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Scaling up Finance for the Sustainable Development Goals: Experimenting with Models of Multilateral Development Banking¹

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Abbreviations

ADB Asian Development Bank ADF Asian Development Fund AfDB African Development Bank

AIIB Asian Infrastructure Investment Bank

AoA articles of agreement

ASEAN Association of Southeast Asian Nations

BNDES Brazilian Development Bank

BRICS Brazil, Russian Federation, India, China and South Africa

CADF China–Africa Development Fund CAF Development Bank of Latin America

CDB China Development Bank

CLAIFUND China-Latin American Industrial Cooperation Investment Fund

CLO collateralized loan obligation
EIB European Investment Bank
EXIM Export–Import Bank

GIF Global Infrastructure Facility
IADB Inter-American Development Bank

IBRD International Bank for Reconstruction and Development

IDA International Development Association

IDC Industrial Development Corporation of South Africa Limited

LAC Latin America and Caribbean MDB multilateral development bank NDB national development bank

NEPAD New Partnership for Africa's Development

NEPAD-IPPF NEPAD Infrastructure Project Preparation Facility

PPP public-private partnership

SAFE State Administration of Foreign Exchange (China)

SDGs Sustainable Development Goals

SRF Silk Road Fund

1. Introduction

The 2030 Agenda for Sustainable Development, adopted in September 2015 by the United Nations General Assembly, brought to the attention of the international community the critical challenge of how to finance the various initiatives and programmes needed to support its new goals – the Sustainable Development Goals (SDGs). As a starting point to address this challenge, the Third International Conference on Financing for Development took place in July 2015 in Addis Ababa, Ethiopia.

The conference outcome, known as the Addis Ababa Action Agenda for Sustainable Development, provided a blueprint that sought to identify various possible sources of finance and mechanisms to support the SDGs. However, even an optimistic assessment indicates that possible new financing sources and the mobilization capacity of the proposed mechanisms fall far short of the resources needed to adequately support the 17 SDGs and their 169 targets embedded in the 2030 Agenda for Sustainable Development. Therefore, the international development community recognizes that much more needs to be done in this area in the coming years.

Multilateral development banks (MDBs) can serve as effective institutional mechanisms to help finance the SDGs. This possibility is due to their clear mandate to support development-oriented programmes, inhouse expertise and track record on identification, development, risk assessment and management of complex projects, and balance sheet structure matching long-term liabilities with long-term assets. A limiting factor, however, has been MDBs' conservative loan approach and narrow capital base, which constrain their ability to scale up lending significantly. Since the prospect of significant capital expansion is not on the agenda of developed country governments in the near future, development banks have been exploring alternative ways to enhance their lending capacity.

This paper discusses some of the new modalities MDBs have been adopting or considering for adoption to relax their lending constraints. The paper explores, in particular, the Asian Infrastructure Investment Bank (AIIB) model for scaling up as a new experiment that may provide significant sums of development finance, as well as inject new ideas for operational improvements in other banks. It focuses on AIIB's articles of agreement and argues that such articles give the bank a potential institutional mechanism to become an important intermediary in channelling sizeable amounts of official (but also private) resources to development-oriented projects around the world. Indeed, the odds are that the AIIB institutional setup may place the Bank ahead of its peers in terms of scale of loans. Although this may entice (or create competitive pressures for) other development banks to follow a similar path, the fact is that the AIIB model is not the only way forward to scale up finance for development. Other multilateral financial

institutions can forge alternative paths towards scaling up that are aligned to their rules, culture and modus operandi.

Following this introduction, section 2 briefly reviews the Addis Ababa Action Agenda and argues that MDBs have a business model that make them very appropriate instruments to leverage resources to development objectives. Section 3 presents recent proposals on how to reroute, through MDBs, resources managed by institutional investors towards development finance, but it also highlights possible downside risks.

Given the lending constraints MDBs currently face, Section 4 provides an examination of loan-to-equity gearing ratios of multilateral and national development banks. This section shows that gearing ratios vary considerably among development banks, due in part to the fact that each bank faces specific structural, institutional and cyclical factors shaping their lending practices; but the observed variation also suggests a possibility for institutional experimentation in the level of a bank's loan operations for a given amount of equity capital. Section 5 then links provisions for special funds in the AIIB articles of agreement, with the creation of China-backed investment funds, to suggest that the special funds mechanism could be an institutional experiment to scale up a form of development finance with greater focus on long-term, non-concessional flows.

Finally, section 6 concludes and asks the question: What does the AIIB model mean for the world? It suggests as a possible answer that the AIIB institutional set-up can be seen as an innovative way forward to scale up financing for the SDGs.

2. The Addis Ababa Action Agenda, institutional investors and development banks

The 2030 Agenda for Sustainable Development and its SDGs are not small in ambition. The SDGs cover the economic, social and environmental sectors and are also expected to address cross-cutting issues such as inequality – including in gender, human and development rights, and access to justice. Goal 9, on industry, innovation and infrastructure, has eight targets, including developing sustainable and resilient infrastructure, promoting industrialization and supporting technology development. ² Their levels of ambition, however, require a whole range of new financing sources and mechanisms that the Addis Ababa Action Agenda (Addis Agenda) of July 2015 did not go far enough to identify or earmark for development.

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² Available at https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals.

The Addis Agenda followed the structure initially set out in the 2002 Monterrey Consensus, adopted at the first International Conference on Financing for Development. The Addis Agenda emphasized first domestic public resource mobilization and, second, international development cooperation, as part of its plan to scale up finance for development. On domestic resource mobilization, the Addis Agenda highlighted the important need to address illicit financial flows and tax capacity issues that result in substantial resource erosion by States. On international development cooperation, a major initiative was the establishment of a global infrastructure forum to help address the global financing gap in infrastructure development. However, on both counts, the Addis Agenda failed spectacularly to come up with fresh ideas or mechanisms or, above all, any new commitments from the international community for a substantial scaling up of resources for development finance.³ The lack of international commitment for resource scaling up comes at a time of sluggish global economic growth and of an austerity-dominated mindset among most country governments from around the world (UNCTAD, 2017). The austerity drive, in particular, seems to persist, and places a limit on the prospects for a substantial increase in official resource flows for development – albeit with some notable exceptions (e.g. China).

In this context, it is inevitable that the focus of generating additional financing for development has been shifting away from national government budgets, towards financial resources under the management of institutional (and other) investors. However, such investors are characterized by a strong short-term bias in their investment decisions.

In the case of pension funds, for instance, the Inter-agency Task Force on Financing for Development reports that, for the seven largest pension markets in the world, 76 per cent of their total portfolio is invested in liquid assets, and less than 3 per cent in infrastructure projects (United Nations, 2017:57).⁴ This short-term focus is not limited to pension funds or other institutional investors. Official investors such as central banks and sovereign wealth funds also invest largely in low-yield liquid assets. The challenge, therefore, is how to persuade international investors to shift away from their short-term orientations and towards a longer-time horizon, so that a larger part of their portfolio can be invested in long-term projects.

³ For a critical assessment of the Addis Agenda, see, for example, Montes (2016), who stressed the lack in the Agenda of new commitments to meet the financing requirements of the Sustainable Development Goals, and in whose view the most important outcomes of the conference were limited to two new processes – the proposed technology facilitation mechanism and the monitoring of progress on financing for development by the United Nations Economic and Social Council.

