

# HOW AFRICAN DEVELOPMENT BANKS CAN MOBILISE RESOURCES FOR GREEN STRUCTURAL TRANSFORMATION

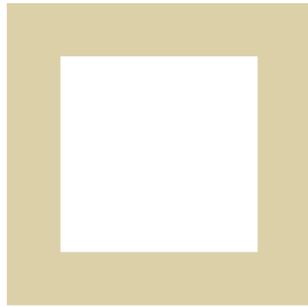
## WORKING PAPER

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**THE  
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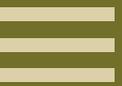
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# Abbreviations

AFC:	Africa Finance Corporation
AfDB:	African Development Bank
Afreximbank:	African Export-Import Bank
BADIA:	Arab Bank for Economic Development in Africa
DB:	Development bank
DBSA:	Development Bank of South Africa
GFC:	Global financial crisis
MDB	Multilateral development bank
NDB:	New Development Bank
NDC:	Nationally determined contributions
NPL:	Non-performing loan
PFI:	Development finance institution
SDGs:	Sustainable development goals





# 1. Introduction

Africa is projected to experience disproportionately harsh effects from both the direct and indirect effects of climate change, including policy spill-over effects from global mitigation and adaptation measures. This is despite the fact that it contributes least to the stock of greenhouse gases in the atmosphere. The continent needs an estimated \$1.6 trillion to meet its sustainable development goals (SDGs) and \$1.4 trillion to meet its nationally determined contributions (NDCs) for the decade 2020 to 2030 (Lopes 2023). Concurrently, its external debt exceeded \$1 trillion in 2021, constraining the capacity of African states to fund public climate mitigation and adaptation efforts. While African countries benefitted from their natural resources during the commodity “super-cycle” over the 2000s, the consequences of growth with limited structural transformation was brutally exposed by the global financial and Covid-19 crises. The exposure of growth’s fragility without deep structural transformation highlights the need to mobilise investment and finance for climate-compatible manufacturing and agricultural modernisation. In short, the continent faces a formidable investment and finance mobilisation challenge for green structural transformation from both international and domestic sources.

Despite the 2015 Paris Agreement commitment from advanced economies to provide \$100

billion annually in climate finance to developing nations, this target has not been met. In 2020, \$632 billion in worldwide climate finance was mobilised, including from developed economies. Of this total, only 3% or approximately \$19 billion was invested in African countries. As a result, the continent faces an annual financing gap of between \$100 billion and \$127 billion to achieve its NDC goals (Lopes 2023).

Combined and overlapping efforts are required at the international, regional and domestic level to mobilise fixed investment and finance to meet the SDG goals and NDCs, and to promote climate-compatible structural transformation; that is, it needs finance for green growth.

Development banks are already playing a significant role in supporting the mobilisation of investment and finance in various countries and regions. Knowledge about DBs’ servicing of certain countries and regions is well developed. However, as Ndikumana et al. (2023: 2) point out:

***“A major gap in the existing literature is the lack of evidence on Africa as most of the studies are on developed countries, Latin America, and Asia.”***



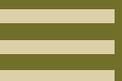
This paper aims to help fill this gap by strengthening our understanding of African Development Banks (ADB) in two ways: First, the paper scopes out a prevailing baseline understanding of the state of ADBs. It adds to our empirical understanding of ADBs by systematically examining the scale, distribution and mandates of ADBs on which information is available. It draws on the database of public development banks and development financing institutions housed at Peking University (Xu et al. 2021), as well as on financial statements of selected multilateral and regional DBs and other data sources. Second, it proposes a research agenda to deepen our understanding of ADBs and of mechanisms through which they may be quantitatively scaled and qualitatively capacitated to mobilise finance for green growth.

Section 2 sets out the conceptual and historical context of ADBs. It traces a shifting approach to development banks in the literature and establishes the rationale for DBs. It briefly discusses the historical evolution of ADBs and the global context in which ADBs currently function.

Section 3 scopes out the ADB footprint on the continent, discussing their size, regional distribution and mandates. It identifies the largest ADBs operating at both the regional and national level, highlighting the uneven geographic and size distribution of ADBs, and briefly traces the history of the four largest regional ADBs on the continent: the African Development Bank (AfDB), the African Export and Import Bank (Afreximbank), the New Development Bank (NDB) and the Africa Finance Corporation (AFC). It also discusses patterns of sectoral lending and financing instruments.

Section 4 compares the fundamentals of these four regional ADBs and discusses the extent to which they have expanded their financing and key financial ratios, indicating financial health and sustainability.

Section 5 concludes with key findings, areas for additional research and policy recommendations.



## 2. African development banks: Conceptual, historical and global context

### 2.1 The rationale for development banks

The conceptual rationale for the role of development banks in economic development and structural transformation is well established in the literature. Financial markets for fixed investment funding are imperfect owing to uncertainties and information asymmetries, which lead to socially suboptimal levels of investment in structurally transformative projects. State supported development banks have played an important role in filling this gap (Griffith-Jones and Ocampo 2018; Di John 2020). As the level of uncertainty and risk rises with the length of the investment horizon, development banks have a particularly important role to play as providers of long-term “patient” capital (Gottschalk et al. 2016).

Although DBs are traditionally viewed as tools to remedy market failures and imperfections, Mazzucato and Penna (2016) argue that state-led finance is important for the creation of entirely new industries and associated markets. Using their privileged embeddedness with both the state and private sector, DBs can act as “second best” institutional drivers of new industrial sectors and projects, particularly in otherwise institutionally impaired contexts.

Development banks can also contribute to the development and stability of the overall financial system. The global financial crisis (GFC) and Covid-19 pandemic have demonstrated the anti-cyclical role DBs can play in preventing even deeper recessions and enhancing financial stability and resilience. DBs can play a substantial role in domestic financial market development, particularly for longer-term lending and in local currencies. Repayments of foreign borrowing is subject to currency risk and thus raises the cost of capital. An important mechanism for domestic financial market development is the issuing of bonds to domestic pension and insurance funds and lending in local currency.

However, as this paper and prior research (Attridge, Chen, and Mbate 2021) show, there is a large gap between the ‘ideal’ role that ADBs can play and their current scale and impact. The percentage of ADBs in relation to worldwide DBs (circa 20%) is not matched by their scale, as they collectively account for less than 1% of global DB assets. A handful of ADBs dominate while the remainder are undercapitalised. This limited scale persists even as the mobilisation of domestic sources of long-term patient capital has become increasingly critical.

### 2.2 African development banks: Historical context

Development Banks (DBs) have played an important role as providers of long-term “patient” finance in processes of structural transformation. This has been the case with respect to both wealthy economies (Gerschenkron 1962) and developing countries (Di John 2020; Amsden 2001; Gottschalk et al. 2016). Several African development banks were established after independence from colonial rule. Some have even longer historical roots, having been established under colonial administrations (Attridge, Chen, and Mbate 2021).

Pushback against post-war state-led macro-economic management and industrialisation strategies mounted from the mid-1970s, with advocates contending that, in general, government failures were likely to outweigh benefits from state intervention to address market failures (Krueger 1974). More specifically, state interventions such as price caps and directed lending to ‘strategic’ sectors was characterised as ‘financial repression’. These policies were argued to distort savings incentives to save (and hence to invest) and cause widespread capital misallocation (McKinnon 1973; Shleifer and Vishny 1998). Financial and trade liberalisation were presented as necessary responses to the inflation and debt crises of the 1970s and 1980s. As result, African countries, partic-



ularly hard hit by debt crises, liberalised and privatised as part of structural adjustment. This included either outright liberalisation or scaling back the activities of state-owned development banks (Ndikumana, Naidoo, and Perez 2021). However, a number of ADBs survived the structural adjustment era (Abor and Ofori-Sasu 2024).

Recognition of the importance of development banks resurfaced in the wake of the 2008 global financial crisis (De Luna-Martinez et al. 2017; Griffith-Jones and Ocampo 2018) and was reinforced by the economic crisis induced by the Covid-19 pandemic (McDonald, Marois, and Barrowclough 2020). A worldwide resurgence in the role of development banks has been reflected, in part, in the establishment of new African development banks since the global financial crisis (Abor and Ofori-Sasu 2024; Attridge, Chen, and Mbate 2021).

Ndikumana et al. (2023) find that ADBs extend greater medium- to long-term lending and take on more risk than commercial banks, but are generally too undercapitalised to adequately perform this role. ADBs' technical capabilities in sector and project development could be leveraged to build more effective pipelines of bankable projects (Ndikumana, Naidoo, and Perez 2023). South Africa's Industrial Development Corporation illustrates this, having driven the post-war establishment of industries such as synfuels, chemicals and fertilisers. Recently it played the leading role in the development of a national Green Hydrogen Commercialisation Strategy (<https://www.idc.co.za/key-policies/>). Morocco's Caisse de Dépôt et de Gestion (CDG) has played an active role in the development of various sectors and supportive infrastructure such as the Tangier Med Port and associated Tanger Automotive City (Malouche and Partow 2019).

## 2.3 African development banks: The global and macroeconomic context

The scale of Africa's investment and financing mobilisation challenge is considerable.

At the same time, various developments since the GFC have been unfavourable to Africa. Foreign private capital has withdrawn from developing countries in general and African

countries in particular. A major contributing factor is the spill-over effects of Basel II and III regulations in the aftermath of the GFS. To promote greater international financial stability in the wake of the GFC, the Basel regulations require tighter capital, liquidity and prudential requirements. However, this 'one-size-fits-all' approach "hinders the development and deepening of Africa's financial and capital markets" and has "incentivised international banks to exit African markets and largely increased the cost of capital" (Lopes 2023: 18). Credit rating agencies' disproportionately harsh assessments of African country risk sometimes also unduly raises the cost of capital. For instance, African solar and wind projects face amongst the highest costs of capital, despite African infrastructure project lending having the lowest global default rates (Lopes 2023: 2). Rising interest rates in North Atlantic economies have triggered a 'flight to safety' that has also contributed to the regressive flow of capital 'uphill' from developing to developed economies, rather than the other way around.

