

The Future of National Development Banks

**Co-Chaired by Stephany Griffith-Jones and José Antonio Ocampo
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Project Framework: Stephany Griffith-Jones and José Antonio Ocampo

In the opening session, Stephany Griffith-Jones noted that since the 2008 Financial Crisis, there has been a renewed interest in national development banks. Private financial institutions are unable to provide sufficient long-term funding to key sectors and are also procyclical, exacerbating challenges during economic downturns. Historically, there were numerous development banks in Latin America, but ideological and economic changes in the 1980s and 1990s resulted in their privatization. Through the Washington Consensus, the World Bank also advocated for closing of national development banks.

However, development banks have resurfaced as a solution to many of the existing economic problems, especially after the 2008 Crisis. Development banks can provide long-term as well as countercyclical financing. They can also help diversify a financial system away from a reliance on large commercial banks in a way that increases competition and specialization. Development banks also have access to public resources, and they can leverage public funds by raising capital against paid-in capital that is provided by the government. They can promote financial inclusion. They also help the government fund projects that may be underfunded, such as infrastructure, agriculture, renewable energy, and energy efficiency. They can even play an important role in facilitating international trade and investment, such as the US Export-Import Bank.

Nevertheless, Stephany Griffith-Jones also noted that there is substantial variation in both the structure and activities of development banks. Important features are that 54% of all loans are over 10 years in maturity, suggesting they are providers of patient capital. 89% borrow from other financial institutions and/or issue domestic bonds, and 41% accept public deposits. New data also shows that the real lending rates of NDBs are lower than commercial banks, they lend more to corporates than private banks, and have higher equity ratios.

As Jose Antonio Ocampo pointed out, there is also variation in their financial instruments. Some development banks are first tier lenders, while other also engage in second-tier lending. NDBs can also provide guarantees, and in some cases guarantees are growing faster than lending.

Direct investments have also played an important role in Latin American development banks, although this has been downsized recently, at least outside key investments in things like environmental sustainability. Finally, development banks can provide subsidies—either through direct transfers or through subsidized interest rates—though this has become less common.

Good governance is key to NDB success. Coordination with government policy, as demonstrated by Germany’s KfW and China’s CDB is also crucial.

There are also questions about how development banks should be governed. For instance, should NDBs use the same regulatory frameworks that govern commercial banks? What are the procedures for assessing their contingent liabilities? Or how much they need to keep in reserve? It is also worthwhile thinking about what are the right pre-conditions for development banks to function well. This would include interest rates, inflation, and depth of capital markets.

Discussion

During the discussion, conference participants broadly agreed with the argument that development banks have multiple positive implications for development. Questions were mainly targeted to clarifying precisely how development banks operated, and how they related to both the government and larger economic context. These included:

- Who are national development banks supporting?
- How do development banks interact with other financial institutions and mechanisms?
- How do development banks interact with smallholder farmers, whose main issue is not long-term finance but working capital?
- What type of credit lines are these banks using for their countercyclical role? During a crisis or a recession, companies are not interested in long term lending, but rather working capital needs. How do development banks address these issues?

In their response, Stephany Griffith-Jones and José Antonio Ocampo emphasized that development banks are only one—but perhaps critically important part—to the development of an economy. They emphasized that there were many ways to structure a development bank, and this is dependent on the context. They also mentioned that development banks raise numerous questions that have not been solved, such as how they can relate to the private market, how they can “capture the upside” of investments, and how they can develop instruments for new challenges, such as shadow pricing for carbon and other environmental issues.

BNDES (Brazil): Rogério Studart

In his presentation, Rogério Studart noted that BNDES has historically been at the centre of the transformation of the Brazilian economy since 1952. Today, however, Brazil is going through one of its deepest crises, and the role of BNDES has been uncertain.

Like most other national development banks, BNDES provides a variety of services for the Brazilian economy. It provides financing to sectors that do not have access to private capital;

promotes transformational investments at critical stages of Brazil’s national development strategy; promotes exports and the internationalization of companies; provides a countercyclical role; leverages public resources to create bridge loans, blended lending, and guarantees; and promotes innovative financial instruments to crowd-in private capital.

Yet Brazil has still lagged behind in two key sectors. First, the decline in public investment in infrastructure has been significant. The WEF Infrastructure Quality chart demonstrates how far Brazil lags its peers; Brazil has inefficient transportation networks that reduces competitiveness. The infrastructure investment as % of GDP has gone down from 5.42% (1971-1980) to 2.16% (2000-2014). Second, the Brazilian financial sector does not function properly as there is little provision of long-term capital. Brazilian stock market capitalization is underdeveloped as proven by the number of listed companies, as well as the stock market capitalization as % of GDP. Institutional investors continue to emphasize short-term asset allocation strategies.

According to Studart, the “elephant in the room” continues to be the Plano Real—the plan to decrease inflation through the de-indexation of the currency. The Plano Real had three important contributions to macroeconomic policy. First was the law of fiscal responsibility. This brought discipline but also rigidity given the structure of spending commitments, some related to the social debt and inherited infrastructure, and limited the ability of the government to engage in countercyclical fiscal policies. Second, floating exchange rates increased exchange rate pass-through and raised concerns about inflationary shocks. Finally, the central bank adopted a mandate that centred on fighting inflation. Together, these changes decreased the ability of the federal government to impact the economy. Today, even though inflation has decreased, interest rates remain very high; the private interest rate is 35% for bank lending.

Discussion

Participants had questions primarily about how BNDES could be restructured to better achieve its goals. For instance:

- Was BNDES overcapitalized, and what could have been done about it?
- How much of the problems that faces BNDES is a consequence of its internal structure, and how much is the larger macroeconomic framework and political economy of Brazil?
- Given the lack of bureaucratic capacity, how can BNDES avoid problems of corruption?
- Is BNDES the appropriate solution for compensating for the lack of public investment, particularly when this type of investment has decreased all over the world?

Studart recommended that two big areas of reform are needed. First, there needs to be a focus on environmental sustainability and inclusion and second, there needs to be help with the origination of infrastructure investments so that public investment increases and private investment can be crowded in.