⁴ These figures are based on Willis Towers Watson (2016).

A main issue revolves around the obstacles they face to invest more long-term, especially in the area of infrastructure development, which is sorely needed to meet most of the SDGs. Another main issue relates to the long-term maturity of investment projects, which increases perceived risks and uncertainty about the future. In addition, infrastructure projects, in particular, generate social benefits, which are higher than private benefits, a difference the private sector does not internalize in its calculations. Obstacles can also be associated with regulatory frameworks that increase costs or complexity, or that implicitly favour short-term returns.

Basel III rules on capital and liquidity requirements for banks, for example, tend to inhibit availability of finance for long-term investments, while cross-border projects, which are important to increase connectivity and trade between countries (considered a main lever to achieve the SDGs), require a regulatory framework that is often significantly more complex than within border projects. Obstacles can also be internal to investors, such as a pension fund or insurance company, related to corporate compensation packages in which managers are incentivized to enhance short-term performance rather than pursue long-term goals. Institutional investors, moreover, lack in-house expertise to assess the risks of long-term projects, or the capacity to supervise them (United Nations, 2017; Arezki et al., 2016; UNCTAD, 2016; Inderst and Stewart, 2014).

A further issue is that the larger institutional investors are concentrated in the developed countries, which have a home bias that deters them from investing in other countries, particularly developing countries, which are perceived as a higher risk asset class (Philips, 2014; Philips et al., 2012; Gottschalk, 2003). Moreover, barriers to investing in developing countries are not just based on perception. Institutional investors face fiduciary rules according to which they cannot invest in projects that are below investment grade, which is the case for most developing country projects (Group of 20, 2017:4).

MDBs: Bridging the infrastructure gap?

Development banks could help bridge finance from institutional investors to development projects. MDBs, in particular, have operated internationally and been a major feature of the development finance architecture for many years. 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. They can certainly continue to play such a role, and in particular become major financial tools in support of the 2030 Agenda for Sustainable Development. Their ability to tap into international capital markets at reasonably low costs, and to collaborate with other partners, including private actors in co-financing

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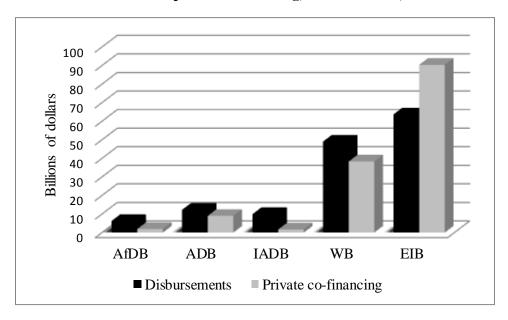
⁵ These are the so-called emerging and frontier markets.

development projects, is among their major strengths. Moreover, MDBs' accumulated experience with complex infrastructure and green projects places them in a particularly strong position to help meet the new goals of the 2030 Agenda for Sustainable Development, such as the development of productive capacities and environmental sustainability.

The World Bank and the main regional development banks – the African Development Bank (AfDB), the Asian Development Bank (ADB) and the Inter-American Development Bank (IADB) – have been, over the years, important contributors to global development knowledge, and have had an uncontested role in creating and shaping development policies and solutions in different parts of the world. Despite their prominent roles, their aggregate lending is limited. In 2016, the World Bank and the three regional development banks mentioned above lent in aggregate only \$77 billion. These figures are not much higher than the \$64 billion the European Investment Bank (EIB) alone lent in the same year (see figure I). EIB is thus the largest MDB in the world in terms of annual loan disbursements and borrowing. Its operations will be briefly discussed further below (in section 4), in the context of the discussions on MDBs' gearing ratios.

Figure I

Total disbursements and private co-financing, selected MDBs, 2016^a



Source: Authors' elaboration, based on banks' annual reports and MDBs (2017), annex table 1.

^a On disbursements, AfDB includes African Development Bank, the African Development Fund and the Nigeria Trust Fund; ADB includes loans and grants from ordinary capital resources, Asian Development Fund and other special funds for grants; IADB includes ordinary capital resources, the Fund for Special Operations and other funds; World Bank includes the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), the International Finance Corporation and Recipient-Executed Trust Funds; EIB

includes all resources, loans, equities and guarantees. On private co-financing, it is total long term. IADB includes the Inter-American Investment Corporation; the World Bank includes the International Finance Corporation and the Multilateral Investment Guarantee Agency.

Overall, financing from the MDBs has not been sufficient to meet the needs of developing countries. In particular, as existing MDBs shifted significantly away from financing infrastructure over the past few decades (Griffith-Jones et al., 2016:7–8; Humphrey 2015a:3–4; Chin, 2014:367–370), the financing gap in the developing world in this regard is huge. 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 level of \$0.8 trillion–0.9 trillion per year observed in the recent past (Bhattacharya and Romani, 2013). Taking the Sustainable Development Goals more broadly, UNCTAD estimates the annual financing gap in key Sustainable Development Goals sectors at \$2.5 trillion for the period 2015–2030 (UNCTAD, 2014:142–145). 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, including risk aversion, as pointed out earlier.

MDBs 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 over time. They can also help mitigate informational deficiencies facing the private sector by providing screening, evaluating and monitoring functions and, where needed, their own capital resources, thus partnering with private investors in co-financing. MDBs, in addition, can help address the need for low-income countries to have access to loans for financing infrastructure projects at subsidized rates. As mentioned above, the main binding constraint of existing MDBs for scaling up lending to support the 2030 Agenda for Sustainable Development is their lending capacity due to their limited capital base and their conservative lending practices.

3. Alternative models towards bridging the financing gap

In this context, proposals have cropped up in the recent past on how to raise MDBs' leverage capacity in order to bridge the financing gap.

The report of the Inter-agency Task Force on Financing for Development 2017 highlights four channels through which development banks can help leverage finance for infrastructure and other development-

⁶ In 2013, concessional lending by the World Bank, AfDB, ADB, IADB and the European Bank for Reconstruction and Development totalled \$20 billion, which represented 30 per cent of their total loan portfolio (UNCTAD, 2016:36).

related projects. The first has to do with their mobilization capacity by borrowing from international capital markets, which relates to their traditional funding operations. The other three relate to their ability to attract private capital as co-investors in development-oriented projects, by providing guarantees and other instruments to cover different sorts of risk, technical assistance and best practices, to ensure alignment with broader developmental goals (United Nations, 2017:16). These are laudable practices that development banks have successfully adopted in the past several decades, and which should be expanded.

A major obstacle for further expansion through borrowing from the international capital markets, however, is, first, the limited size of MDBs' equity capital: in the cases of two large MDBs – ADB and the World Bank – these were (until recently) at \$18 billion and \$40 billion, respectively (Humphrey, 2017:11). The second obstacle is the relatively low loan-to-equity gearing ratios of MDBs, which reflect their conservative approach to lending (see detailed discussion in section 4 below).

Unless development bank shareholders contribute more capital, or are willing to extend more loans with the current amount of equity capital, new ways have to be explored to relax the capital constraints facing existing MDBs. Expansion of banks' equity capital may take place basically through apportionment of new capital by their shareholders, and/or by adding net incomes to their reserves. Since the creation of the large MDBs several decades ago, shareholders have contributed new capital through general capital increases, but the main source of equity expansion over the years has been by adding undistributed profits to the banks' reserves (Humphrey, 2017; 2015a:8). Developed countries, which are the main shareholders of the large MDBs, have not signalled a willingness to inject more capital in the near future, despite their stated commitment to the Sustainable Development Goals, and the fact that they are likely to benefit – directly and indirectly – from the achievement of the goals, which are global in nature.