Consequently, many African countries face debt distress alongside liquidity- and balance-of-payment stresses. Limited structural transformation has left these countries acutely exposed to such macroeconomic risks. Lower prices for oil and metallic minerals, in particular, have reduced export earnings and tax revenues, while associated currency depreciation has increased the cost of servicing foreign debt. As a result, African governments now spend more on net interest repayments - predominantly on external debt - than either education or health.

African development banks could play an important role in mobilising the capital required for green structural transformation. Developing a clearer understanding of the state of ADBs is therefore essential for identifying ways they might scale their financial, technical and policy support capabilities to meet this challenge.

## 3. Scoping African development banks

### 3.1 African development banks: Size, regional distribution and mandate

Drawing on the database constructed by Xu et al. (2021), we build a comparative picture of the African development finance landscape through examining data on public development banks (PDBs or DBs) at global, continental, regional and national levels between 2018 and 2022.

Table 1 shows the distribution of PDBs amongst continents according to size category and total assets under the management of development finance institutions (DFIs) in each continent as of 2022.

Two elements in Table 1 are especially striking: First, Africa is home to over a quarter of the world's DBs: 43 of 158, or 27% as of 2022. However, the total assets under the management of African DBs is extremely small relative to other continents, with their assets to the value of \$202 billion constituting under 1% of the global total. Also significant is that 30 or 29% of ADBs identified by Xu et al. (2021) have no information available in the public domain. It is assumed that this corresponds with low or insignificant levels of capitalisation for these banks.

**Table 1: Continental distribution of DFIs by size category and total assets (2022)<sup>1</sup>**

Size Category	Micro	Small	Medium	Large	Mega	No information	Total	Total assets (USD billion)
Africa	43	24	3	0	0	30	<b>100</b>	202
America	46	43	7	6	2	19	<b>123</b>	9 273
Asia	29	59	14	9	3	37	<b>151</b>	7 369
Europe	27	68	19	5	4	11	<b>134</b>	4 497
Oceania	11	3	0	0	0	6	<b>20</b>	13
World	2	3	2		1	0	<b>8</b>	679
<b>Total</b>	<b>158</b>	<b>200</b>	<b>45</b>	<b>20</b>	<b>10</b>	<b>103</b>	<b>536</b>	<b>22 032</b>

Source: Authors' construction based on Xu et al. (2021)

Within the broader category of African DFIs, Attridge et al.'s (2021) analysis of 33 national development banks (NDBs) in 21 countries yields several valuable insights. First, while the number of African NDBs has grown substantially in the past decade, and almost all have expanded their balance sheets and lending books, Attridge et al. argue that this expansion has been driven by increased debt rather than equity capitalisation:

*“[O]verall low levels of capitalisation ... means that banks have limited ability to leverage their balance sheets and support economic transformation goals.”*

Second, while the profitability of some African NDBs is comparable to their European counterparts, around half of the sampled banks have non-performing loan (NPL) ratios greater than 15%, with eight NDBs showing NPL ratios above 25% (Attridge et al., 2021). Third, Attridge et al. (2021) find a negative relationship between politically influenced governance structures and board appointments, and financial performance.

<sup>1</sup> Xu et al. (2021) use total assets as a criterion to classify DFIs into five size categories: mega (more than \$500 billion), large (between \$100 billion and \$500 billion [included]), medium (between \$20 billion and \$100 billion [included]), small (from \$500 million to \$20 billion [included]), and micro (less than or equal to \$500 million).



Table 2 below reflects (a) the regional distribution of African DFIs alongside their total assets under management and (b) the top 10 African countries' DBs by assets. Table 2a) shows that North Africa is host to by far the largest pool of assets managed by DFIs in the continent. This is reflected in Table 2b), which includes three North African countries that together account for 27% of total DB assets on the continent: Morocco, Egypt and Tunisia. North Africa is in fact likely to be more dominant than this figure suggests, owing to a lack of data available in

the latest edition of Xu et al.'s (2021) database for large institutions, such as Algeria's National Investment Fund. While Algeria's National Investment Fund (FNI) was previously included in the database, its exclusion owing to a lack of published financial information has a significant impact on the overall rankings and picture. With \$13 bn in assets under management when last stated, Algeria's DBs are ranked third largest among country DB assets, and further bolster North Africa's dominance in DB assets.

**Table 2: African DFIs, 2018-2022**

**(a) Regional distribution and total assets<sup>2</sup>**

Region	No. of DFIs	Assets (USD billion)				
		2018	2019	2020	2021	2022
<b>Continental</b>	2	51,5	54,9	58,3	59,4	61,6
<b>Eastern Africa</b>	26	11,3	11,9	12,1	13,1	13,4
<b>Middle Africa</b>	8	2,9	1,9	2,0	2,0	2,3
<b>Northern Africa</b>	14	56,8	65,7	78,0	84,3	83,0
<b>Southern Africa</b>	21	23,8	18,0	23,6	27,0	21,9
<b>Sub-Saharan Africa</b>	1	0,1	0,1	0,2	0,2	0,2
<b>Western Africa</b>	28	11,8	13,8	18,8	17,6	19,3
<b>Total</b>	<b>100</b>	<b>158,2</b>	<b>166,2</b>	<b>193,0</b>	<b>203,6</b>	<b>201,7</b>

**(c) Top 10 African countries by DFI assets under management as of 2022**

		No. of DFIs	Assets (USD million)				
			2018	2019	2020	2021	2022
-	Multi	13	77 404	83 932	93 939	98 367	10 7262
<b>1</b>	Morocco	5	40 618	44 972	51 432	53 802	47 735
<b>2</b>	South Africa	7	21 060	15 481	20 872	23 085	18 304
<b>3</b>	Nigeria	8	3 999	4 495	6 617	5 372	6 464
<b>4</b>	Egypt	3	0	3 047	3 544	4 919	3 971
<b>5</b>	Tunisia	2	2 765	3 257	3 738	3 754	3 410
<b>6</b>	Zambia	4	1 127	1 083	1 120	2 808	2 692
<b>7</b>	Côte d'Ivoire	2	960	1 411	1 848	2 032	2 613
<b>8</b>	Ethiopia	1	2 654	2 868	2 751	2 816	2 437
<b>9</b>	Benin	1	0	0	1 147	1 379	1 400
<b>10</b>	Mali	3	855	909	1 124	1 246	1 379

Source: Authors' construction based on Xu et al. (2021)

<sup>2</sup> Note: Data on total assets is missing for 12 of 26 DFIs in Eastern Africa, 6 of 8 in Middle Africa, 6 of 14 in Northern Africa, 12 of 21 in Southern Africa and 17 of 28 in Western Africa.



Table 3 summarises the official mandates of the 100 African DFIs covered by Xu et al.'s (2021) most recent database. As may be seen, 44 of the 100 have flexible mandates. Further research is required to establish the sectoral composition of their financing activities and inform an assessment of the developmental roles they are equipped to play, especially in relation to climate change and green structural transformation.

**Table 3: African PDB/DFIs by official mandate (2021)**

Official mandate	No. of DFIs
Flexible	44
SMME promotion	24
Rural and agricultural development	10
Social Housing	6
Infrastructure	6
Export-Import	5
International financing of private investment	3
Local government	2
<b>Total</b>	<b>100</b>

Source: Authors' construction based on Xu et al. (2021)



Table 4 lists the top 20 DBs on the continent by official mandate, ownership and total assets. These DBs accounted for 96% of total assets under management by DFIs on the continent in the 2022 period. The largest by far is the African Development Bank (AfDB), with three other multinational DFIs also making the top 10: African Export-Import Bank, Africa Finance Corporation, and The Trade & Develop-

ment Bank. The last may be more accurately described as a regional bank, as it serves East and Southern Africa. While South Africa has two DBs in the top 10, the scale of North African DFIs is made clear in Table 4. Morocco's Caisse de Dépôts et de Gestion du Maroc alone is significantly larger than all the South African DFIs combined.

**Table 4: Top 20 African DFIs by official mandate, country and total assets**

2022 rank	PDB&DFI Name	Official Mandate	Country	Total Assets (USD billion)				
				2018	2019	2020	2021	2022
1	African Development Bank	FLEX	Multilateral	47,0	48,7	50,9	50,8	51,1
2	Caisse de Dépôts et de Gestion du Maroc	FLEX	Morocco	26,3	29,3	33,2	35,1	32,6
3	African Export & Import Bank	EXIM	Multilateral	13,4	14,4	19,3	21,8	27,9
4	Agricultural Credit of Morocco	AGRI	Morocco	11,2	12,1	13,9	14,1	13,7
5	Africa Finance Corporation	INFRA	Multilateral	4,5	6,1	7,4	8,6	10,5
6	Industrial Development Corporation	FLEX	South Africa	10,0	6,2	9,7	11,9	9,0
7	Trade & Development Bank	INTL	Multilateral	5,6	6,7	7,2	8,0	8,4
8	Development Bank of Southern Africa	FLEX	South Africa	6,2	5,6	6,8	6,8	6,1
9	West African Development Bank	FLEX	Multilateral	4,5	5,3	6,0	5,7	5,5
10	Bank of Industry	FLEX	Nigeria	2,9	2,9	4,9	4,2	5,3
11	Export Development Bank of Egypt	EXIM	Egypt		3,0	3,5	4,9	4,0
12	Caisse des Dépôts et Consignations Tunisia	FLEX	Tunisia	2,5	3,0	3,4	3,4	3,4
13	Zambian Investment Holding	INFRA	Zambia	1,1	1,1	1,1	2,8	2,7
14	National Investment Bank	FLEX	Côte d'Ivoire	1,0	1,4	1,8	2,0	2,6
15	Development Bank of Ethiopia	FLEX	Ethiopia	2,7	2,9	2,8	2,8	2,4
16	Land & Agricultural Development Bank of South Africa	AGRI	South Africa	3,5	2,5	2,7	2,4	2,0
17	Ecogas Bank for Investment & Development	FLEX	Multilateral	0,9	1,0	1,0	1,2	1,6
18	Caisse des Dépôts et Consignations Benin	FLEX	Benin	N/A	N/A	1,1	1,4	1,4
19	CDG Capital	MSME	Morocco	1,0	1,1	1,3	1,7	1,4
20	Development Bank of Central African States	FLEX	Multilateral	0,7	0,8	1,2	1,2	1,3
	<b>Total</b>			<b>145</b>	<b>154</b>	<b>179</b>	<b>191</b>	<b>193</b>

Source: Authors' construction based on Xu et al. (2021)

This data excludes other important development banks and actors. These include the New Development Bank (discussed below) operating across its member shareholding countries and the Arab Bank for Economic Development in Africa (BADEA). BADEA had total assets of \$6.5bn in 2024 (<https://www.badea.org/>).