NAFINSA (Mexico): Juan Carlos Moreno

Development banks have been historically important for the Mexican economy. Between 1933 and 1963, seven development banks were created. Since they began operations, development banks gained increasing importance in the economy, either participating directly in production or indirectly providing subsidized loans. They—and especially NAFINSA—became a key part of the financial sector and of the business culture in the nation. Traditionally development banks in Mexico had three objectives: (1) act as financial agents of the federal government; (2) strengthen the financial market: stocks, government and corporate bonds and inclusion; and (3) develop key sectors and activities.

Of all of the Mexican development banks, NAFINSA was the largest, as well as Latin America's oldest. In the beginning, NAFINSA had the role to promote fixed capital investment. Its importance grew steadily as a % of GDP between 1940-60, to reach 9% of GDP, and declined thereafter. The funds of NAFINSA were directed mainly to infrastructure, and alternatively to manufacturing or to basic industry. From 1940 until the 1980s, NAFINSA helped to regulate the stock market, provided long-term loans and gave financial support to promote key industries and infrastructure (directly or indirectly by subsidized loans). The dates below highlight the changing nature of NAFINSA's investments:

1940-47: irrigation, roads, bridges, other public works.

1948-54: electricity and transport were predominant.

1970-82: Key financial source for industrial projects, in charge of several large companies.

As the Mexican economy developed, NAFINSA facilitated access of MSMEs, financing priority investment projects and other business development services and contributed to the formation of financial markets and act as trustee and financial agent of the federal government. Essentially, NAFINSA served as the financial agent of the Federal Government.

But by the 1990s, the neoliberal shift in the development agenda restricted its actions to correct market failures, complementing the commercial banking system. Its role as policy bank as market creator was basically taken away. It ceased to promote industrialization. Its trust funds devoted to such objectives were dwarfed or ended. The new Organic Law of 1986 limited its activities and goals, stopped its promotion of special sectors and limited that its direct participation in enterprises to be a minority and temporary one. Firms under its direct control went from 88 in 1982 to 32 in 1991. In the nineties, NAFINSA emphasized the promotion of commerce and service sectors, with the idea that they were sectors with previously little access to formal sources of funding. Guarantees became the main instrument for NAFINSA.

In short, the changes in NAFINSA reflect a change in how in the old model of development banks were seen as a key tool to promote capital accumulation in strategic productive sectors and regions that were underdeveloped. The main actor was the state, and its strategy was to emphasize structural transformation to achieve robust economic growth, reduce poverty, and help to keep inflation manageable. The new model saw development banks as having a subordinate role relative to commercial banks. Instead of serving the state interest and replacing the commercial banks, they were seen as complementing the commercial banks. This was enshrined in law, including their mission, scope and tools. Ultimately this implied that their goal

or rationale was to correct for market failures that commercial banks could not solve for profitability reasons.

In recent years, the portfolio and objectives of NAFINSA changed again. Its total portfolio of direct and induced credit grew rapidly in 2010-15 (40% in real terms), and allocation of direct credit increased by 70% and guarantees by 50%, while the factoring program of production chains fell 40%. The “Cadenas Productivas,” a flagship initiative, lost relative weight in recent years. Its decline in the portfolio is related to exit from it of many, so called first order companies (FOC) of the private sector, marked by high levels of operation that shifted to similar schemes from the commercial banks. Their exit was partially offset by an increased outlay of funds to suppliers of SOEs and entities in the Federal Procurement Program. By 2015, around 40% of the funds operated by the program “Productive Chains” operated through this window. NAFINSA also has several programs aimed at microcredit, and has also been a key financial agent in securing funds from the external capital markets. A few years ago it floated a green bond signalling its return to the world capital markets for the first time in 18 years. Virtually its entire portfolio is based on its credit and guarantees programs, with operations aimed at giving “second-tier” support through commercial financial institutions. Today less than 9% of its funds to the private sector go as first-tier operations.

Today, the vast majority of NAFINSA resources finance the private sector. NAFINSA’s resources are distributed almost evenly between commerce and industry, with relatively more to other services. Support for MSMEs is carried out mainly through bank or other specialized commercial intermediaries. Nafinsa has created the “Programa Nacional de Franquicias” that allows larger SMEs to participate in a franchise with an interest-free loan through a financial institution that covers up to 50% of the costs to be reimbursed in 36 months. Between 2007 and 2011, the program supported 1,627 franchise outlets. Financial inclusion is supported both by direct credit and guarantees for products such as microcredits. NAFINSA (with the Ministry of Economy) has created different funds with the purpose to invest in projects of Mexican entrepreneurs.

There are numerous strengths of the new bank. For one, the new role of development banks is in accordance with the shift brought about by the market reforms in Mexico in favour of open markets and of the retrenchment of the state in economic affairs. Its experience shows that development banks can and should have important roles as an institution committed to collaborate with the private commercial banking system in compensating market failures in financial intermediation and as a financial agent of the federal government. However, there are numerous weaknesses as well. In the early 2000, the policy-induced weakening of NAFINSA and its transformation to a second-tier financial institutions soon translated into a credit rationing that severely affected SMEs and the overall level of economic activity, employment, and poverty. Furthermore, as a renewed vision of the relevance of development banks gained momentum, NAFIN’s activities resumed a strong pace and soon induced an improvement of financial inclusion by SMEs.

In short, the neoliberal market reforms forced a radical change in NAFINSA, modifying its objectives, instruments, and channels of intermediation as well as its target population. From

being Mexico's key policy bank it was downsized to become a 2nd-tier intermediary explicitly oriented to ease MSMEs' access to financial resources. Within the strict perspective defined by the priorities and objectives set decades ago by the market reforms and routinely ratified by subsequent governments, the challenges of NAFINSA boil down to having more capital, more leeway in selecting and expanding its body of human resources, and more possibilities to engage in first-tier, direct credit operations.

Nevertheless, there are many challenges facing NAFINSA in the near future. Continued weakness in the Mexican economy means that NAFINSA must be a relevant instrument in strengthening financial intermediation for capital formation with a developmental vision to promote a structural transformation of the Mexican economy. Therefore, it should recover the functions, prerogatives and responsibilities as a policy bank. But this implies that the government should adopt a new development agenda, with an active industrial policy and a boost of public investment, something that diverges significantly from the current government perspective on how to achieve economic growth.

