond issuance, in both regional and global markets.

[14] Item 8 of the articles of agreement of NDB states that the voting power of the BRICS countries should not be lower than 55 per cent of the total voting power, even if other countries become members and increase their voting power over time (BRICS, 2014b).

AIIB aims to finance both national and regional infrastructure projects. The latter will aim to support trade and further development of the region's production networks. In particular, AIIB, together with China's Silk Road Fund, is expected to contribute to the financing of China's One Belt, One Road strategy, based on the creation of two modern-day silk roads that will cross Asia and reach Europe. The initiative aims to promote regional integration through the provision of transport and energy infrastructure (Kozul-Wright and Poon, 2015). Although the focus is Asia, there have been suggestions that the strategy should include Africa, by means of focusing on industrial relocation from China to the region (Lin, 2015).

AIIB faced considerable scrutiny at the time of its announcement, with questions arising about issues of governance, standards and transparency. Moreover, concerns were raised that the bank was being created as part of an effort to displace existing multilateral banks. However, similar to NDB, AIIB may not be interested in replacing current similar institutions but, rather, intend to improve upon them. Already in its operation, AIIB portrays itself as a bank with a lean structure and a non-resident board, and the bank's first president has vowed to have a bank that is "clean, lean and green" and that adheres to the highest international standards (Donnan and Sevastopulo, 2015). The latter does not imply, however, that AIIB will operate along similar lines as existing banks. The idea is to pioneer a more pragmatic approach to development and seek to combine high standards with rapid loan disbursements to meet financing needs in the Asian region and beyond. With a target of lending of $1.2 billion in 2016, AIIB had eight loans approved within the first nine months of operations, of which six were for projects co-financed with AsDB, the European Bank for Reconstruction and Development, the International Finance Corporation or the World Bank.[15] This pattern of lending hints at the complementary role played by the bank, alongside that of existing multilateral financial institutions (Kamal and Gallagher, 2016).

[15] The eight loans were for projects related to power, transport and urban investments in Bangladesh, India, Indonesia, Kazakhstan, Myanmar, Pakistan and Tajikistan (see http://euweb.aiib.org/html/PROJECTS/AIIB website).

E. Conclusion

In an era of excess global liquidity and savings on the one hand, and an acute shortage of financing for development on the other, this report argues that development banks at all levels – national, regional, multilateral – can play a critical bridging role between savings and financing needs and thereby contribute significantly towards the achievement of the Sustainable Development Goals.

Unlike commercial financial institutions, geared towards short-term projects and returns, development banks are by design providers of long-term finance. Their funding is predominantly in the form of long-term liabilities, they have technical expertise to take a leading role in the design and execution of development projects and they have the financial means to attract other players to co-financing. Historically, they have played such a role regarding early as well as late industrializers. In future, they should continue to be a key feature in the development finance landscape.

In addition to long-term finance, development banks can provide countercyclical lending, thereby making economies more resilient to shocks and downturns. In doing so, they can help countries protect their productive capacities for their next expansionary phases. This report shows that a countercyclical role has been played by the national development banks of large developing economies in the recent past, as well by regional banks such as EIB, which has an explicit mandate to help sustain levels of activity and employment in its borrowing countries in times of crisis.

Over the years, national development banks have been key levers for national economic transformation and, in particular, for industrialization. Of the banks discussed in this report – BNDES in Brazil, KDB in the Republic of Korea, IDBI in India and CDB in China – most currently stand among the largest development finance institutions in the world. They therefore have considerable firepower to ignite the creation of new industries and provide support to a more inclusive development strategy.

In contrast, at the international level, long-established multilateral and regional development banks other than EIB have exhibited limited loan disbursements. In this context, smaller regional and subregional development banks have stepped in, vigorously expanding their loan portfolios and in this way helping fill critical financing gaps. In addition, the national development banks of the larger developing economies have supported international development through their expanding international operations. These are positive responses to shortages in the international development finance architecture, yet the provision of development finance remains largely insufficient and uneven. In Africa, for example, subregional development banks have small capital bases and therefore limited lending capacity.

In response to failures in the current international financial architecture and its inability to provide sufficient financing for development, cross-South development banks are emerging. The new banks are expected to supplement the amount of financing for long-term investments that are on offer globally, and to better serve the interests of economic development, along with greater concern for sustainability and inclusiveness. As they start operations, they will likely foster a healthy competition with other development banks. For example, following the creation of AIIB, the World Bank decided to step up its presence in the area of infrastructure development by setting up a Global Infrastructure Facility. This is a welcome step, given the World Bank's relatively limited spending on infrastructure development in recent years. Such an initiative points to an important role for the new banks; they can exert a positive influence on existing multilateral financing institutions, by encouraging the latter to move away from excessively conservative lending practices. In addition to fostering healthy competition, most important is the fact that they may engage in collaboration with each other, thereby creating synergies and complementarities between old and new institutions.

Moreover, the new South-led banks can work closely with national development banks, particularly from the BRICS countries, such as Brazil (BNDES) and China (CDB), as proposed at the Seventh Summit and evidenced by first loan approvals of NDB. While international banks may have greater expertise in the engineering and financing aspects of loans, national development banks have greater local knowledge, thereby helping reduce asymmetries of information at the national level. By partnering both with international and national banks, these new banks have the potential to become the nub of a worldwide network of development banks. The main strength of such a network would be its diversity in terms of expertise, focus and geographic reach. Greater diversity in the international financial and monetary landscape is welcome, and the additional resources that the new institutions are expected to provide can have a significant positive impact in terms of generating more long-term financing for development.

More broadly, the establishment of large institutions such as NDB and AIIB, as well the BRICS contingent reserve arrangement, with a greater level of representation from the developing world, can be seen as worthy changes in the international financial system in favour of developing countries. Most importantly, they can encourage meaningful reforms from within the system, leading to the emergence of a new international financial architecture that is better able to contribute to financial stability and prosperity worldwide.

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