### 3.2 Trends in selected multilateral development banks operating in Africa

Below we present case studies of four multilateral development banks (MDBs): the African Development Bank (AfDB), the African Export-Import Bank (Afreximbank), the New Development Bank (NDB) and the Africa Finance Corporation (AFC). These four are a useful starting point for understanding and mapping out a research agenda on the potential of development banks to play a greater role in green structural transformation on the continent.

Each section begins with an overview of the institution.

#### 3.2.1 The African Development Bank

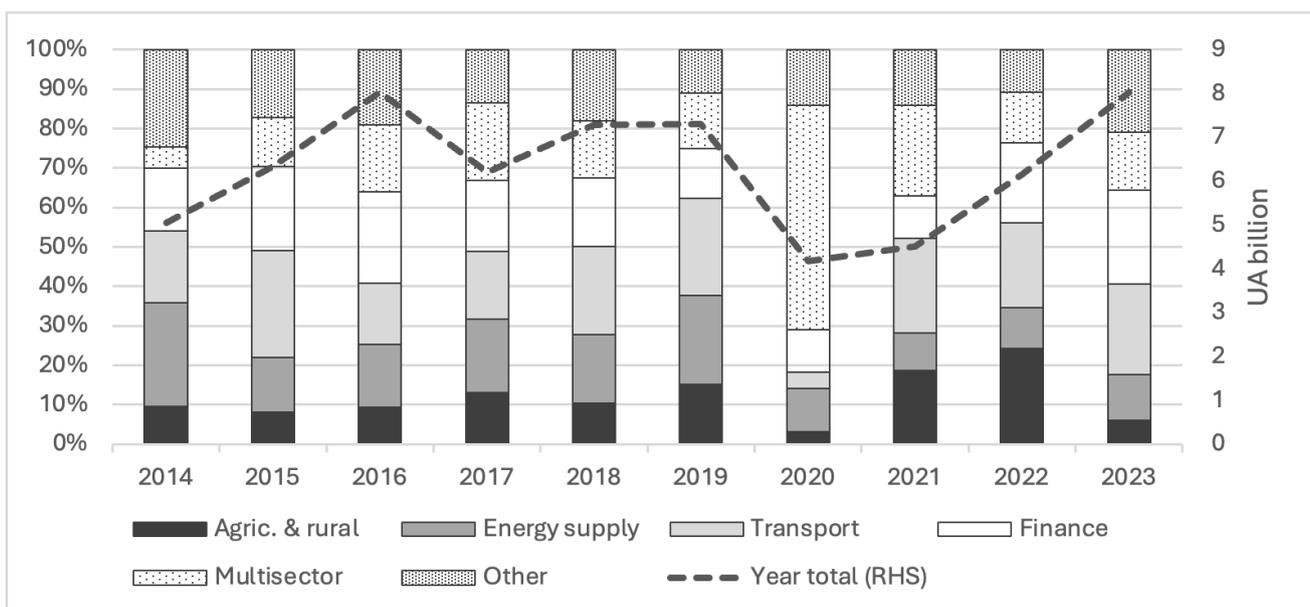
Established in 1964 following an agreement among African countries under the auspices of the Organization of African Unity (now the

African Union), the African Development Bank (AfDB) is Africa’s leading multilateral development bank, with a mandate to spur sustainable economic development and social progress across the continent.

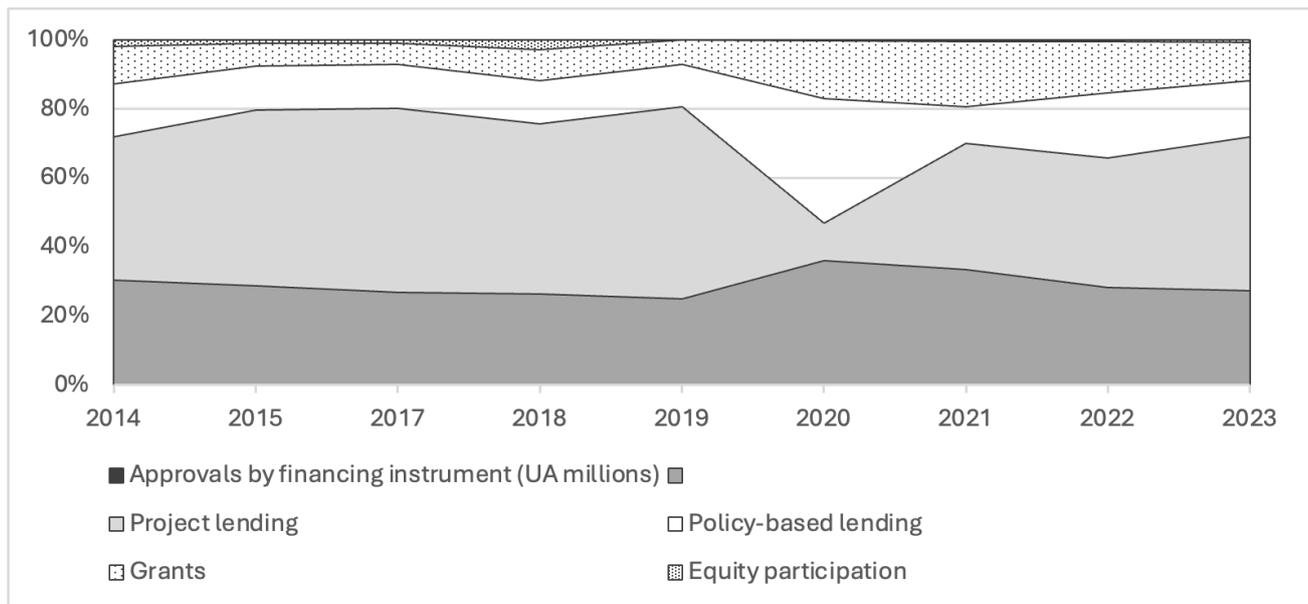
Headquartered in Abidjan, Côte d’Ivoire, its activities are funded in part by capital contributions from 81 member countries – 54 African and 27 non-African – as well as through international private capital markets. The latter hold 41.4% of voting power, with the USA holding the second largest individual share (5.6%) after Nigeria (8.7%).

The AfDB issues bonds (including green and social bonds), and its AAA credit rating has enabled it to raise capital at relatively competitive rates, thereby facilitating significant leverage of private capital. It also promotes private-sector co-financing through risk-sharing mechanisms and syndicated lending. Figure 1 shows the composition of AfDB’s annual loan approvals by sector and instrument, i.e., how the total value of the loans approved each year was distributed among sectors and financing instruments. The dashed line in the upper chart refers to the loan approvals made by the bank in each given year. Loans grew, with annual fluctuations, from approximately UA 5.5 billion to UA 8 billion between 2014 and 2023.

Figure 1 a): AfDB annual loan approvals by sector and instrument, UA billion, 2014–2023



**Figure 1 b): AfDB annual loan approvals by sector and instrument, UA billion, 2014-2023**



Source: Authors' construction based on AfDB annual reports

Not directly reflected in the bank's reporting structure are a range of goals related to its 2030 Strategic Framework on Climate Change and Green Growth. These include a commitment to allocate 40% of annual investments to climate finance and "to increase Africa's share of global climate finance from the current 3 percent to 10 percent by 2030" (AfDB, 2023: 34). In 2023 climate finance approvals totalled UA 4.3 billion (approximately \$5.8 billion, representing 55% of annual approvals), 47% of which was allocated to mitigation and 53% to adaptation.<sup>3</sup>

### 3.2.2 The African Export-Import Bank

Founded in 1993 and based in Cairo, Egypt, the African Export-Import Bank (Afreximbank) was created by African governments and institutions in order to enhance trade finance across the continent. It specialises in export development, intra-African trade promotion, and more recently regional integration under the African Continental Free Trade Area (AfCFTA).

As of 31 December 2023, the top five African DBs include the Central Bank of Egypt, the Nigerian Federal government and central bank, and the Reserve Bank of Zimbabwe, with large foreign shareholders in the top 20 including the Export-Import Bank of China and the UK's Standard Chartered Bank.

Afreximbank's interventions span various prod-

ucts: direct lending to companies (for example, pre-export loans to commodity producers or financing for manufacturers to acquire equipment), lines of credit to local banks to on-lend for trade, syndicated loans for large transactions, trade guarantees and letters of credit confirmation (to facilitate imports of essentials), and project finance for infrastructure related to trade (such as industrial parks, logistics centres and ports). The changing composition of these instruments from a more diverse set of instruments to a tighter focus on lines of credit and direct financing is illustrated in Figure 2.