Moreover, while MDBs are generally profitable (to varying degrees), shareholders have increasingly used banks' profits to pay for their contributions to the replenishment rounds of the banks' concessional funds, as well as to create trust funds whose resources are earmarked by donors for specific projects (Humphrey, 2017:13–14). In this sense, the proliferation of trust fund vehicles can be seen as a way to boost the financial resources of existing MDBs (and other multilateral organizations), albeit with a limited focus on infrastructure (see box 1). More recently, the use of trust funds has become a key component of so-called "blended finance", which involves degrees of concessional financing to attract private capital (World Economic Forum, 2015; Deloitte, 2017). However, as the concept and impact of trust funds is still a work

⁷ This is the case since the two main components of banks' total equity are paid-in capital and reserves.

in progress, and has been the subject of other studies (Pereira, 2017; Romero, 2013), this issue is not further explored in this paper.

Box 1

Trust funds and multi-bi aid

Trust funds have been an increasingly important feature of lending patterns of existing MDBs. This institutional mechanism provides donor countries with a third option beyond the traditional channels of bilateral and multilateral official development assistance. In general, trust funds channel resources to multilateral development organizations or MDBs that conduct project implementation, but the funds are earmarked for specific purposes and cannot be used at the discretion of the implementing organization. In this way, these trust funds are considered as a "multi-bi" institutional vehicle – a hybrid mechanism that channels concessional funding through multilateral organizations, while retaining bilateral priorities (World Bank, 2017c).⁸

By one estimate, the role of trust funds has grown quickly in the past 20 years, reaching a level of \$19 billion in 2012, which represented almost 60 per cent of total multilateral aid flows, and almost 20 per cent of bilateral aid flows. In terms of organizational distribution, 61 per cent of trust fund resources are channelled through various United Nations organizations, with the World Bank being the second largest recipient, at 20 per cent. Other organizations, such as regional development banks and the European Union, also received 4 per cent and 2 per cent of trust fund resources, respectively (Reinsberg et al., 2015:538–539).

As infrastructure financing by existing MDBs has declined significantly over the past few decades, trust funds also generally reflect this trend. For example, single-donor trust funds are estimated to account for over 70 per cent of trust funds (by value), compared with less than 30 per cent for multi-donor trust funds. Single-donor trust funds, in turn, allocated roughly 75 per cent of their resources to social sectors (40 per cent) and humanitarian aid (35 per cent). Only approximately 10–15 per cent of single-donor trust fund resources are designated for economic infrastructure and productive sectors. The sectoral allocation of multi-donor trust funds is generally similar, but with less financing for humanitarian aid (15 per cent) and slightly more for economic infrastructure and productive sectors (over 20 per cent) (Reinsberg et al., 2015:540–541).

Instead, the remainder of this section discusses other possible experiments in how development banks may address this major constraint on the scaling up of loan disbursements.

Besides an increase in capital, which is desirable but politically difficult, Humphrey (2017) suggests relaxing banks' capital requirements to allow for higher leveraging, since banks currently have some "headroom" to do so without putting at risk the high ratings they have been granted over the years by the credit rating agencies. Another option consists of merging development banks' balance sheets of the concessional with the non-concessional windows, thereby increasing the banks' equity capital (by putting

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⁸ See http://fiftrustee.worldbank.org/Pages/FIFSOverview.aspx.

the funds of the concessional window into their reserves) and therefore their leverage capacity. Other options include allowing: the concessional window to obtain its own rating and raise resources in the international capital markets; loan swaps between MDBs in order to reduce portfolio concentration, which can improve their ratings and, again, their leverage capacity; callable capital to be made more automatic and transparent so that credit rating agencies may consider them as part of equity for calculation of gearing ratios (as opposed to their current practice of taking into account only paid-in capital); and loans to be removed from MDBs' balance sheets by selling these to private investors (Humphrey, 2017).

Some of these ideas have already been adopted by the MDBs. In 2015, the ADB Board of Governors approved the merger of its Asian Development Fund (ADF) with its ordinary capital resources. Taking effect from January 2017, the bank's merger has led to the increase in the resources of the bank's ordinary capital from about \$17.3 billion to \$48.1 billion. The consequence has been a substantial expansion of the bank's lending capacity (ADB, 2015; 2017). In late 2016, IADB took a similar step by approving the transfer of the assets of its Fund for Special Operations to the bank's ordinary capital resources, which also took effect from January 2017. In addition, IADB made an exposure exchange agreement with other MDBs to diversify its portfolio of loans to reduce its risk profile (IADB, 2017). Unlike the ADF of the ADB and the Fund for Special Operations of the IADB, The World Bank's International Development Association (IDA) has remained separate from the World Bank ordinary capital resources. IDA shareholders, instead, sought and received triple-A ratings from credit rating agencies, with which it can raise resources on international capital markets (World Bank, 2016).

ADB in its 2017 annual report states that concessional finance will continue to be provided to poor countries on the same terms and conditions as before (ADB, 2017). Since such loans will come from the bank's ordinary capital resource window, and given that ADF will continue to operate by providing grants only, it seems that cross-subsidization will have to increase. After all, the additional resources used in concessional finance will be raised in the international capital markets, which require market returns. The World Bank, in turn, will use its leveraged soft window to also increase loans to IDA borrowing countries, but this will henceforth include non-concessional loans – or, at least, loans with lower levels of concessionality (World Bank, 2017a: figure 9).

The last proposal, regarding MDBs taking part of their loans off their balance sheets, does not necessarily mean the bank ends its engagement with the project that the loans were originally financing. The bank,

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⁹ See also Birdsall et al. (2014) for a detailed appraisal of ADB's initial merger proposal.

¹⁰ See also Humphrey (2017:11) for a detailed discussion of the MDB's initiatives to enhance its lending capacity.

instead, designs, implements and supervises the project but does not own the loan. This is an example of a modality of an off-balance sheet operation that MDBs already adopt extensively and that may grow even further in the future, albeit not without important downside risks (see box 2).

In addition, off-balance sheet operations may take other forms and involve more complex arrangements. A growing trend has been the establishment of joint investment platforms in which MDBs and private actors are partners in investment projects. In this partnership, the MDBs are expected to provide resources such as technical expertise (for project design, preparation and monitoring), guarantees and insurance, while the private sector participates by contributing financial resources to the project. Examples of joint platforms are EIB's project finance (in which the bank engages in public—private partnership projects (PPPs)); the World Bank's Global Infrastructure Facility (GIF), in which the bank co-invests by providing technical expertise and facilities; and the European Bank for Reconstruction and Development Equity Participation Fund, in which the bank and private actors co-invest in equity (Arezki et al., 2016; United Nations, 2017).¹¹

Other initiatives involve the creation and/or management of special funds with multi- or single-donor support focused on infrastructure development, and also with the aim of attracting private investors. These include:

- (a) IADB's Infrastructure Fund (InfraFund) to facilitate investment in infrastructure through identification and preparation of bankable projects, ¹² and also the Regional Infrastructure Integration Fund, in which IADB provides technical assistance for the development of integration projects in the Latin America and the Caribbean region (IADB, 2017);
- (b) ADB's Leading Asia's Private Sector Infrastructure Fund (LEAP), which provides co-financing to non-sovereign infrastructure projects and seeks private sector participation through different modalities, including PPPs, joint ventures and private finance initiatives;¹³
- (c) Africa 50 with strong sponsorship of AfDB, aimed at developing bankable projects and attracting private capital from long-term institutional investors;¹⁴ and

www.iadb.org/en/topics/transportation/infrafund,1635.html. Accessed on 19 December 2017.