CORFO (Chile): Stephany Griffith-Jones

In her presentation, Stephany Griffith-Jones highlighted the changing role of Chile's national development bank, CORFO. Some of its former activities—such as in creating state enterprises in electricity and steel— are no longer carried out. CORFO is not allowed to own state companies. Today, however, despite a scaling down in some of its resources, CORFO has found a new role in the national development strategy. There is consensus that CORFO can help, but at present, it possesses only limited resources that are insufficient to both serve sufficiently a countercyclical role as well as a force for structural transformation. Griffith-Jones also highlighted that currently, CORFO needs to have an important role. The Chilean economy has suffered from a drop in the global price for copper, and productivity growth has been slow. She recommended that CORFO could increase its size and assets, since it only accounts for 1% of total Chilean GDP.

CORFO is principally funded by the budget. Loans have been decreasing as a total portion of CORFO's activities while guarantees have increased. The advantage of guarantees is it can be leveraged, but it also means that its role is more passive than credits. It is also increasingly giving guarantees rather than loans. When compared with other banks like Germany's KfW, CORFO is proportionally small. Therefore, Griffith-Jones notes that there is a case for CORFO to issue bonds on the financial markets, much like other national development banks do. This makes even more sense given the depth of Chile's capital market, which, in proportion to GDP, is larger than it is in Germany.

During the 2008 financial crisis, Chile's public banks were the most countercyclical in Latin America, increasing their lending by 20%; the commercial banks decreased their balance sheets. CORFO increased its action by injecting an additional USD 850 million to the financial markets,

which was then leveraged even more. It also increased the flexibility of its lines requirements and funding limits.

Chile has also engaged in a more active development strategy in recent years. CORFO has developed interesting instruments. For instance, Start Up Chile gives USD 40,000 in grants to Chilean and foreign entrepreneurs to help create small (little ponies), medium (centaurs) and larger corporations (unicorns). The caveat is that, an evaluation shows, there is an increase in capital, but not overall impact on employment and exports. In addition, the solar industry has become very successful, and Chile has already surpassed its target. Corfo has played a role in this.

Discussion

Participants were primarily curious as to how CORFO can transform itself into a more active development agent. For instance, what are the trade-offs of the different avenues of investment? How can Chile diversify its economy with a relatively small sized bank? What would be the implications for CORFO if it were to borrow from the capital markets? How integrated is CORFO in the transition to start-ups and solar energy? Griffith-Jones largely agreed with the comments, and reiterated that a reassessment of the role of CORFO in the economy was necessary, and that she thinks that CORFO could play a much more transformational role if given, or was allowed to raise the financial resources.

Colombian Development banks (Colombia): José Antonio Ocampo and Paola Arias

In the presentation by José Antonio Ocampo and Paola Arias, they noted that the major feature of Colombia's national development banks is that they constitute a system of multiple, specialized institutions. These are: (1) Financiera de Desarrollo Nacional FDN, which is infrastructure bank, and a successor of the energy bank FEN; (2) Banco del Comercio Exterior BANCOLDEX, which is the EXIMBANK but also absorbed the industrial bank; (3) Financiera de Desarrollo Territorial FINDETER, which is for local public sector investments; and (4) Fondo para el Financiamiento del Sector Agropecuario FINAGRO, which is the agrarian development institution. They were created at different times to promote sectors that were considered strategic for the country's development. Their presentation focused on the development banks' roles in three market failures: infrastructure, financial inclusion and entrepreneurial growth.

The authors noted that Colombia has a long history of public sector banking. The first development bank was Instituto de Fomento Industrial (IFI), created in 1940 as part of a Latin American wave with the major objective of promoting manufacturing development through equity investments (in partnership with private investors) and long-term lending. A second push came with the banking reforms of 1951, which gave development functions to the central bank, and were reflected in the establishment, in the 1950s and 1960s, of several development funds, which created rediscount facilities directed to sectors that were prioritized in the policy agenda. The funds were financed from reserve requirements, directed credit obligations, bonds issued by Banco de la República in the domestic market, and credit lines from multilateral development

banks. They provided credit under preferential interest rates and maturities. Interest rate subsidies were reduced or eliminated by the mid- and late 1970s.

A new development bank, Financiera Eléctrica Nacional (FEN) was created in 1982 to finance the electricity sector, which at the time was essentially state-owned; the central bank's electricity development fund for the sector was transferred to the new institution. The main reforms of the system were introduced from 1989 to 1991, and were part of a major domestic financial liberalization. The central bank's development functions were eliminated, as part of a broader reform of Banco de la República, which became an autonomous institution in charge of monetary and foreign exchange policies with the 1991 Constitution. Public banks were privatized with one exception, Banco Agrario, and development banks were kept but separately from the central bank. In the transition from the old to the new policy regime, three development banks were established to manage the old development funds: (i) Financiera de Desarrollo Territorial (FINDETER), created in 1989 to finance local development infrastructure; (ii) Fondo para el Financiamiento del Sector Agropecuario (FINAGRO), formed in 1990 to finance the agricultural sector; and (iii) Banco de Comercio Exterior (BANCOLDEX), which was set up in 1991 to finance non-traditional exports and started operating in 1992. These institutions took over most of the development funds managed by the central bank; the remaining funds, those for industrial development, were transferred to IFI in 1994.

Later reforms included broadening the responsibilities of these institutions, and included two major transformations. In 2002, IFI was absorbed by BANCOLDEX to manage the financial strains faced by the former, but mixing two entirely different business models. In 2011, FEN was transformed into the Financiera de Desarrollo Nacional (FDN), with the broader objective of financing infrastructure in partnership with the private sector. Directed credit was dismantled with one major exception: the agricultural sector, for which there is still the commitment to allocate 15% of all commercial bank credits. If banks fail to do so, they have to buy bonds issued by FINAGRO, which provides the funds to rediscount loans from other institutions.