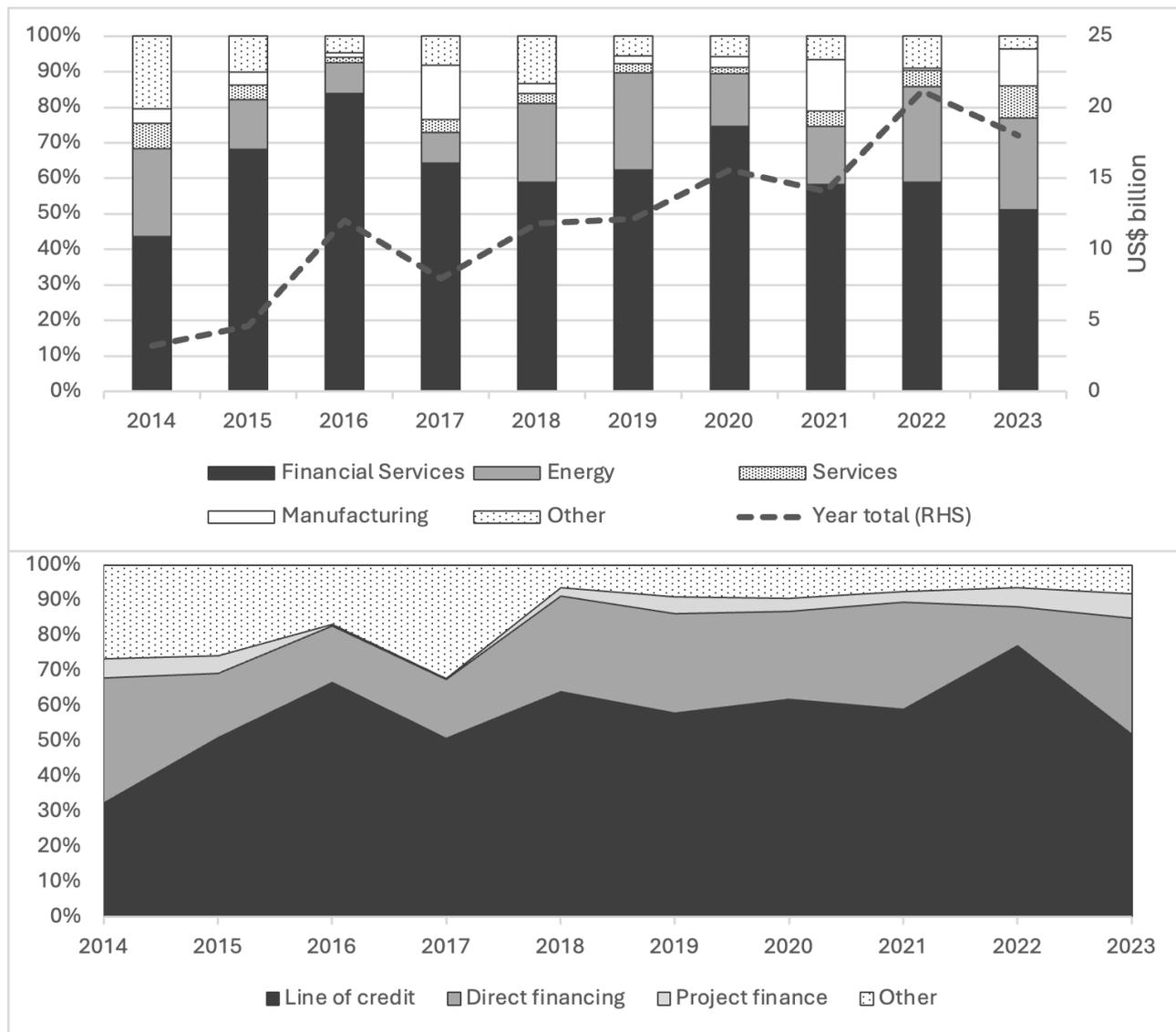
The sectoral composition of Afreximbank's annual loan approvals is shown in the top half of Figure 2, reflecting a strong preference for lending to the financial services and energy sectors rather than directly supporting producers of goods and services. This approach is also shown in the relatively small share of the bank's total portfolio allocated to its Export Development Programme "designed to drive diversification and structural transformation of African economies into higher value-added and manufactured exports", which accounted for just 1.5% of the portfolio at the end of 2023. The dashed line reflects substantial growth in annual approvals, which averaged \$8 billion per year from 2014 to 2018 and \$16 billion per year in the from 2019 to 2023.

<sup>3</sup> The AfDB uses an accounting currency called the Unit of Account (UA) which is pegged to the International Monetary Fund's Special Drawing Rights (SDR).

Although Afreximbank’s core mandate is trade, it has increasingly incorporated climate considerations into its operations, acknowledging that climate change poses a fundamental threat to Africa’s economies and trade. Citing research stating that Africa needs \$250 billion each year between 2020 and 2030 to meet its commit-

ments on nationally determined contributions (NDCs), the bank’s strategy is to focus largely on long-term climate finance for adaptation, “shifting from a focus on short-term emergency response towards one on long-term resilience building and capacity development” (Afreximbank, 2023: 113).

**Figure 2: Afreximbank annual loan approvals by sector and instrument, 2014-2023**



Source: Authors’ construction based on Afreximbank annual reports



### 3.2.3 The New Development Bank

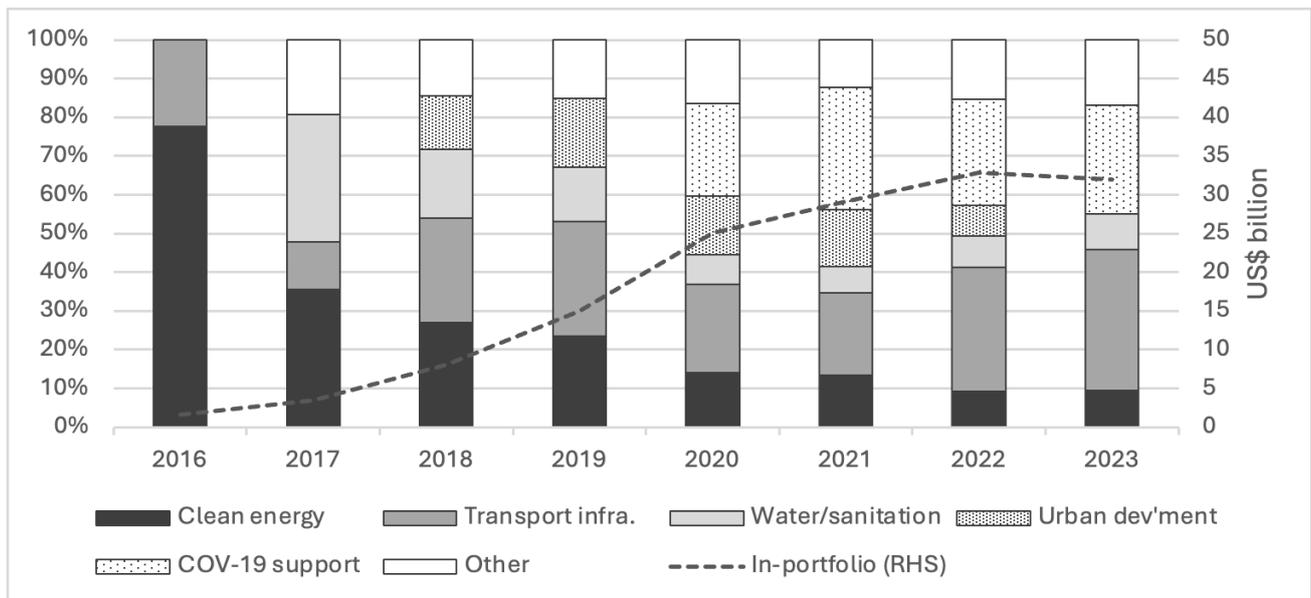
The New Development Bank (NDB) was founded in 2015 by the BRICS countries – Brazil, Russia, India, China, and South Africa – as a multilateral development bank for emerging economies. With headquarters in Shanghai, the NDB’s mandate is to mobilise resources for infrastructure and sustainable development projects in its member countries and other emerging economies. Its governance gives equal voting power to the founding five members, each having originally contributed \$10 billion in capital. By the end of 2023, the NDB had approved 93 projects to the value of \$32 billion in loans across its members: \$5.7 was allocated to projects in Brazil; \$4 billion to Russia; \$8.6 billion to India; \$8.3 billion to China. The remaining \$5.3 billion allocated to projects in South Africa has included a \$1 billion project finance facility to Eskom<sup>4</sup> to support renewable energy integration and grid expansion, and a \$300 million loan to the Development Bank of Southern Africa (DBSA) for on-lending to private sector sustainable infrastructure projects in South Africa.

With regard to climate change, the NDB’s General Strategy for 2022–2026 emphasises

scaling up financing in a way that balances economic development with sustainability. The NDB’s commitments on climate are notable – it has pledged that by the end of its 2022–2026 strategy period, 40% of its total approvals should be for projects contributing to climate change mitigation and adaptation, and that it will not finance any new coal-fired power plants (NDB, 2023: 23–24). More broadly, the NDB has set a target that 20% of the projects it approves (by number) over 2022–2026 will be co-financed with other MDBs. It aims to expand local currency financing to around 30% by the end of this period to facilitate a reduction of exchange risk for borrowers (NDB, 2023: 23).

In Figure 3, the dashed line represents total approvals for projects in all member countries, with more specific data unavailable. The NDB’s proportionate South African assets under management are therefore in addition to those recorded for ADBs as a whole in Section 3.1 above. Figure 3 differs from the representation of other banks analysed in that it reflects the stock of projects in the bank’s portfolio as at 31 December of each year, rather than total approvals per year.

**Figure 3: NDB composition of total portfolio, 2016–2023**



Source: Authors’ construction based on Afreximbank annual reports

<sup>4</sup> South Africa’s public energy utility.