¹¹ For more detailed information about these platforms, see EIB (2017), World Bank (2017b) and Rosca (2016).

¹² Information on IADB Infrafund can be found on the IADB website at

¹³ ADB's LEAP is wholly funded by the Japan International Cooperation Agency. Information on LEAP can be found on the ADB website at www.adb.org/site/funds/funds/leap. Accessed on 19 December 2017.

¹⁴ Information on Africa 50 can be found on the Africa 50 website at www.africa50.com/about-us/our-mission/.

(d) New Partnership for Africa's Development (NEPAD) Infrastructure Project Preparation Facility (NEPAD-IPPF) which has AfDB as a trustee serving as legal owner, holder and manager of the fund (AfDB, 2017).

Some of the funds are old enough to have already built a track record on leverage capacity since their creation. NEPAD-IPPF, for instance, has leveraged investment financing of over \$7 billion since its establishment in 2005. Notwithstanding this, funding contribution in aggregate has been disappointingly low. The World Bank's GIF has a total funding size of \$84.4 million, of which China is the largest contributor with \$20 million. The size of NEPAD-IPPF's fund is currently \$92 million, and the size of IADB's Regional Integration Fund is \$20 million (IADB, 2017). Their sizes pale in comparison with the China-created funds reported in section 5 below, portions of which could be channelled through AIIB. 16

Box 2

MDB originate-to-distribute model – upsides and downsides

Concerning off-balance sheet operations, Arezki et al. (2016) propose that MDBs change their current modus operandi more radically from the originate-to-hold model to the originate-to-distribute model for PPP infrastructure projects. Under the originate-to-hold model, banks use their funding base to finance loans that they keep in their balance sheets until maturity. Under the originate-to-distribute model, banks originate the loans but then syndicate these loans (by bringing in the participation of other banks), or sell all or part of the loans in the secondary loan markets (Bord and Santos, 2012). While this kind of practice is not new among MDBs, Arezki et al. (2016) further propose that, under the originate-to-distribute model, development banks could use collateralized loan obligations (CLOs), a financial instrument that investment banks used intensively in the 2000s, until the global financial crisis. This instrument means packaging the loans for a pool of investors. Moreover, it allows for the slicing of loans into tranches with different levels of seniority, and therefore can attract investors with different risk profiles. The argument is that the use of CLOs would enable MDBs to play to their strengths by designing and structuring projects but having them off their balance sheets. At the same time, it would bring in parts of the resources under the management of international investors that are currently invested in short-term assets. In addition, the authors suggest the bundling of infrastructure projects and their financing through largescale bond financing to attract large institutional investors.

The downside of the originate-to-distribute model using CLOs is that it could attract short-term capital to projects that are essentially long-term, and that may become volatile and raise the risk of default (United Nations, 2017:59). In the event that CLOs become a problem, this could cause reputational damage to the

¹⁵ Other major contributors are Australia (\$18.6 million), Canada (\$15.8 million), World Bank IBRD (\$15 million), and Japan (\$15 million). This information can be found on the World Bank website at http://fiftrustee.worldbank.org/Pages/gif.aspx.

¹⁶ Funds in which long-established MDBs such as IADB and AfDB are co-participants with China's entities are briefly discussed in section 5. Not all of these funds have been set up by MDBs, but in each of them, these banks have an important role to play.

MDB, and affect its rating and ability to raise capital, even if its balance sheet were not directly affected. As regards the idea of MDB engagement in PPPs, the fact is that such an engagement is already the case. However, the evidence on performance of PPP projects is that results have been disappointing and in many instances countries are reappraising them. MDB involvement above what has been the case to date is not necessarily a guarantee that outcomes will significantly improve (Barrowclough, 2015; UNCTAD, 2015: chapter 6).

More recently, MDBs have joined efforts to measure how much private capital they raise through cofinance. These comprise both direct and indirect mobilization of private capital, which occur as a result of their recourse to tools and initiatives such as investment risk mitigation, co-investment including with non-traditional investors, and development of new financial products. According to recent estimates, in 2016, total co-financing by MDBs and other multilateral development agencies amounted to \$163.6 billion, of which \$49.9 billion was the result of direct resource mobilization and \$113.7 billion of indirect mobilization (MDBs, 2017). Of this total, \$68 billion was invested in infrastructure (GIF, 2017).

Broadly speaking, the figures on private co-financing are of a similar order of magnitude to the disbursement figures from the large long-established MDBs, as reported in figure I. This suggests that, roughly, for each dollar of financing on the bank's balance sheets, there is at least another dollar that the bank has demonstrated can be leveraged from private markets through co-financing. This one-to-one proportion, however, is not confirmed by disaggregated values, also displayed in figure I. With the caveat that private co-financing does not include short-term capital, figures for individual MDBs show accentuated variation. At one end, EIB exhibits a 1.4 ratio of private co-financing to bank's disbursements. In the mid-range, WB and ADB have a 0.8 and 0.7 ratio, respectively. At the low end, AfDB and IADB have ratios in the range of 0.2–0.3. This variation might be explained, in part, by the fact that EIB operates mostly in Europe, a region that can attract private capital for long-term projects more easily. In contrast, AfDB and IADB operate in regions that private investors assess as riskier to engage long-term.

¹⁷ Direct private capital mobilization "involves a transactional relationship between the MDB and the client" and can be captured with great accuracy. The second mobilization effort involves MDB co-financing of a project or activity, but the MDB may not directly arrange the financing (MDBs, 2017:3).

¹⁸ The total co-financing sum refers to commitment data. The MDBs and agencies are: AfDB, ADB, AIIB, the European Bank for Reconstruction and Development, EIB, IADB, the Inter-American Investment Corporation, the Islamic Corporation for the Development of the Private Sector, the Islamic Development Bank, the International Finance Corporation, the Multilateral Investment Guarantee Agency, New Development Bank and World Bank. Data from AfDB and the Islamic Development Bank are based on approvals. New Development Bank did not mobilize private capital in 2016 (MDBs, 2017:4).

¹⁹ These estimates do not include private investment in development projects that are triggered by other MDBs' activities, such as capacity-building or by demonstration effects (MDBs, 2017:3).

Notwithstanding these figures, MDBs' leverage capacity can go much farther. A major leverage tool at the disposal of MDBs is their risk mitigation instruments, but, according to the Group of 20–IFA Working Group (2017), less than 5 per cent of infrastructure projects financed by MDBs use such instruments.²⁰

To shed further light on alternative ways to directly enhance the lending capacity of MDBs, the next section contrasts the loan-to-equity gearing ratios of MDBs vis-à-vis those of selected national development banks (NDBs). The subsequent section discusses the AIIB institutional mechanism for scaling up based on special funds, which can be considered as an alternative model from existing MDBs. A key advantage of AIIB's special funds is their primary focus on finance projects in infrastructure and other productive sectors.