Despite the numerous institutions, the authors noted some commonalities. All of the institutions operate as second-tier institutions; only FDN does any first-tier lending. All are permitted to make equity investments, though they have done so sparingly. FDN offers credit enhancement facilities, while FINDETER and BANCOLDEX are planning to do so. They also provide additional services to clients, such as advising, project structuring, technical assistance and training, and portfolio administration. Finally, except for FINAGRO, which benefits from the mechanism of directed credit, the others must fund themselves in the markets. BANCOLDEX and FINDETER mix domestic term deposits and bond issues with loans from MDBs and international banks. FDN is essentially financed from equity investments and the government's purchase of securities issued by this institution. Regarding size, the banks are all relatively small, at around 1% of GDP, though FEN, BANCOLDEX, and IFI have all shrunk in recent years.

Infrastructure is one of the key areas of investment by Colombian banks, particularly because they were envisioned to compensate for market failures. Two of the banks are active in infrastructure. First, FDN has a three-pronged mandate: (i) directly providing part of the financing required by PPP infrastructure projects; (ii) creating incentives for other market agents

to participate in the financing of these projects by mitigating some of the market failures; and (iii) supporting the creation of an infrastructure “project bank” for all types of initiatives. In order to achieve these goals, FDN has developed a myriad of products, senior and subordinated credits and credit enhancements, to catalyze resources into infrastructure projects, mainly the 4G highways. Aside from the design of new financial instruments, FDN has also promoted regulatory changes, contributed to increase the technical capacity and standards of private and public institutions involved through different training courses, jointly undertaken with universities and industrial associations, disseminated guides on best international practices on project finance, and broad-based socialization of the 4G program. In addition, the authors noted that FDN has played an important advisory role, providing technical assistance, structuring projects, and conducting research on good management practices in infrastructure to support other institutions in the public sector. Second, FINDETER has continued providing rediscount facilities for urban and local projects and has been very instrumental in the implementation of a series of key programs. Lending comes in three ways: ordinary rediscounts, subsidized interest rates, and special credit lines, but lending is also complemented by its supply of non-financial services, as it supports the regional and local governments to plan, identify, and prioritization of strategic projects. Additionally, FINDETER supports local governments in the structuring of projects, to guarantee that they are viable from a technical, legal and financial point of view.

As far as financial inclusion, both BANCOLDEX and FINAGRO are active. Close to half of BANCOLDEX’s rediscounts are destined to micro, small and medium-sized enterprises inherited from IFI. It is also in the process of designing a new unit of financial inclusion specialized in microfinance, and already manages the major program to coordinate financial inclusion, Banca de las Oportunidades. That was created in 2006 to promote access to credit and other financial services for small firms and poor households. While it does not directly provide financial services, its activities include: (i) subsidies to strategic activities or products that can enhance financial inclusion; (ii) co-financing of strategic pilot projects that cannot be standardized; and (iii) technical support to microfinance institutions, credit unions and NGOs. As far as FINAGRO, a large proportion of its rediscounts go to medium and large-sized agricultural producers. It has also developed new instruments to promote microcredit through non-banking institutions. This includes: (i) a new microcredit line; (ii) a special program for rural microenterprises (PADEMÉR); and (iii) a special fund for microfinances (FMR). FMR is a joint initiative of FINAGRO, the IADB, and Banca de las Oportunidades. It wants to offer a more integral solution for rural inclusion that, in addition to credits aimed at non-banking institutions, also includes technical assistance for these institutions. Financial inclusion is also supported by two guarantee funds, with that for agriculture being managed by FINAGRO.

Finally, BANCOLDEX promotes entrepreneurial growth as well through its rediscount facilities. Although BANCOLDEX does not have specific innovation policies, it manages one of the major policy instruments in this area, the program iNNpulsa. The institution has also been very active in promoting private equity venture funds to support business growth. It has supported them with its own equity investments, as well as the promotion of good practices.

The authors concluded that the redefinition of the functions of these institutions look promising, and there is probably today the strongest support for the role of development banks since the

market reforms of the early 1990s. The authors argued that although specialized in their specific areas, it is important that they operate in collaboration. Funding strategies could also be an area of mutual interaction and learning, particularly to guarantee that their lending strategies is consistent with the more competitive financial sector that characterizes Colombia today. They also noted that there is an on-going discussion on whether the boards of the banks should cease to be chaired by the respective Ministers to meet OECD standards, weakening an essential element of public sector administration characteristic of Colombia. Finally, they noted that there are no specific prudential regulations for these institutions.

China Development Bank (China): Qiyuan Xu

Qiyuan Xu explained that in China, there is not just a need for development banks because of market failure. Before the 1990s, there was no market. The China Development Bank was born, therefore, in a transition economy. Before 1994, the fiscal capacity at the local level was very strong and the fiscal capacity at the central government level was very weak. In 1994, there was reform in tax system and budget law system, and while there was still significant expenditure at the local level, but not the revenue collection. The CDB helped fill this gap. The CDB took over the business of the China Construction Bank and six investment corporations, but therefore had no independence from the ministries and was forced to assume bad loans.

Consequently, the CDB was born bankrupt in the 1990s. The NPL ratio in 1997 was 42.65%, and the NPL ratio in the coal industry was 75%. Local government had poor capacity to finance infrastructure. The new model of the City Investment Companies (CICs), which the CDB had helped to create, provided mechanisms for local governments to raise capital, but simultaneously created two additional problems. First, project based financing meant that many projects still didn't receive capital, and second, in 1995, the Law of Guarantees meant that local government was unable to give guarantees to local projects. The CDB also lacked flexibility. On the asset side, CDB's projects were defined by the State Planning Commission; on the liabilities side, the PBoC (People's Bank of China) forced the CDB's bonds onto commercial banks via administrative command. The interest rates were defined, by the PBoC as well.

By the late 1990s, however, the CDB had engineered an amazing turnaround. The NPL ratio decreased from 60% to less than 1% over twenty years. The CDB disposed of NPLs through help with the central government, whereby the central government created an institution that took over RMB 100 billion of bad debt. The CDB also strengthened the loan approval process and built-up a national network of branches. In this way, the CDB became more independent of central government intervention in selecting projects through (1) a strong CDB leader, (2) building an approval system, and (3) increased planning.