### 3.2.4 The Africa Finance Corporation

The Africa Finance Corporation (AFC) is a multilateral financial institution created in 2007 with a mandate to address Africa's chronic infrastructure deficit and to drive industrial development. Headquartered in Lagos, Nigeria, the AFC operates as a private-sector-focused development bank that invests in projects across sectors such as power, natural resources, logistics, and heavy industry. AFC's shareholding includes both its 42 African country members (as of 2023) and institutional investors. It is run on commercial principles, in other words, it aims to be profitable and has paid dividends to shareholders.

AFC accesses global capital markets through bond issuance, syndicated loans, and structured financing. It holds an investment-grade

rating from Moody's (albeit several tiers below AfDB's Aaa rating), allowing it to attract relatively competitive private funding. AFC actively mobilises private investment through infrastructure-focused equity and debt instruments, notably through subsidiary funds like AFC Capital Partners, which launched the Infrastructure Climate Resilience Fund (ICRF) to attract institutional investors interested in climate-resilient infrastructure. While AFC's annual financial disclosures are not sufficiently detailed to allow for the disaggregation of its activities by sector and instrument, it has taken part in some notable projects, including the geo-economically strategic Lobito–Zambia Rail Project linking critical mining areas in Zambia and the DRC with Angola's Lobito port on the west coast of the continent.

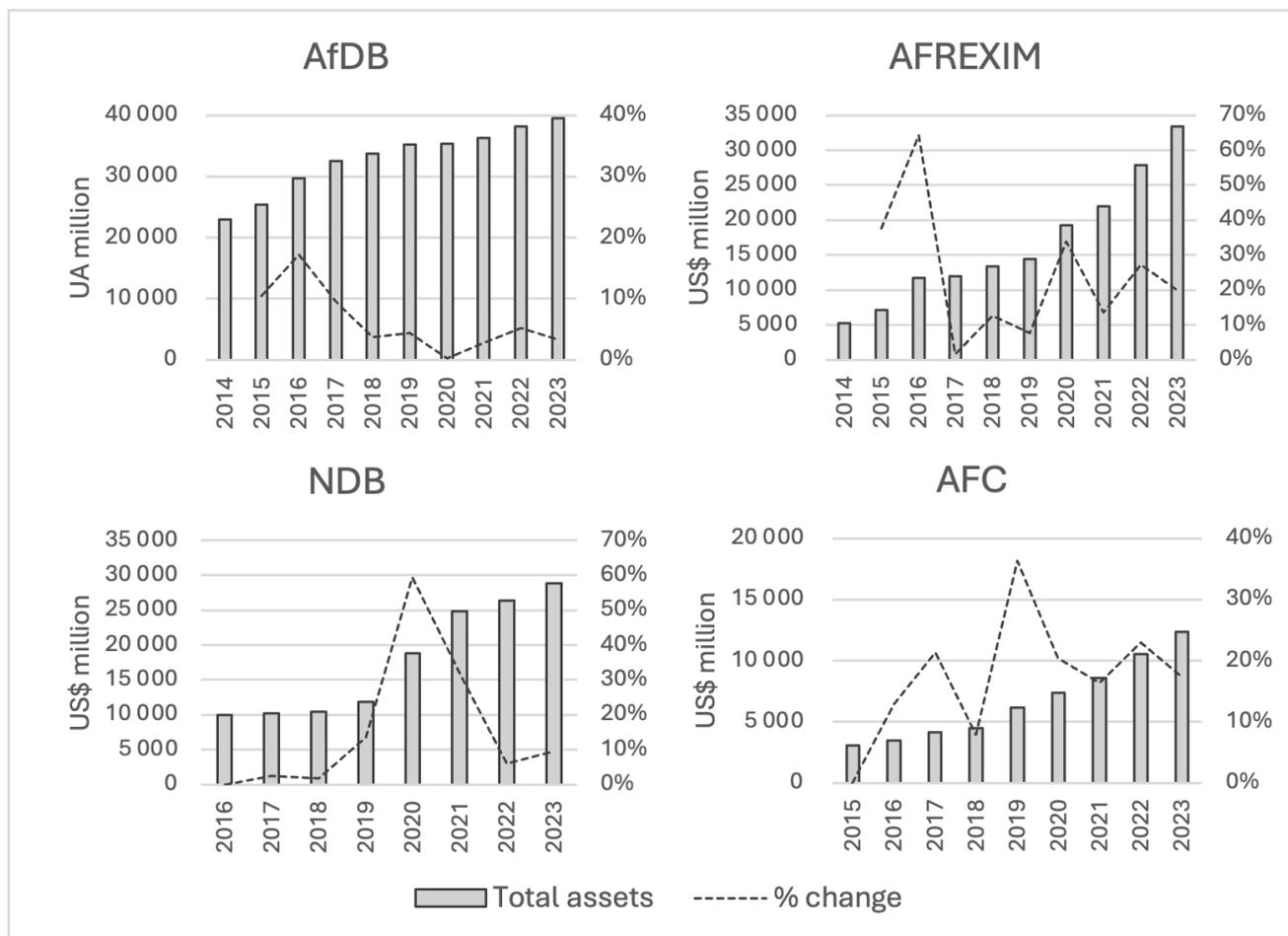


# 4. Comparing selected MDB fundamentals

Figures 4 to 8 present data drawn from our case study MDBs. Figure 4 shows that there has been a substantial increase in total assets across all four institutions. Afreximbank's expansion is the most striking. By the end of 2023, its assets were almost 5.5 times larger than they were in 2014, indicating that the large

annual approvals shown in Figure 2 have been followed by significant level of corresponding disbursements. The NDB and AFC grew their total assets by 189% and 306% respectively over the period shown in their charts, with AfDB growing at a more modest 72% between 2014 and 2023.

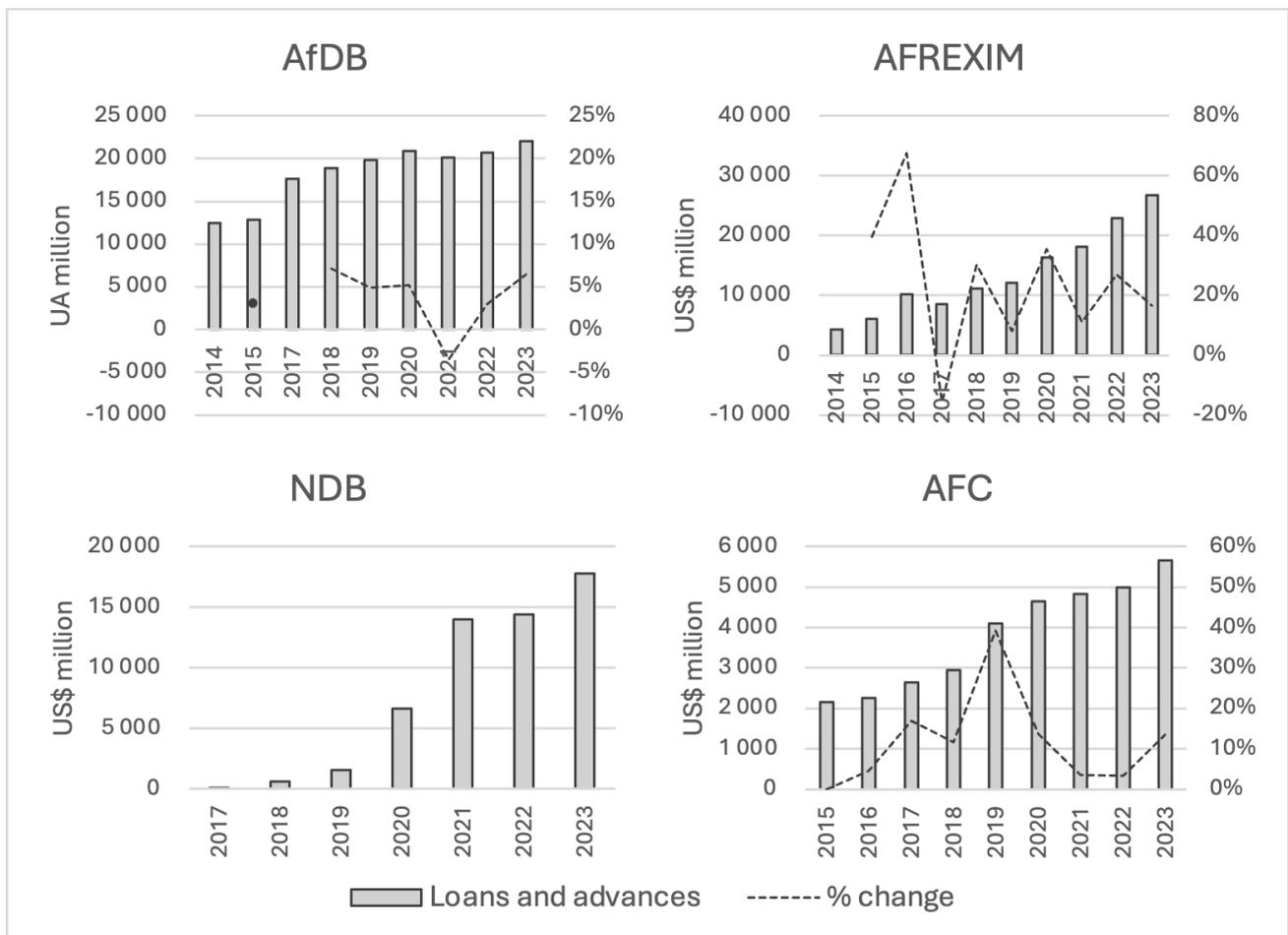
Figure 4: Total assets of selected MDBs



Source: Authors' construction based on MDB annual reports.