4. Gearing ratios of MDBs and NDBs

Of the main obstacles that currently constrain MDBs' lending capacity, of central significance are the rules and norms related to a development bank's extent of loan operations for a given amount of shareholder capital, known as the bank's loan-to-equity "gearing" ratio.

At the heart of the financial models of existing MDBs is the ability to raise resources inexpensively by selling highly rated triple-A bonds on international capital markets. To maintain their triple-A bond rating, existing MDBs have adopted a conservative approach to lending operations to reassure rating agencies and MDB bond investors that bank financial resources are sufficient to cover any potential loan losses. Among the selected MDBs shown in table 1, EIB, which is owned by member States of the European Union, has the highest average annual gearing ratio − 5.4. Thus, for every €1 of EIB shareholder equity, the bank extended €5.4 in outstanding loans. By contrast, AfDB had the lowest average gearing ratio − 1.9 − among selected MDBs. All things being equal, a lower gearing ratio denotes shareholder equity that is being leveraged less to provide financing for development projects. The World Bank's IBRD, which provides non-concessional loans, has gradually increased its gearing ratio over time − after only recently deciding to raise the "ceiling" of its ratio to 5 (Humphrey, 2015a:10; Kroeber, 2015:28).

²⁰ As is the case with other policy tools, use of risk mitigation instruments such as guarantees must be assessed judiciously by giving due consideration of fair and pragmatic risk-sharing among project stakeholders, thus ensuring that such projects contribute positively to overall sustainable development outcomes (Romero, 2015).

Table 1 Loan-to-equity ratios, selected MDBs, 2009–2016

	2009	2010	2011	2012	2013	2014	2015	2016	Annual average
AfDB	1.6	1.7	1.9	2.0	2.0	2.1	2.0	n/a	1.9
ADB	2.6	2.7	2.8	3.0	2.9	3.1	3.3	3.6	3.0
CAF	n/a	n/a	2.3	2.4	2.3	2.2	2.1	2.1	2.2
EIB	5.3	5.7	5.7	5.4	5.2	5.6	5.2	5.4	5.4
World									
Bank									
(IBRD)	2.9	3.3	3.4	3.6	3.6	3.8	3.9	4.3	3.6

Source: Authors' elaboration based on balance sheets' information from MDB annual reports.

As Humphrey (2017:9) has argued:

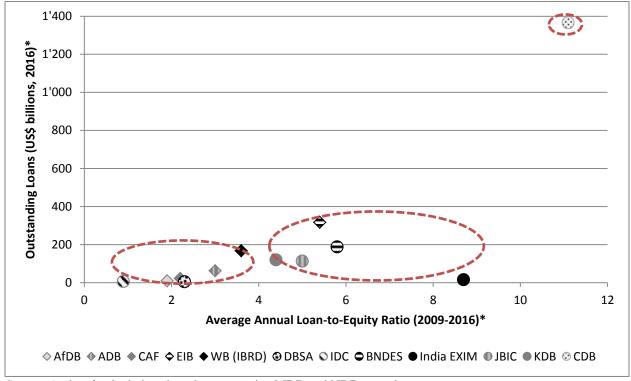
The problem is, no one is sure just how much capital is necessary to preserve an AAA rating. This is a difficult question to answer for MDBs, because of their unique characteristics and the fact that, unlike private financial institutions, MDBs have no regulator. As a result, shareholders, MDB staff and bond rating agencies all have different ideas about MDB capital adequacy. Shareholders would like to see their capital work harder, but because MDB finance and risk departments manage their own interactions with bond markets and credit rating agencies, they tend to favour cautious financial policies.

To help visualize selected MDBs and NDBs in relative context, figure II organizes these according to loan-to-equity gearing ratios and loan disbursement levels. Although MDB and NDB gearing ratios are not strictly comparable, ²¹ the NDBs nonetheless serve as important comparators by which to assess the scale of lending by existing MDBs (Studart and Gallagher, 2016; UNCTAD, 2016). The analysis reveals the potential for experimentation in bank gearing ratios and, in particular, provides some insight into the potential lending practices of AIIB based on the institutional experience of China's national development banks, such as the China Development Bank (CDB). Below, three broad groupings can be discerned from the respective operations of these MDBs and NDBs.

²¹ In principle, variations in development bank gearing ratios can arise from structural factors such as differing national macroeconomic conditions, stages of development, operational mandates and lending profiles, statutory lending limits and sources of funding.

Figure II

Loan levels and gearing ratios, selected MDBs and NDBs



Source: Authors' calculations based on respective MDB and NDB annual reports.

At the lower end of the spectrum of gearing ratios are the large MDBs (AfDB, ADB and World Bank), CAF and the South African NDBs Development Bank of Southern Africa (DBSA) and IDC.²² Among the MDBs, their low loan-to-equity gearing ratios confirm their conservative lending approach, aimed at ensuring that their high credit ratings are not compromised, as just suggested. Likewise, both NDBs of South Africa are likely aimed to safeguard sustained growth in lending operations, and to maintain an adequate credit rating to ensure continued access to capital markets at reasonable rates. Institutional credit ratings closely tied to the country's sovereign credit rating, relatively weak economic growth and macroeconomic fundamentals (among other factors, such as political risk) in South Africa are all factors that contribute to reinforcing the need to adhere to conservative loan-to-equity gearing ratios.²³

^a Latest available, or most available, year(s).

²² Unlike many NDBs, IDC's operations involve a larger proportion of equity financing than debt financing: in fiscal year 2015/16, the bank had R53.3billion (\$4.2 billion) in equity investments, and R23.9 billion (\$1.9 billion) in outstanding loans and advances. As such, both equity investments and loans and advances have been included in the calculation of the bank's loan-to-equity gearing ratio; combined, they accounted for 63.6 per cent of total assets.

²³ In June, Moody's (2017) downgraded the Government of South Africa's credit rating to Baa3, one level above non-investment grade. Other major ratings agencies have downgraded the country's credit rating to below investment grade (Cotterill, 2017; Financial Times, 2017).

At the middle of the spectrum of gearing ratios are the MDB EIB and NDBs such as the Brazilian Development Bank (BNDES), the Export-Import Bank of India (India EXIM), the Japan Bank for International Cooperation (JBIC), and the Korea Development Bank (KDB). EIB has both a bigger loan portfolio and gearing ratio than any of the other long-established MDBs. Created in 1958, EIB in the past has allocated a significant proportion of its total loans to infrastructure. Its bigger financing role and relatively higher gearing ratio is, in part, explained by the fact that it is a regional bank in which all owners and most borrowers are developed countries. Moreover, the bank lends in euros and it surely can count on the support of the European Central Bank if a need arises. EIB expanded its portfolio of loans strongly during the global financial crisis, thus playing a strong countercyclical role, with the aim of helping sustain income and investment levels across Europe and protect the region's infrastructure and productive capacity from the effects of a deep economic downturn. This countercyclical role is part of EIB's mandate. NDBs such as BNDES and KDB have historically played a very prominent role in the development of their countries and have had budgetary support from their national Governments (UNCTAD, 2016).