In the end, the CDB became a shaper to the financial system. Since local governments were not allowed to issue bonds, the CDB created a new entity. The LGFV (Local Government Financing Vehicle) was a legal entity with corporate governance structure. The CDB developed bundled loans to LGFV for different types of infrastructure projects—some with high revenues, some

with medium amounts of revenues and some without revenues. Before 2007, the total volume of LGFV was RMB 10 trillion, but by 2014, it reached RMB 30 trillion. Since beginning 2015, however, local governments can issue bonds and run deficits, reducing the need for LGFVs. The central government ultimately wants to restrain LGFV and move towards a PPP model, though the specifics are still being worked out.

Discussion

Following the presentation, the discussion centred mainly on the experiences of the CDB and how a turnaround was engineered:

- How did the competence and technical knowledge of the CDB grow so quickly? How do you insure the independence of the three technical committees that were created to improve the financial viability of the bank?
- How did the experience of the CDB compare with that of the Japanese development banks?
- What were the terms of the CDB's lending, with regards to interest rates and maturities? What was the variation of the different instruments?
- How are NPLs accounted for, and how did the CDB so effectively bring down the ratios?

Qiyuan Xu noted that unlike other countries, China decided to consolidate its many development banks into a larger one. On non-performing loans, part of the reason for the success of the CDB was that assets grew much faster than the NPLs, allowing the ratio to fall quickly.

KfW (Germany): Ulf Moslener and Peter Volberding

In their presentation on Germany's development bank KfW, Moslener and Volberding emphasized the important role that KfW has played in supporting the German economy. KfW is Germany's largest development bank, and issues around EUR 80 billion in new loans and investments every year, mainly for exports, energy efficiency, and small and medium-sized enterprises. KfW has also been active in the structural transformation of the German economy, providing funding for key industries and, more recently, Germany's Energiewende. However, they also noted that what KfW finances is only part of the story; equally important is how KfW engages with policy makers. Therefore, the authors argued that it is critical to note that KfW's importance extends beyond providing financing, and instead also includes the creation of a new policy space for development banks vis-à-vis the German government. The authors used the heuristic of a policy cycle to explain how this works.

This policy cycle was adapted from sociologists Abbott and Snidal (which originally looked at regulation), but the authors instead stylized it to examine how policies are created in the German case. The policy cycle is conceptualized as a five step, repeating process—first there is agenda setting, which is where the issue is placed on the agenda. Second is negotiation, where actors define and negotiate the parameters of how a particular policy will be implemented. Third is implementation, which includes creating the policy for the economic actors, such as firms, private households, etc. This also can include coordination with the government. Fourth is

monitoring, which ensures that the goals are being adhered to, and finally is enforcement, whereby the government or KfW will respond to non-compliance. After a particular policy has been implemented and finished, KfW will then go back to create new policies using the information procured from the experience. In this way, policies are iterative and interactive.

They argued that KfW plays an active and involved role at each stage of the policy process, and this has been beneficial because it ensures continuity and effectiveness. The authors assume that KfW possesses agency and attempts to influence the context in which it operates. They also noted three characteristics about the institutional structure of KfW. First, KfW acts as a market actor with economic objectives, but has a strong government backing. In this way KfW is meant to compensate for market failures and promote socially beneficial projects that are underfunded by the market. It is financially backed by the government, yet also cooperates with commercial banks. Second, KfW has access to bureaucrats and regulators. This is because KfW is still a government institution, yet also has essential market and on-the-ground knowledge that is desired by the government. It can achieve policy synergy with the government through a carrot and stick strategy, whereby the government increases regulation and KfW provides funding to incentivize new behavior. Finally, KfW has a lot of in-house technical expertise. They have both economic and technological knowledge that can help shape policies, revise legislation, and improve operations.

What makes KfW important is that at each stage, the bank plays an active role. It helps select the programs, the parameters that constrain them, implements them, monitors and enforces them. If they are successful, the KfW will revise the program and restart the cycle; if not, policies would either be scrapped in favour of new ones or entirely eliminated. As a result, the public mission is brought into policy decisions that also rely heavily on the allocative efficiency of markets.

The authors used the examples of green finance and the post-financial crisis lending as evidence. Moslener talked about how KfW had developed housing efficiency programs, and how these programs even became the basis for energy efficiency housing standard. KfW also engaged in some monitoring and enforcement of these standards. Moslener also mentioned that KfW has been important in the *Energiewende*. As far as the financial crisis, KfW took on additional burdens on behalf of the German government. However, they warned that KfW's model might not be replicable in every context.

Discussion

The ensuing discussion had people trying to identify precisely how KfW has been so successful in promoting its development agenda, and how this might be replicated in other contexts. For instance, the most prevalent question was whether or not KfW's model is simply too good to be true. Another participant asked that if during crises, KfW switched to being a first-tier—does becoming a first tier bank make it easier to be countercyclical? There were also political economy questions. How important are subsidies for KfW? How does KfW remain independent of the government when it operates so closely within the policy cycle with them? How does KfW relate to the commercial banking sector, with whom KfW must compete on some level? In their responses, the authors noted that the management of KfW is careful, and there are a lot of things that enable it to work properly. This includes good governance, a well-developed financial market, competent bureaucracy, and strong legal framework. They cautioned that this is not

always reproducible in other institutional contexts, and that the lessons for the greater development agenda may be circumscribed.

Peruvian Development Banks (Peru): Oscar Dancourt

The Peruvian case is one where development banks had a relatively limited impact. Furthermore, there is no clear development strategy, to frame their action. Prior to the 1990s, 30% of the Peruvian banking sector was in public hands. In 1990, bank credit in foreign currencies expanded rapidly, in what became dollarization of the Peruvian economy. In 1992, and in a relatively short amount of time, most of the banking system was privatized. For instance, in 1981, 15% of GDP was held by state banks, while only 5% was in private hands; in 2015, less than 5% was public, and 32% was private. Banco de la Nacion and the Corporacion Financiera de Desarrollo (CFD) were shrunk after the 1990s; the Banco de Fomento was dismantled. In their place, two new institutions were created; the Banco Agropecuario (in agriculture) and the Fondo Mi Vivienda (housing).