Figure 5 shows aggregate data on loans and advances in the portfolios of each of the four cases. These follow a similar trend to that shown in Figure 4 for AfDB (76% growth for 2014–2023) and Afreximbank assets (loans having grown more than fivefold over the period). The NDB, founded only in 2015, registered no loans until 2017 followed by four years of rapid growth, a slowdown in 2022, and further expansion thereafter.<sup>5</sup> The AFC, having grown its total assets threefold over the 2015–2023 period, achieved an expansion of 163% only in its loan assets, the balance of asset growth being made up of expanded holdings of various other financial assets.<sup>6</sup>

**Figure 5: Total loans and advances of selected MDBs**



Source: Authors' construction based on MDB annual reports

<sup>5</sup> The chart for NDB does not show a percentage change in loans, its growth from near zero rendering such figures meaningless.

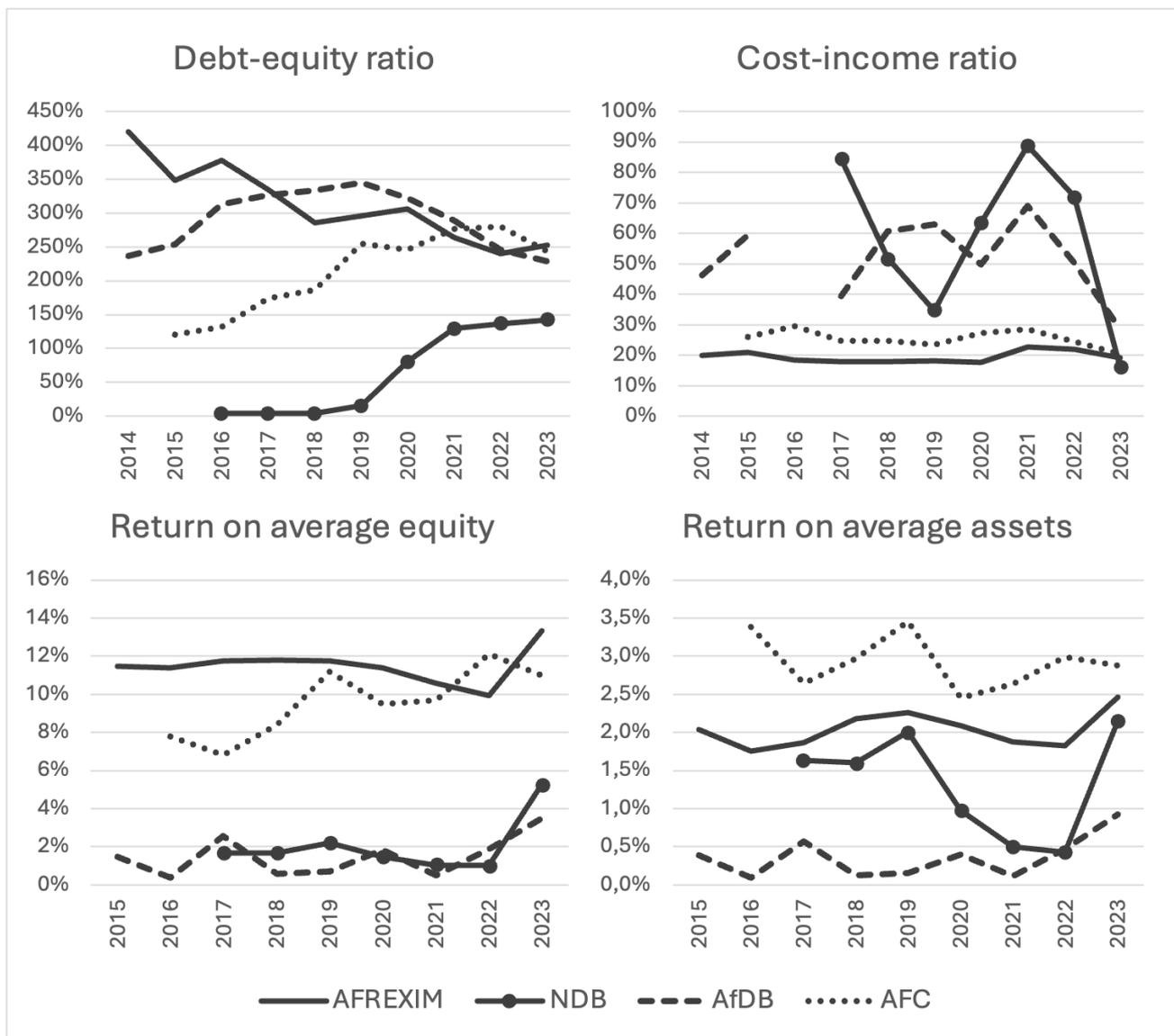
<sup>6</sup> Largely listed under derivative financial instruments, financial assets at fair value through profit or loss, and investment securities (largely sovereign debt securities such as US treasuries) (AFC 2015: 7; 2023: 160, 236).



Figure 6 shows four key ratios for the four MBDs: the debt-to-equity ratio (the extent to which an institution uses borrowed funds versus shareholder capital to finance its activities); the cost-to-income ratio (a key measure of operational efficiency); return on average equity (how profitably a bank generates net income from its shareholders' equity); and return on average assets (how profitably an institution generates net income from its total asset base).

The banks' debt-equity-ratios reflect a striking convergence around 250% (or 2.5) for AfDB, Afreximbank and AFC by 2023. Each of the three banks approached this common point along different trajectories, with Afreximbank deleveraging substantially from over 400% in 2014, AFC increasing its leverage from around 120% in 2014, and AfDB increasing leverage to almost 350% in 2019 before returning to below 250% in 2023.<sup>7</sup>

**Figure 6: Key financial ratios of selected MDBs**



Source: Authors' construction based on MDB annual reports

<sup>7</sup> For reference, Figure 7 and Figure 8 in the Appendices show trends in debt and equity for each bank.

Figure 7 and Figure 8 in the appendices show trends in debt and equity for each bank. Figure 7 illustrates that Afreximbank, NDB and AFC all increased their total stock of debt substantially over the period, while AfDB's debt was smaller in absolute terms at the end of 2023 than it was in 2019. Figure 8 shows that all the banks except the NDB have substantially expanded their total equity in the past ten years. NDB, being relatively recently established and currently having a more limited membership, grew from \$10 billion in equity in 2016 to \$11.6 billion in 2023. Its debt stock grew from around \$403 million in 2016 to \$16.6 billion in 2023. This may be partially ascribed to the fact that the bank issued a range of bonds and notes across multiple currencies and markets from 2019 onward, driving its debt-to-equity ratio closer to its peers (although this ratio is still well below theirs).

Returning to Figure 6, the data reflects another interesting convergence on cost-to-income ratios. Where Afreximbank and AFC have had markedly consistent and relatively lower cost-to-income ratios, AfDB and NDB have had substantially higher and more volatile ratios. Further research is required to understand the drivers behind each bank's relative operational inefficiency, but the similarity is surprising given the many differences between the two institutions, including their relative ages.

The two profitability measures shown in Figure 6 also show some marked differences in financial performance between the four institutions. The graph illustrating return on average assets (bottom right) shows a clear difference between relatively consistently higher performing institutions (AFC, 2.5–3.5%; Afreximbank, 1.7–2.5%), consistently lower performers (AfDB, 0.1–0.9%) and volatile performers (NDB, 0.4–2.1%), albeit within a relatively narrow range. Return on average equity (bottom left) shows a more substantial and sustained difference in performance; Afreximbank and AFC have been significantly more profitable than AfDB and NDB, with the former averaging 11.5% and 9.6% while the latter averaged 1.5% and 2.1%, respectively.

With the exception of Morocco, individual African DB assets are below 10%<sup>8</sup> (Table 5(a) in the Appendices). In general, African country stock of DB assets as a percentage of GDP is lower than some other significant developing countries such as China (27%), Thailand (24%), Mexico (15%) and India (11%). Other countries more in line with African DBs include Brazil (7%), Turkiye (4%) and Viet Nam (3%). The matter of what constitutes an “appropriate” level of DB assets for countries at different stages of development is not straightforward. However, countries with high DB shares appear to be those exhibiting economic and industrial dynamism. An important question is the extent to which regional ADBs contribute in relation to other regional DBs elsewhere in the world.

<sup>8</sup> Morocco is an outlier both by African and broader developing country standards, with DB assets at 36% of GDP.



# 5. Scaling the impact of African development banks: Conclusions and policy implications

## 5.1 Conclusions

Recent and emerging research increasingly emphasises the importance of regional and national development banks, particularly since the global financial and Covid-19 crises. The picture of African development banks is less well researched and understood than DBs in other regions. This paper has contributed to addressing this limitation by scoping the African development banking ecosystem with a particular emphasis on their role in financing green structural transformation. The analysis reveals both insights and further questions to be addressed.

For instance, while prominent large regional ADBs have signalled their intent to shift the focus of their financing towards climate-aligned objectives, their current reporting by sectors and instruments makes it difficult to fully assess progress in this regard.

***Africa hosts over a quarter of the world's DBs but, at \$202 billion, accounts for less than 1% of the global \$2.2 trillion stock of DB assets. This is lower than Africa's share in world GDP of 2.5 to 3%. If ADBs were to scale their asset base simply to match the continent's share in global GDP their assets should rise to between \$550 and \$660 billion.***

This is not an unreasonable objective in the medium term. Raising the scale of ADB financing should advance hand in hand with shifts in its composition. This includes a sectoral shift towards financing green structural transformation. It also requires raising the share of lending that is extended in domestic currency terms in order to manage foreign-exchange-related risks and costs. Furthermore, ADBs, particularly the smaller ones, need to improve

their financial and technical capacity and governance arrangements. Financial capacity refers to the fundamental systems required to manage a modern DB, not least of which is to regularly publish detailed financial statements. This is a minimum requirement to raise capital and co-financing with public and private sector actors. Technical capacity includes project and programme development capabilities in order to develop a bankable pipeline of projects. ADBs also need to strengthen their policy analysis and advisory functions to leverage their proximity to both state and private sector actors in order to support the formulation of policies that are favourable for sector development.