Finally, at the higher end of the spectrum of gearing ratios is China's CDB. CDB was created in 1994 under the direct leadership of China's State Council, as the country pursued financial and economic reforms and sought to better extricate policy-based lending from commercial-based lending. CDB provides medium-to-long-term financing to serve China's major economic and social development strategies. Today, CDB is the world's largest NDB (by assets) and China's largest bank for foreign investment and financing cooperation, long-term lending and bond issuance (CDB, 2015; UNCTAD, 2016:26–27).

In 2015, CDB had RMB 8,865.4 billion (\$1,365,687 billion)²⁴ in outstanding loans and advances, which accounted for 70.3 per cent of the bank's total assets. The bank's estimated average annual loan-to-equity gearing ratio for 2012–2015 was 11.1, a level notably higher than that of most other selected NDBs, but at a similar level to private banks (Humphrey, 2015a:9). CDB benefits from the relatively high-grade country credit rating assessment of China: in 2015, China had an AA- rating from S&P, the fourth-highest credit rating level. Aside from sustained levels of rapid growth and strong macroeconomic management of the domestic economy, CDB enjoys an implicit guarantee from the Government of China. Although State ownership is not uncommon among NDBs, in CDB's case, it issues long-term bonds that carry zero risk in terms of capital requirements for the State-owned commercial banks that buy them. State banks, which account for nearly half of total assets in China's banking sector (Martin, 2012), treat these bonds as

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²⁴ The 2015 year-end exchange rate was \$1:RMB 6.49.

assets with risk-free returns on depositors' funds. This bond market structure permits CDB to provide loans with substantially longer terms than those offered by commercial banks and most other NDBs (UNCTAD, 2016:28).

Although this paper does not comprehensively consider all the factors that influence the loan-to-equity gearing ratios of respective MDBs and NDBs, and these ratios should be viewed as rough estimates, the focus of this section on the variation in gearing ratios between banks hints at the ability to potentially experiment with operational settings in NDBs, notably in the case of China's CDB. Indeed, the term "exploration" (探索) in Mandarin Chinese is frequently used by leading Chinese policymakers in reference to the country's domestic experience in development finance (Chen, 2012; Jin, 2017; Caijing, 2015). Considering the pressing need to reform global economic governance and to scale up development finance, combined with the newly created China-led MDBs, the question remains whether greater experimentation — with loan-to-equity gearing ratios in particular — can also take place in multilateral development banking. This issue is discussed in the next section.

5. Scaling up: The role of AIIB special funds

With the recent establishment of the New Development Bank (BRICS Bank), launched in July 2015, and AIIB, launched in January 2016, there is some expectation that these new MDBs will help spur the reform of global economic governance and expand the possibilities for policy and institutional experimentation among developing countries (Grabel, 2015; Chin, 2014). At the same time, the new MDBs could also improve upon the practices of existing MDBs by, for example, finding a better balance between the need for high standards and safeguards in project lending, and the imperative for large and rapid loan dispersions (Kozul-Wright and Poon, 2015; Humphrey, 2015a:13–14).

One of the most contentious issues surrounds the lending capacity of these new MDBs. A number of existing studies have adopted different methodologies to estimate the scale of lending (Griffith-Jones et al., 2016; Humphrey, 2015b; Kroeber, 2015; Griffith-Jones, 2014),²⁵ but these have generally relied on superimposing the operational features of existing MDBs to make projections on the potential lending behaviour of the new MDBs. From an institutional perspective, however, this section contends that China's experience with its own NDBs is very likely to inform its approach to experimentation with the operational features of the new MDBs, particularly the AIIB.

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²⁵ Others have suggested that AIIB could have a loan-to-equity ratio of 20 (Arezki et al., 2016:30).

On the issue of loan-to-equity gearing ratios, Griffith-Jones et al. (2016:18) have noted that AIIB's articles of agreement (AoA) only permit, by a super majority vote, a maximum loan-to-equity ratio of 2.5 of the bank's "unimpaired subscribed capital, reserves and retained earnings included in its *ordinary resources*" (AIIB, 2015:8, emphasis added). This provision is found in article 12, paragraph 1 of AIIB's AoA. The term "ordinary resources" consists of "authorized capital stock of the Bank, including both paid-in and callable shares", as set out in article 8 (AIIB, 2015:6–7).

However, in article 10, paragraph 1 of AoA, it is clearly outlined that the operations of the bank will consist of two types: (a) ordinary operations financed from *ordinary resources*; and (b) special operations financed from "special funds" resources. Importantly, these two types of operations may separately finance elements of the same project or programme.

The remainder of article 10 establishes a clear partition between ordinary resources and special funds resources. Paragraph 2 states that ordinary resources and special funds resources "shall at all times and in all respects be held, used, committed, invested or otherwise disposed of entirely separately from each other". Financial statements of AIIB will list ordinary operations and special operations separately. Paragraph 3 ensures that there can be no mixing of funds between the two types of operations, that ordinary resources, "under no circumstances, be charged with, or used to discharge, losses or liabilities arising out of special operations or other activities for which Special Funds resources were originally used or committed". Paragraph 4 stipulates that expenses directly related to ordinary operations will be charged to the ordinary resources of the bank, while expenses directly related to special operations will be charged to the special funds resources (AIIB, 2015:7).²⁶

It remains to be seen how AIIB will utilize the special funds provisions found in its AoA. In principle, however, insofar as special funds can contribute to the same projects as ordinary funds, AIIB's AoA appear to create a way to increase the scale of infrastructure project loans, while respecting its stated statutory limit of the gearing ratio.²⁷ As the AIIB has secured a triple-A credit rating from the three major international credit ratings agencies (AIIB, 2017), the institutional design appears to maintain a de jure gearing ratio aimed at ensuring the bank's access to international capital markets, while also creating a

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²⁶ Article 17, paragraph 1 sets out that the bank may accept special funds "which are designed to serve the purpose and come within the functions of the Bank; such Special Funds shall be resources of the Bank". Moreover, article 17, paragraph 2 states that special funds received by the bank will be "used on terms and conditions consistent with the purpose and functions of the Bank and with the agreement relating to such Funds" (AIIB, 2015:11).

²⁷ See also Griffith-Jones et al. (2016:18).

conduit that allows for development financing to be de facto scaled up beyond statutory limitations.²⁸ This institutional design is reinforced by provisions in AIIB's AoA that are careful to maintain a clear partition, in accounting and administrative terms, between ordinary resources and special funds resources.

Moreover, China's experience with the high gearing ratio of CDB suggests a pragmatic institutional willingness to experiment with raising AIIB's gearing ratio, over time. Two further considerations help to accentuate the institutional features of AIIB's special funds provisions: existing orientation of trust funds and China-backed investment funds.

In contrast to the orientation of trust funds by existing MDBs (and other multilateral organizations) (as discussed in box 1 in section 3), the provisions in AIIB's AoA that allow ordinary resources and special funds resources to separately finance elements of the *same* project or programme, constitute an institutional design that will likely further amplify the bank's dedicated focus on infrastructure and other productive sectors, resulting in a far higher proportion of AIIB special funds' investment in these areas.

China-backed investment funds

While existing trust funds have traditionally channelled concessional development finance, there are increasing signs that Chinese policymakers are experimenting with forms of long-term, non-concessional development finance provided by a range of recently established national, regional and bilateral investment funds.