Unfortunately, problems for Peru mounted as the 1990s progressed. Credit dollarization reached a high of 80% in the late 1990s. Besides privatization of the banking sector and high levels of dollarization, the terms of trade and GDP plummeted; yet there were no development banks in place. Credit funding was also mismatched, and deposit rates were around 3-5%, while the interest rate for loans of SMEs was around 33%. Therefore, the main market failures at the time were threefold: (1) lack of long-term financing in local currency, (2) lack of financing for small businesses, and (3) lack of agricultural financing. The CDF and Banco de la Nacion were also prohibited from creating a bank if a private bank already existed in the area, further limiting the impact that development banks could have.

In short, the external funding of these state financial institutions arose because they were not allowed to compete in the deposit market with private banks or participate on an equal footing with commercial banks in the money market governed by the central bank. With the exception of the Banco de la Nacion, these institutions have ended up as followers of international investment banks through the local intermediation of the greater external debt that these entities offered them. As a result, none of these institutions could become in an effective NDB.

20 April

Patient Finance and Mission Oriented Innovation: Mariana Mazzucato

Mariana Mazzucato argued that since innovation requires long-term, patient finance, a good way of providing this is through public financial institutions. Historically, public institutions evolved from catch-up growth (mainly in financing industrialization), but more recently had played a role in innovation and developing new sectors and industries. Following the 2008 Financial Crisis, there is now a consensus that not just the rate of growth is important, but also the direction of

growth. This includes smart growth (better innovation), sustainable growth (more environmentally friendly), and inclusive growth (less inequality).

This has led practitioners to question what the appropriate role of the state is in economic growth. Mazzucato argued that we currently have a very boring approach to the state's role, which includes: setting the rules of the game and levelling the playing field; de-risking, incentivizing, and facilitating the private sector; and solving market and system "failures". This had led to a widespread assumption that value creation only comes from businesses, but in reality, value is co-created between the private and public sectors. For instance, market failure policies don't explain how the aviation sector was able to grow so fast. Therefore, the role of the public sector exists throughout the entire innovation chain.

She used the example of the iPhone to demonstrate how the US government greatly supported supposedly private innovation. She noted that the iPhone was the result of significant government research, ranging from Department of Energy, Army Research Office, DARPA, US Military and more. However, there isn't a single mention of the role of government in the various official documentation of the iPhone. Today, even though previously there was little acknowledgement of the role of the government, this is the first period where the country's decentralized innovation systems are under attack.

Mazzucato argues that public development banks can play a critical role. They serve as sources of countercyclical lending; fund long-term projects and deploy capital; target investments in high risk R&D, innovative start-ups, and innovations; and promote investment in societal problems. The role of development banks has become even more crucial because large corporations and banks are hoarding profits and not reinvesting them into the real economy. State involvement, however, can't be completely divorced from policy. Most importantly, financing should be mission-oriented. That is, it needs to be accompanied by a larger strategy that often includes investments in many diverse sectors.

Discussion

Following the presentation, participants asked principally clarifying questions regarding the relationship between a development bank, the market, and the government:

- What is the difference between equity investments versus lending versus guarantees, with regards to state-backed financing?
- How much subsidies should the government provide?
- How should development banks be regulated?
- What is the benefit of having a state development bank versus other types of institutions and instruments that do the same thing?

Mazzucato acknowledged that there are many possible instruments, but that governments need different types of instruments for different projects and sectors. She noted that equity investments are being increasingly used in Europe with EIF Funds, and the question is what is the right instrument depending on what is trying to be done? She also emphasized that creating

the appropriate eco-system for a bank and broader financial system and innovation system is also crucial for the success of a state-backed innovation strategy.

Financial Regulation and Development Banks: Lavinia Barros de Castro

Lavinia Barros de Castro addressed the impact of financial regulation on development banks. The talk was framed around four central questions. First, should development banks be controlled by prudential regulation? Second, is the Basel Accord a suitable framework for development banks? Third, regarding risk management, do development banks have different characteristics from private banks? Finally, what are the challenges brought by Basel III?

It is generally thought, at least within development banking circles, that development banks should not be governed according to standard banking regulations. For one, they do not normally receive cash deposits, nor do they constitute sources of systemic risk. According to theories of regulation, prudential regulation is supported by the recognition of the cyclical nature of capitalism, but also by the possibility of systemic risk. This occurs when the bankruptcy of one bank (1) generates contagion effects on other financial institutions or (2) affects, at some point, the payment system of an economy. All banks that collect cash deposits are source of systemic risk and should be regulated, but development banks normally do not. Yet even though there is some theoretical possibility that the illiquidity or, ultimately, the bankruptcy of a development bank (that does not collect cash deposits) can indirectly generate systemic risk, this possibility seems remote, from a practical point of view. That said, negligent or reckless behavior of a development bank, through excessive leverage or poor risk management, for instance, could cause potential fiscal damage. In this case, a government may need to provide resources (ultimately, an inflationary risk) or risk a credit crunch. It would probably not be “systemic” since the means of payment would not be affected, at least at first, but is still quite relevant.

Consequently, Basel is an inadequate framework for development bank regulation because its enforcement conflicts with the objectives of funding development. Nevertheless, as a result of the power of the Basel agreements, it became potentially applicable to development banks; many development banks, including KfW, KDB, and the CDB, even voluntarily agreed to abide by the rules because it became a seal of quality, which these banks needed to attract market resources. The voluntary acceptance of Basel II reveals something important: the Basel requirements were not perceived, by many development banks as a hindrance to their business model. This was, in part, because several of their measures were simply good practices, bringing some important advances. Additionally, the banks already possessed relatively robust risk assessment mechanisms, so the requirements did not place an undue burden. Finally, she noted that according to informal reports by risk managers in development banks, adherence to the Basel II framework led to some improvements in risk management. For instance, the creation of integrated risk management systems enabled improvements in management and, above all, improvements in the quality of databases. She emphasized that this does not mean that Basel II was an ideal framework for the regulation of development banks; but it also suggests that the international regulations were not wholly incompatible with the mission and operations.