Further research is needed to explore how ADBs could be scaled up. This requires a deeper understanding of both the existing and potential sources and mechanisms for funding ADBs. Key areas for exploration include options for governments to increase capitalisation while remaining mindful of debt and interest repayment constraints; possibilities for bringing in other countries or funds as shareholders without diluting the developmental mandate of ADBs; and the economic and political advantages and disadvantages of national and regional consolidation of ADBs. Of value would be to better understand how national and regional African development banks interact with, are funded by and co-invest with MDBs, Chinese DBs and funds, emerging 'middle power' DBs and sovereign wealth funds, particularly Middle East-based, European, US and UK DBs, and how such funding could be scaled. It is particularly important to consider how to strengthen the ability of ADBs to lend in domestic currencies, thereby reducing exchange-rate risk and associated premia. This includes how they might tap into domestic pension and other long-term funds, issue bonds in local markets and expand domestic lending.

Scaling up also requires an understanding of how ADBs can escape the "sovereign ceiling

trap” in which they struggle to attract a rating higher than that of the sovereign, regardless of governance or prudent financial management. Insights could be drawn from case studies of African development banks that have used their privileged embeddedness with both the state and private sector to act as “second best” drivers of new industrial sectors and projects, even in institutionally impaired contexts. Of particular interest are ADBs that are performing this role in the development of green infrastructures and industries. Such studies should proceed in parallel with efforts to raise the quantitative and qualitative capacity of ADBs, drawing on the growing body of international research on their evolving role.

## 5.2 Policy implications

The emerging literature points to several policy-relevant measures that could be pursued to scale ADBs for green structural transformation.

### 5.2.1 Promoting an African financing system

Lopes argues for the development of a more coherent and ambitious African financing system that “should focus on building robust regional and continental financing mechanisms that leverage African capital for African needs” (Lopes 2025). At the regional level, the largest regional ADBs, notably the African Development Bank and African Export-Import Bank, should champion a process of working with multilateral development banks, national development banks, sovereign wealth funds and pension funds for resource pooling and co-investment. Multilateral development banks should support regional and national development banks to extend lending in local currencies. Lead actors in the African financial ecosystem should engage credit ratings agencies on the “ruinous price for Africa of pernicious ‘perception premiums’” (Fofack 2021).

### 5.2.2 Fiscal resource mobilisation

Another source of funding lies in stemming illicit financial outflows, through which substantial capital flows “uphill” from African and other developing countries to advanced economies (Volz, Lo, and Mishra 2024). Capturing and redirecting even a portion of these could provide significant green development funding. This requires national tax authorities to substantially strengthen tax administration

and digital tools to better detect and curb revenue losses from illicit cross-border flows. In parallel, governments can capture a greater share of mineral windfall rents to recapitalise development banks and finance diversification into low-carbon, job-rich sectors. Priority areas include agricultural modernisation, labour-intensive and medium-technology manufacturing, renewable energy infrastructure and the sustainable development of critical minerals (Green Industrial Development Expert Panel 2025).

Fiscal resource mobilisation can also help reduce the cost of capital for ADBs. Governments can issue tax-exempt bonds themselves or authorise ADBs to issue tax-free or tax-advantaged debt instruments. Such incentives can be targeted not only at domestic institutional investors and households but also at diaspora communities. A successful example is Ethiopia’s issuance of diaspora bonds, which have mobilised significant funding for the Grand Ethiopian Renaissance Dam (Volz, Lo, and Mishra 2024).

### 5.2.3 Options to raise ADB capitalisation

The ability to extend debt financing is constrained by the capital base; to raise their impact, ADBs need to increase their capitalisation. While many African countries are fiscally constrained owing to high external debt service obligations, there are some options available.

An obvious step for a number of ADBs is to improve the quality, breadth, depth and frequency of their reporting (Attridge, Chen, and Mbate 2021). As noted earlier, many small national ADBs do not publish regular annual financial statements. At a minimum, all ADBs should be required to produce and publicly disclose comprehensive annual accounts prepared in accordance with international standards. Moreover, although most institutions now express strong rhetorical commitment to climate and green funding, the absence of disaggregated, project-level reporting on sector allocation and environmental impact make it impossible to genuinely assess progress. There is also a need to improve the governance and professionalism of some smaller ADBs. These are minimum steps to attract further capitalisation and concessional climate-related lending.



One effective way to raise the capitalisation of ADBs is to capture a greater share of natural resource rents, particularly during commodity booms, and channel these revenues into recapitalising development banks for investment in green structural transformation. A current opportunity exists in several gold-producing countries, which are experiencing windfall taxable rents from elevated global gold prices driven by heightened international geopolitical tensions and risks.<sup>9</sup>

Another route to raise capitalisation is to allow or invite shareholding by other development banks, in both the global North and South. This can lower the cost of borrowing if the credit rating of the new shareholder is higher than that of the investee development bank (Gottschalk et al. 2017).

#### **5.2.4 The role of MDBs in supporting local currency lending of ADBs**

MDBs can play a far more substantial role in making financial instruments available that assist ADBs to scale their lending in domestic currency terms for green structural transformation. One proposal by Volz et al. (2024) is for MDBs to extend guarantees to ADBs in order to support their ability to lend in domestic currencies. Such guarantees would help mitigate the risks associated with foreign currency borrowing and lending. They could be provided on the strength of the MDBs' investment grade rating, thereby significantly lowering the cost of capital, overcoming the sovereign risk premium problem, and attaching the MDB rating to the bonds or loans extended. This would lower the cost of capital attached to exchange rate premia for foreign borrowing. It would also contribute to macroeconomic stability by avoiding interest repayment spikes arising from sharp currency depreciations.

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<sup>9</sup> Significant African gold producers include Ghana, South Africa, Mali, Burkina Faso, Sudan and Tanzania.



# Appendices

**Table 5: Top 20 African countries by total assets under management**

(a) National Development Bank assets as share of GDP

	2018	2019	2020	2021	2022
<b>African economies</b>					
Morocco	32%	35%	42%	38%	36%
South Africa	5%	4%	6%	5%	5%
Nigeria	1%	1%	2%	1%	1%
Egypt	0%	1%	1%	1%	1%
Tunisia	6%	8%	9%	8%	8%
Zambia	4%	5%	6%	13%	9%
Côte d'Ivoire	2%	2%	3%	3%	4%
Ethiopia	3%	3%	3%	3%	2%
Benin	0%	0%	7%	8%	8%
Mali	5%	5%	6%	6%	7%
Angola	2%	2%	2%	1%	1%
Botswana	4%	3%	4%	3%	2%
Rwanda	3%	3%	3%	3%	3%
Namibia	6%	6%	8%	5%	3%
Uganda	0%	0%	1%	1%	1%
Kenya	0%	0%	0%	0%	0%
Mauritius	1%	1%	1%	2%	2%
Ghana	0%	0%	0%	0%	0%
Tanzania	1%	1%	1%	0%	0%
Seychelles	7%	7%	6%	8%	6%
<b>Other selected developing economies</b>					
Brazil	12%	11%	12%	9%	7%
Russian Federation	3%	3%	3%	3%	0%
India	10%	10%	12%	11%	11%
China	29%	28%	31%	27%	27%
Mexico	15%	16%	19%	16%	15%
Turkiye	5%	6%	6%	5%	4%
Viet Nam	7%	7%	7%	6%	3%
Thailand	20%	20%	24%	23%	24%
<b>Bangladesh</b>	<b>1%</b>	<b>1%</b>	<b>1%</b>	<b>1%</b>	<b>1%</b>

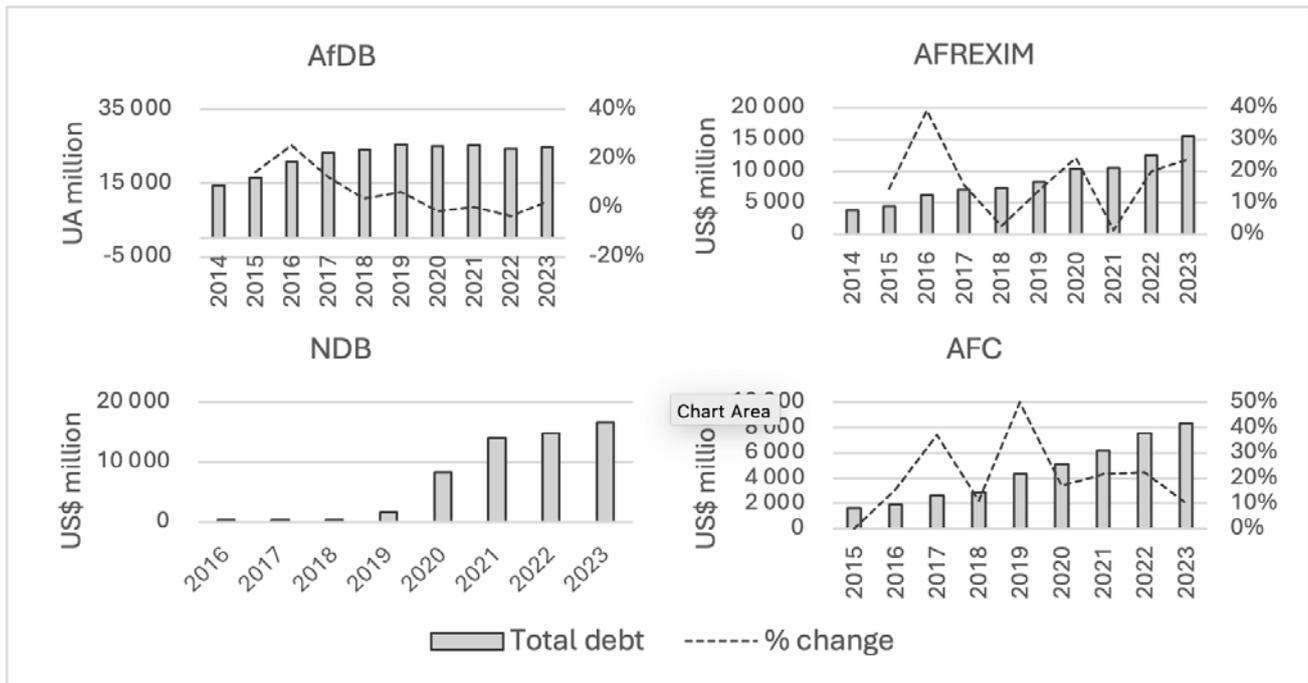
Source: Author's construction based on Xu et al. (2021) and World Development Indicators