For example, in remarks about the Silk Road Fund (SRF, discussed further below), considered as China's latest sovereign wealth fund, the governor of the People's Bank of China, Zhou Xiaochuan, indicated that the SRF will adopt at least a 15-year time horizon for equity investments, rather than the 7-to-10-year horizon adopted by many private equity firms, to account for slower returns on infrastructure investment in developing countries (Kozul-Wright and Poon, 2015). Zhou also positioned the role of development finance as in between that of concessional and commercial finance, but "slightly tilted" toward the latter (Caixin, 2017).²⁹ As Lin and Wang (2015:16) have argued:

As some established donors are constrained by their heavy debt burden and slow growth, development financing will come less from ODA [official development assistance], but more and more from the Other Official Flows (OOF), OOF-like loans, and OOF-like investments from

²⁸ Despite also containing much of the same language surrounding special funds, the specific provision allowing special funds resources to contribute to the same projects as ordinary resources is not found in the AoA of the New Development Bank (BRICS bank) (NDB, 2014). Thus far, the BRICS bank has been assigned a triple-A credit rating from Chinese domestic rating agencies only (NDB, 2017).

²⁹ See also Gallagher et al. (2012) and Brautigam (2011).

development banks in emerging economies. There, the prospect of China's South-South Development Cooperation (SSDC) is likely to expand. For instance, Chinese President Xi Jinping and Premier Li Keqiang have made fresh commitments to invest in Africa and Latin America. These loans are not necessarily ODA, but more likely to be OOF-like loans and OOF-like investments due to the nature of large infrastructure projects.

In recent years, China has also established a growing number of purpose-built national, regional and bilateral investment funds to provide equity financing. These various funds will be, in all, endowed with about \$99.4 billion in investment capital, selective portions of which could potentially be funnelled through AIIB (and/or the BRICS bank) special funds (see table 2). 30

Table 2

China: Selected national, bilateral and regional investment funds^a

CIII	China: Selected national, bhateral and regional investment funds				
	Name	Created	Fund size ^b (billions of dollars)	Chinese investors	Non-Chinese investors
1	China–Africa Development Fund	2007	10	China Development Bank (CDB)	-
2	China–ASEAN Investment Cooperation Fund	2013	10	China Export–Import Bank (China EXIM)	-
3	China—Central and Eastern Europe Investment Cooperation Fund	2013	1	China EXIM	Hungarian Export– Import Bank
4	Silk Road Fund	2014	40	SAFE, China Investment Corporation (CIC), China EXIM, CDB	-
	China–Kazakhstan Production Capacity Investment Fund	2015	[2]	SRF	-
5	China– LAC Cooperation Fund (private equity fund)	2015	3	China EXIM	-
6	China–Latin American Industrial Cooperation Investment Fund (CLAIFUND)	2015	10	SAFE, CDB	-
	China–Brazil Production Capacity Cooperation Fund	2017	[20]	CLAIFUND and Chinese institutions (\$15 billion)	BNDES, Caixa Economica Federal (\$5 billion)
7	China–Africa Production Capacity Cooperation Fund	2016	10	SAFE, China EXIM	-
8	China–Russia Regional Development Investment Fund	2017	15.4	National Development and Reform Commission	-

³⁰ The discussion of special funds in this section is not to be confused with AIIB's \$50 million special fund to assist developing country members in infrastructure project preparation, which was established in January 2016.

TOTAL 99.4

Source: Authors' elaboration.

^a Table 2 is not a comprehensive list of China-backed national, regional, and bilateral investment funds. For example, the \$2.4 billion China–Mexico Investment Fund and the \$10 billion United Arab Emirates–China Joint Investment Fund have not been included, either due to lack of information or uncertainty over their status. Also, China's bilateral investment funds with developed countries have not been included. See also Zhang (2014). Other related initiatives, such as establishing a \$10 billion Shanghai Cooperation Organization development bank, have yet to materialize.

To avoid double-counting, this calculation does not include related bilateral investment funds that receive capital from other China-backed investment funds. For example, in December 2015, SRF invested \$2 billion in establishing the China–Kazakhstan Production Capacity Cooperation Fund, in partnership with Kazakhstan's National Export and Investment Agency (Kaznex Invest), to provide financing for bilateral projects related to China's "Belt and Road" initiative (Chen, 2015). More recently, in May 2017, the China–Brazil Production Capacity Cooperation Fund was officially launched, with initial capital of \$20 billion to invest in projects in Brazil related to infrastructure, manufacturing, agribusiness and technology. It is reported that \$5 billion of the fund's capital will be provided by Brazilian sources such as BNDES and Brazil's State-owned Federal Savings Bank (Caixa Economica Federal), and \$15 billion from Chinese sources, including the \$10 billion China–Latin American Industrial Cooperation Investment Fund (CLAIFUND) (Xinhua News), 2017.

The \$99.4 billion total should be considered an upper-bound estimate of these funds' potential financial firepower (notwithstanding a future decision to increase the number of funds and/or the overall capital size of existing funds). For example, the China–ASEAN Investment Cooperation Fund is an open-ended private equity fund focusing on investments in infrastructure, energy and natural resources. It is sponsored by China EXIM and other institutional investors, and has an initial fund size of \$1 billion, with a total target fund size of \$10 billion. The China–Central and Eastern Europe Investment Cooperation Fund was initially incorporated with \$435 million, with second phase funding of \$1 billion becoming operational in 2017. Similarly, the China–Russia Regional Development Investment Fund has an initial fund size of \$1.5 billion, with a target fund size of roughly \$15.4 billion.

SRF was created in 2014 and is the main financial vehicle supporting China's Belt and Road initiative. Considered as China's latest experiment with sovereign wealth funds, it was initially capitalized with \$10 billion and has a target fund size of \$40 billion. SRF is jointly owned by four State institutions: State

^b Figures in square brackets are not included in total.

³¹ Available at www.china-asean-fund.com/about-caf.php?slider1=2.

³² Available at http://china-ceefund.com/Template/background_9.html.

³³ Available at http://money.163.com/17/0518/04/CKMLNV41002580S6.html.

Administration of Foreign Exchange (SAFE), with a 65 per cent stake; China Investment Corporation (CIC) and China EXIM, each with a 15 per cent stake; and CDB with a 5 per cent stake (Kozul-Wright and Poon, 2015). In a recent speech, chairman of the board of directors Jin Qi said that SRF has already made investment commitments of \$6.8 billion, of which almost 80 per cent consists of equity financing (Jin, 2017).³⁴ At the recent Belt and Road Forum, SRF was provided with roughly \$15 billion, bringing its fund size to \$25 billion (Belt and Road Forum for International Cooperation, 2017).

For its part, the China–Africa Development Fund (CADF) is a subsidiary of CDB and is also considered as one of China's sovereign wealth funds. CADF was the first Chinese equity fund dedicated to fostering China–Africa economic ties, and invests in Chinese firms with economic and trade activities in Africa, as well as in African firms and projects invested by Chinese firms. The fund does not seek controlling or majority stakes, and financing can take the form of direct equity investment (in ordinary shares of a firm or project); quasi-equity investment (preference shares, convertible bonds, other hybrid instruments); and fund investment (fund-of-funds) (Cummine, 2015). ³⁵ Following the Third Forum on China–Africa Cooperation, CADF was established with \$1 billion in capital in 2007 and committed funds were increased over time: \$3 billion in 2009, \$5 billion in 2012 and \$10 billion in 2015. However, by the end of 2016, CADF had reportedly only been able to invest \$4.4 billion in African countries (CDB, 2017; China Daily, 2016).