Next, Lavinia Barros de Castro addressed whether the objective of development banks is also antithetical to standard banking operations. Development banks bear greater risks than private institutions, precisely because they operate in areas avoided by the private sector, due to their propensity for investments with greater risk or that are for longer term. The investment portfolio of development banks are different: they have lower liquidity risks because of fewer short-term liabilities; they have long-term loans that give them more freedom to renegotiate debt; they support exports to higher-risk countries, but also have more sovereign guarantees; they have smaller exposure to market risk; and they are afforded greater connections with government. The vast majority of Basel requirements for market risks are in the trading portfolio, using VaR or maturity ladder methods; yet for development banks, the greatest risks relate to currency, interest rates, and dividend flows. In Barros de Castro's opinion, the three points of concerns for development banks related to (1) the maturity adjustment in credit risk models; (2) the treatment of concentration risk; (3) and the treatment of operational risk.

As such, the Basel regulations, has the potential to aggravate the situation for development banks due to its tougher requirements. Some of the requirements are irrelevant to the operation of development banks, such as robust stress testing. However, Lavinia Barros de Castro noted many areas that were impactful on development banks. This included a range of issues such as core capital requirements, countercyclical cushions, operational risk, and concentration risk. Currently, the development banks have consulted the regulatory agencies. For instance, she raised that question that if it is assumed that development banks act counter-cyclically, does it make sense to require them to apply certain financial cushions to the balance sheets when they are attempting to correct that very market failure? Or how does the accounting work for development banks that have a large offshore balance sheet? The Basel regulations seem more focused on fixing the domestic operations. These are therefore questions that remain to be answered.

In the discussion, it was noted that many of the new requirements in Basel III do not seem to be (in principle) problematic for DBs, such as the treatment of liquidity risk, of derivatives, amongst others. Some new requirements, however, seem particularly worrisome. This is certainly the case with the new requirements regarding concentration risk. Moreover, the increasing pressure to have standardized approaches reduces the flexibility in the framework for development banks, and this may have negative implications for the credit risk of development banks. With regards to operational risk, it was noted that the adoption of a single standard would be similarly problematic, especially if the magnitude of legal risk associated with changes in the regulatory structure is pursued, which may grow as environmental and infrastructure agendas increase in relevance.

Counter-Cyclical Role of Development Banks: Alfredo Schclarek and Michael Brei

Schclarek and Brei noted that national development banks have played an important role in less developed countries, and that countercyclical credit policies can certainly have an impact during

slowdowns. However, they also note that the empirical evidence has been almost non-existent. In fact, there has been almost no evidence supporting the claim that NDBs provide any countercyclical financing.

Through a new dataset, they endeavoured to demonstrate that development banks can play an important countercyclical role. Included in the dataset are 336 banks, of which 14 are national development banks and 31 are publically owned banks. Collectively, they represent USD 4 trillion in assets. They employed an economic model to test whether national and public banks lend more during times of economic downturn vis-à-vis commercial banks. They controlled for a variety of factors, such as bank size, equity, NPL ratio, liquidity, exchange rate, real GDP growth rate, and interest rate.

They found evidence that national development banks and public commercial banks acted counter-cyclically. They posit four reasons as to why this could be the case. First, the objectives of NDBs and public banks are not only to maximize profits, but also to avoid credit crunches as a recession deepens. Second, development banks are more likely to be recapitalized than private banks, and, as such, government-run banks have more financial resources. Third, since these banks have the backing of governments, there is higher credibility to the public, and people are less likely to withdraw deposits. Finally, development banks may have a better funding structure (characterized by less deposits and more long-term funding), and have less risk of liquidity problems. Regardless of the mechanism, the authors concluded that there was sufficient evidence of countercyclical lending.

They noted, however, that the broad statistical evidence may belie a more complicated underlying reasoning. They acknowledged that the effectiveness of countercyclical lending is affected by the size of the NDB; governance measures; financial strength; and coordination with other government agencies. It also demonstrates the need for politicians to support the banks during times of crisis, as well as the need for innovative credit lines.

Discussion

A few questions were raised regarding the robustness of the claims:

- Is the data driven by BNDES?
- The risk is evaluated when it is disbursed, not when it becomes due, an issue that is not considered by Basel. Issuing a loan during a boom is much riskier than a loan during a crisis, when recovery is expected. How does this impact the data?
- Qualitatively, does the story match the data?

The Roles of Public Banks in Long-Term Funding: Felipe Rezende

Rezende emphasized the role of public banks in the long-term provision of funding. He relies on the theoretical framework of Minsky, who identified two masters of the financial system—one requires assurance that the financing needed for the capital development, while the second requires a safe and secure payments mechanism. He noted that it is very difficult to reconcile

these goals, but development banks could fit this theoretical framework by taking the second (risk-taking) objective.

In his presentation, Rezende highlighted the pressing need for infrastructure investment. In the post-crisis, era, there has also been additional problems of a marked decline in public investment, balance sheet constraints (and the short-termism of financial markets), low investment causes infrastructure funding gap (despite low interest rates). However, there is an assumption that if you have low regulation and low interest rates, investment will follow; but that doesn't always occur, and even in markets with financial depth, like Western Europe, long term funding has still been relatively low. Concurrently, there has also been a sharp increase in debt. This means that the problem is not the lack of funding, but the activities are related to leveraging and do not go to infrastructure or capital formation. The larger problem also is that there is no good project pipeline, regulation, oversight. He also highlighted the fact that institutional investors could help close the gap, but are also more likely to target mature or growth infrastructure, and perhaps avoid greenfield investments.

Rezende argued, however, that development banks can help fix these problems. There has already been a shift on the part of development banks to invest in infrastructure. Yet this requires policy coordination between the government and the development banks. Development banks can provide the supply side, but also need to coordinate with policy makers to encourage demand-side. There also needs to be a discussion on the use of financial instruments.

Discussion

Participants asked mainly about how development banks could specifically catalyze infrastructure spending. For instance, what is the catalytic role development banks can play in mobilizing funding, and blending them with private capital or new financial instruments? Can the long-term investments be funded by QE? What is the relationship between monetary and fiscal policy when investing in infrastructure? How can developing countries use development banks to mitigate risk when the very instruments they use are also based on the market? In response, Rezende noted that risk mitigation alone won't solve anything, instead there needs to be a better understanding of both the risks and how these risks change at different stages of investment.

Public Panel

At the public panel, the four panelists each talked for a short period of time, yet all addressed the questions of what the future for development banks looks like.