**(b) National Development Bank assets as share of external debt**

	2018	2019	2020	2021	2022
<b>African economies</b>					
Morocco	81%	82%	78%	82%	74%
South Africa	12%	8%	12%	14%	11%
Nigeria	6%	6%	8%	6%	7%
Egypt	0%	3%	3%	3%	2%
Tunisia	8%	8%	9%	9%	9%
Zambia	4%	4%	4%	10%	9%
Côte d'Ivoire	6%	7%	7%	7%	8%
Ethiopia	10%	10%	9%	9%	9%
Benin	0%	0%	22%	20%	19%
Mali	19%	18%	19%	19%	22%
Angola	2%	2%	1%	1%	2%
Botswana	36%	36%	35%	28%	24%
Rwanda	5%	4%	4%	3%	5%
Namibia	N/A	N/A	N/A	N/A	N/A
Uganda	1%	1%	2%	2%	2%
Kenya	0%	0%	0%	1%	1%
Mauritius	1%	1%	1%	1%	1%
Ghana	0%	0%	1%	1%	1%
Tanzania	3%	2%	2%	1%	1%
Seychelles	N/A	N/A	N/A	N/A	N/A
<b>Other selected developing economies</b>					
Brazil	42%	36%	31%	27%	25%
Russian Federation	10%	11%	10%	11%	0%
India	53%	50%	58%	56%	59%
China	203%	192%	197%	180%	204%
Mexico	31%	34%	36%	35%	36%
Turkiye	10%	11%	10%	9%	8%
Viet Nam	20%	18%	18%	17%	8%
Thailand	55%	60%	61%	58%	63%
Bangladesh	5%	4%	4%	3%	3%

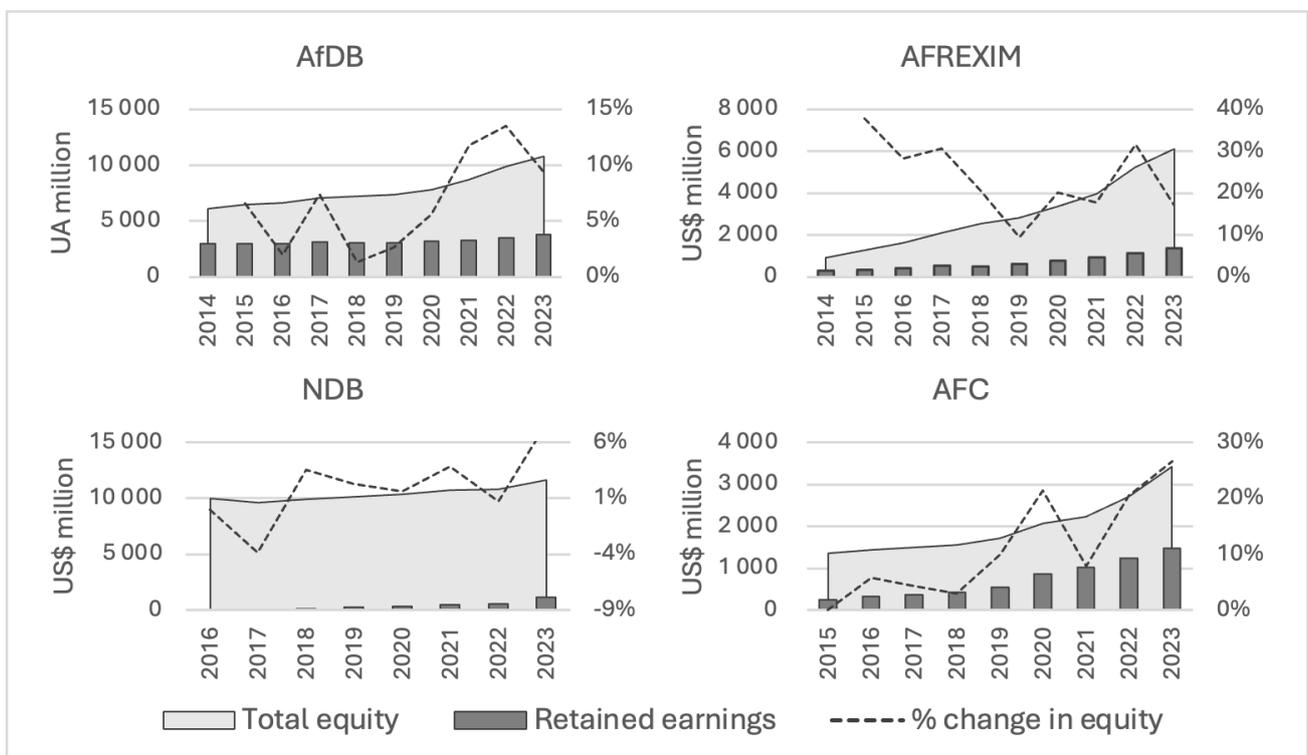
Source: Author's construction based on Xu et al. (2021)

Figure 7: Total debt of selected MDBs



Source: Authors' construction based on MDB annual reports

Figure 8: Total equity and retained earnings of selected MDBs

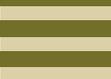


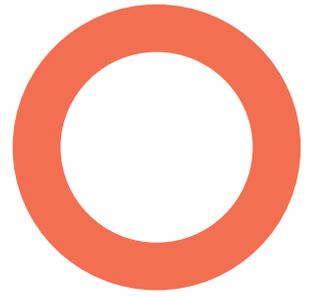
Source: Authors' construction based on MDB annual reports



# References

- Abor, Joshua Yindenaba, and Daniel Ofori-Sasu. 2024. *Perspectives on Development Banks in Africa: Case Studies and Emerging Practices at the National and Regional Level*. Springer Nature.
- Amsden, Alice Hoffenberg. 2001. *The rise of the rest": Challenges to the West from late-industrializing economies*. Oxford University Press, USA.
- Attridge, Samantha, Yunnan Chen, and Michael Mbate. 2021. Financial performance and corporate governance: Evidence from national development banks in Africa. ODI Report.
- De Luna-Martinez, Jose, Carlos Leonardo Vicente, Ashraf Bin Arshad, Radu Tatucu, and Jiyong Song. 2017. *2017 Survey of National Development Banks (English)*. Washington, D.C.: World Bank Group.
- Di John, Jonathan. 2020. The political economy of development banking. [Complete reference](#)
- Fofack, Hippolyte. 2021. The ruinous price for Africa of pernicious' perception premiums. AGI, Brookings Institution Report, October.
- Gerschenkron, Alexander. 1962. *Economic backwardness in historical perspective* (1962). Cambridge MA.
- Gottschalk, Ricardo, D Poon, M Mednik, CP Chandrasekhar, and S Griffith-Jones. 2016. The role of development banks in promoting growth and sustainable development in the South. Division on Globalization and Development Strategies, United Nations Conference on Trade and Development (UNCTAD).
- Green Industrial Development Expert Panel. 2025. Pathways to green African industrialisation: Green Industrial Development Expert Panel (GIDEP) Position Paper. Cape Town: Nelson Mandela School of Public Governance, University of Cape Town & African Climate Foundation.
- Griffith-Jones, Stephany, and José Antonio Ocampo. 2018. *The future of national development banks*. Oxford University Press.
- Krueger, Anne O. 1974. The political economy of the rent-seeking society. *The American Economic Review* 64 (3):291-303.
- Lopes, Carlos. 2023. Priorities for an equitable reform of the global financial system: unlocking climate investment and sustainable development in Africa. African Climate Foundation.
- Lopes, Carlos. 2025. Africa needs its own financing system. Project Syndicate.
- Malouche, Mariem, and Zeinab Partow. 2019. Creating markets in Morocco: A second generation of reforms: Boosting private sector growth, job creation and skills upgrading. Washington, D.C.: International Finance Corporation.
- McDonald, David A, Thomas Marois, and Diana Barrowclough. 2020. Public banks and Covid-19: Combatting the pandemic with public finance.
- McKinnon, Ronald I. 1973. *Money and capital in economic development*. Brookings Institution Press.
- Ndikumana, Léonce, Karmen Naidoo, and Francisco Perez. 2021. Is there a case for national development banks in Africa? Conceptual rationale and empirical evidence. [Complete reference](#)
- Ndikumana, Léonce, Karmen Naidoo, and Francisco Perez. 2023. Can national development banks help alleviate the shortage of patient investment capital in Africa? Evidence from bank-level panel data. *Journal of African Development* 24 (1): 1-42. doi: 10.5325/jafrideve.24.1.0001.
- Shleifer, Andrei, and Robert Ward Vishny. 1998. *The grabbing hand: Government pathologies and their cures*. Harvard University Press.
- Volz, Ulrich, Yuen C. Lo, and Vaibhav Mishra. 2024. Scaling Up Green Investment in the Global South: Strengthening Domestic Financial Resource Mobilisation and Attracting Patient International Capital. London: SOAS Centre for Sustainable Finance, SOAS University of London.
- Xu, Jiajun, Régis Marodon, Xinshun Ru, Xiaomeng Ren, and Xinyue Wu. 2021. What are public development banks and development financing institutions? Qualification criteria, stylized facts and development trends." *China Economic Quarterly International* 1 (4):271-294.





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