It is also important to note that investment funds listed in table 2 do not include Chinese funds (or portions of funding arrangements) that are intermediated by existing MDBs. For example, the China–LAC Cooperation Fund consists of two parts: part one is a \$2 billion China Co-Financing Fund for Latin America and Caribbean Region, which is managed by IADB for investment in areas including education, water conservancy and energy; part two is a \$3 billion private equity fund administered by China EXIM with funds provided from Chinese institutions, with a focus on areas including energy and natural resources, infrastructure, agriculture, manufacturing, high-tech and information technology (China–CELAC Forum, 2015). Only part two of the China–LAC Cooperation Fund – the \$3 billion private equity fund – is included in table 2.³⁶

³⁴ For a brief account of initial investments made by the Silk Road Fund, see Poon and Kozul-Wright (2015).

³⁵ See www.cadfund.com/en/NewsInfo.aspx?NId=48.

³⁶ Other examples include the "Africa Growing Together Fund", established in 2014 as a \$2 billion co-financing arrangement between the African Development Bank and the People's Bank of China (AfDB, 2014). In 2012, IADB and China EXIM created an equity investment platform consisting of three regional investment funds: the LAC–China Infrastructure Fund, the LAC–China Mid-Cap Corporate Fund, and the LAC–China Natural Resources Fund. The funds have a total size of \$1 billion, with \$150 million contributed by IADB (2012). For a list of other Chinese funds linked to existing MDBs or multilateral development organizations, see Kamal and Gallagher (2016:3).

The discussion above is not to suggest that only these China-backed investment funds will make use of AIIB's special funds institutional mechanism. Rather, these investment funds could help act as "first-mover" or "cornerstone" investors to mobilize additional financing from other (international and domestic) public and private sector sources. While these investment funds should not be considered as part of a monolithic Chinese State, their common underlying trait of State ownership could at times lead to degrees of investment coordination among different investment funds and institutions – particularly in the context of the Belt and Road initiative. In this sense, the notion that China's competitive advantage is "based on the willingness and ability of a nation and its firms to invest aggressively" (Poon, 2014:14) appears likely to extend beyond the remit of China's domestic economy, with increasing relevance on the global stage.

As Zhou Xiaochuan of the People's Bank of China has hinted, investment funds such as SRF can act as catalysts for other (State) financial institutions in a selected project's equity and debt financing. Initially, SRF and other public and private investors would make joint equity investments in the project. China EXIM and CDB could subsequently extend loans for debt financing, and CIC could provide further equity financing. With AIIB (and the BRICS bank) in operation, these could also cooperate with SRF in arranging equity and debt financing (Kozul-Wright and Poon, 2015). In this context, it is not inconceivable that other China-backed investment funds could fit into this overall structure of project financing, either directly as initial co-financiers alongside SRF or by channelling resources through the AIIB special funds mechanism. Indeed, it is perhaps through such kinds of strategic financing arrangements that Chinese policymakers may be able to experiment with improving upon existing MDB practices in the provision of large and rapid loan dispersions.

From a broader perspective, some have already contended that China has gradually established parallel structures and institutions to a wide range of international organizations in areas such as financial and monetary policy, trade and investment, security policy and diplomatic forums (Heilmann et al., 2014; Huotari and Hanemann, 2014). While much of the international community remains fixated on advancing forms of "blended finance" to draw in private sector capital, the discussion in this section helps to position AIIB's special funds mechanism and China-backed investment funds as part of China's emerging institutional architecture in international development cooperation. This parallel blended finance architecture appears set to experiment with providing forms of long-term non-concessional development finance, while retaining a distinctive feature of public sector ownership.

6. Summary and conclusions

The world currently faces the critical challenge of scaling up development finance, an indispensable requirement for the realization of the SDGs. The unique characteristics of MDBs place them as key development institutions to help the world in this task. As this paper argues, they have the right sort of technical expertise and capacity for the design, implementation and supervision of complex, long-term development projects, particularly in infrastructure, which are vital for the achievement of most SDGs. In addition, they have extensive experience in leveraging private resources for development projects through the provision of financial resources and instruments, from seed money to guarantees and insurance.

MDBs' ability to raise resources in international capital markets, however, is constrained by their narrow capital base and by their conservative lending approach to maintain high credit ratings, and in this way protect their ability to borrow internationally at relatively low costs. Given the current lack of commitment by MDB shareholders to provide substantial capital increase, MDBs face the risk of losing their relevance as international development players precisely at a time when they are most needed. In this sense, the long-established MDBs could be said to face a competitive challenge from newly established MDBs, which seem to have the financial firepower to become leading development finance institutions in the years ahead.

In the face of these challenges, the long-established MDBs have recently undertaken a number of initiatives to raise their lending capacity. This paper reports the most important ones, including balance-sheet mergers between soft and hard windows, changes in portfolio profile to reduce portfolio concentration risks, and the establishment of co-investment platforms. The paper also discusses – and critiques – proposals suggesting that MDBs change their business models and start to operate more like private investment banks by packaging loans and distributing them to private investors with different risk profiles.

Against this backdrop, the paper presents the AIIB model as an alternative to leverage resources for infrastructure development, through the use of "special funds" resources that are treated separately from the bank's ordinary resources, but may finance different parts of a same project or programme supported by ordinary funds. This gives the bank greater capacity to finance different sorts of projects in infrastructure and other productive economic sectors, which are at the core of its mission.

AIIB's special funds institutional mechanism is then placed in the context of national, regional and bilateral investment funds created by China in recent years, which could provide significant additional

resources for the purpose of financing complex, multi-year projects, such as the Belt and Road initiative, that cover several countries. To date, these funds are comprised mainly of public resources, but to the extent that AIIB's intermediation role involves non-concessional loans, the bank could build on its track record in this regard and would likely be able to increasingly attract private sector capital as co-investors in its development projects. The likelihood, therefore, is that such funds will gradually parallel the co-investment platforms set up by the existing MDBs, in terms of pooling together both private and public resources, while still maintaining a distinctive feature of public sector ownership and control.

China's experiment with development banking as an instrument of its international development initiatives did not start with the BRICS bank or AIIB. Since the early 2000s, China has significantly increased the provision of financial assistance to developing countries, using a variety of sources of funds and programmes, particularly its national development banks (CDB and China EXIM). The establishment of the BRICS bank with China as an equal shareholder, and AIIB, in which China is a main shareholder with veto power, can be seen as part of a new phase of China's international engagement, where it is actively experimenting with institution-building and the multilateralization of its development finance.

The AIIB model may be seen as unique in that its principal shareholder is a State that has the resources and is eager to promote development finance both at home and abroad. But the message that China's recent experience – and the steps the country is undertaking towards greater international engagement – truly conveys is that availability of financial resources is not all that matters, but, rather, that political will and innovative ideas are central pieces to build up a strategy to enhance financing for development. As the world moves towards taking concrete steps to implement the 2030 Agenda for Sustainable Development, the leading advanced economies will have no option except to either try to emulate China's model or to propose clear alternatives for substantial financial scaling up, at the peril of inescapably losing their central position in the international development arena.

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