Stephany Griffith-Jones explained that we are now in a moment where there is renewed support for development banks, and this started in the wake of the Global Financial Crisis, where it was shown that private finance didn't fund SMEs and infrastructure, as well as being pro-cyclical. She argued that we need instruments of long-term finance that will fund structural transformation. We need a recovery of growth, greener growth, and inclusive growth. And

whenever you need a change of model, you also need to have instruments to fund these projects at their infancy. She noted that there is increasing recognition of these needs, and even a World Bank report found that development banks can be a part of a successful development strategy. She continued to say that this project specifically looked at 5 countries in Latin America, as well as China and Germany. While she acknowledges that there is substantial variation in development banks, the potential roles are similar. Development banks can provide: (1) countercyclical policies, (2) structural transformation and economic diversification, (3) promotion of green energy, (4) infrastructure financing, and (5) financial inclusion. However, she also noted that development banks should be more targeted in their focus, and not become overstretched. And the synergy between public and private sectors, and development banks collaborating with regional and multilateral development banks is important; we need to think about a system of development banks.

Next, Jose Antonio Ocampo noted that the case studies in Latin America reflect three different historical trajectories. The first case is BNDES, which continued to be important in Latin America. Second, both Chile and Colombia were early reformers, but kept a lot of the old institutions without complete privatization. Finally, Peru and Mexico kept the development banks but with significant reduction, along with widespread privatization. He also discussed four types of instruments: (1) Most important is lending, particularly through second tier and on-lending, though a few do first-tier lending in sectors like infrastructure; (2) Equity and debt funds have also become more important; (3) Guarantees are serving an increasingly important function, but unclear how much it can replace other financing; (4) finally subsidies can also be important, and they are very flexible (including green technology to financial inclusion). Finally, Ocampo noted three areas that present challenges: (1) there are currently unclear regulatory frameworks for development banks; (2) new instruments like microfinance and rediscounting are untested, and there is not much precedent; (3) finally, there is also a need to increase state capacity. Development banks need to be engaged with politics, but not dominated by them.

Ulf Moslener discussed the experience of KfW. KfW was founded to administer the ERP Funds, but today the role of KfW has been changed, and today mostly focused on climate change mitigation and structural transformation. KfW's early support for housing in reconstruction and reunification also gave it key experience in climate finance. Important to understanding KfW is that providing money is insufficient, and it is more than just addressing market imperfections. And we think that this has effectively increased the policy space for KfW. This is a consequence of an active interaction in the policy process, from what policies are selected all the way to implementation and evaluation.

He noted that the three characteristics of KfW: (1) An active bank but acting based on socioeconomic objectives, and equipped with the financial backing of the German government; (2) The exchange between KfW and the government. In this way, KfW knows more about policy than commercial banks, and more about financing than the government; and (3) in-house technical expertise. An example is the green economy. How can you translate international agreements into domestic policy? Hard to address on a project basis, but rather as an entire shift. For one, there needs to be taking serious the entire value change—not only the high-value investments, but also need a wide arrange of supports (such as developing the technology). At

the beginning, equity might be good; later second-tier banking might be good (such as decentralized solar). KfW has been active in this process, and thinking through the investment strategy and the instruments, and trying to avoid market distortions. He reiterated that there is also difficulty in replicating this model abroad.

Finally, Qiyuan Xu discussed the experience of the CDB. While KfW may be successful, it is difficult to know whether this was successful with the CDB. For one, there has been a lot of revising of old problematic tools (local financing vehicles), but this has also created a set of new problems. In addition, the CDB has been growing rapidly—assets are now more than 2 trillion USD and 18% of all assets in China. Yet it is a young institution (from 1994), and had huge problems with NPLs. Today, this has completely turned around. He gave two reasons. First, for a developing country, the crediting system is more important than the tangible infrastructure. But for the intangible system, China had a deficit. There was no sound credit system—this has improved with the development of the CDB. As the laws began to limit local borrowing, CDB created the LGLV, and was quite efficient until it was restrained in 2015 (an instrument that used local government owned land as collateral). Second, China suffered from underdeveloped financial market, and the CDB could play a role to develop markets. CDB has developed the bond market. He noted that overall the CDB has improved its trajectory.

Following the panelists, Mariana Mazzucato extolled the virtues of development banks, arguing that this is an opportunity for us to become bolder and louder in policy circles. For example, the Schroeder reforms are often demonstrated to show why Germany is competitive; but KfW is also key to this, in addition to some of the reforms. Ultimately, this should be used to argue for the increase in government capacity. Moreover, these voices should be done at the macro-level to talk about this as the greater role of government in the economy, and the role of public banks in structural transformation.

Dr. Otaviano Canuto, the moderator of the panel, echoed many of the other panelists. He said that there is a strong narrative that development banks provide services that cannot be provided by markets. This can be done through financing and providing additionality. The operations and needs of these DBs have also changed substantially and this requires a new strategy. He then opened the floor to questions from the audience:

- What is the impact of the North American Development Bank, which does try to bridge the core-periphery challenges?
- There also seems to be a deficit of vocabulary, since they are all interested in aligning public and private interests, but this has now been lost on the left. So how can we unify our vocabulary?
- Argentina has no DB, but the recent spate of corruption charges have made government institutions less desirable.
- How do you measure the impact of a development bank?

Stephany Griffith-Jones responded that Germany has been active in the promotion of development banks, especially in Europe, and they have funded new development banks and instruments. In addition, EIB's capital has been expanded, and leveraged on capital markets,

which does more with less (Junker Plan). The real question is how to scale these efforts up. Ocampo responded that the North American bank is multilateral, and that the US used to have bigger banks, such as the US Export-Import Bank. In response to Mazzucato's question, Moslener said that it is difficult to measure the success of development banks, so it's hard to justify in the public sphere. It is also not good for institutions to try and leverage this for political reasons.

In conclusion, Griffith-Jones recommended that we now need policies that will help expand effective development banks and to effectively regulate them. There needs to be better cost-benefit analyses, and these banks need to crowd in the private sector, not crowd it out. At times of transformation, the private sector doesn't always invest—so it needs to be the role of the public sector. In countries without a development bank, it is an incomplete financial sector, and they should consider establishing one. Ocampo concluded that there may be functions that have social value, and those should be financed by the government.