



Report

Financial performance and corporate governance: evidence from national development banks in Africa

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Cover photo: Women work in a garment factory in Accra, Ghana, 2015. World Bank / Flickr.

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Acronyms

AADFI	African Association of Development Finance Institutions
ADB	Agricultural Development Bank, Ghana
AFD	Agence Française de Développement
AR	auto-regression
BOI	Bank of Industry
BPC	Banca de Poupança e Crédito, Angola
CDC	Caisse des Dépôts
CEO	chief executive officer
DBN	Development Bank of Nigeria
DBNA	Development Bank of Namibia
DBSA	Development Bank of South Africa
DFI	development finance institution
GDP	gross domestic product
IDC	Industrial Development Corporation, South Africa
IFC	International Finance Corporation
LCU	local currency unit
MSMEs	micro, small and medium-size enterprises
NDB	national development bank
NEXIM	Nigeria Export-Import Bank
NPL	non-performing loan
PSGRS	Prudential Standards, Guideline and Rating System
ROA	return on assets
SEFA	Small Enterprise Finance Agency
S-GMM	System Generalized Methods of Moments
UDB	Uganda Development Bank

For ease and brevity, NDBs may be referred to using the convention of the bank's acronym, followed by country of origin, e.g. UDB Uganda.

Executive summary

National development banks (NDBs) have huge potential to support their country's development strategies and the transition to low-carbon, climate-resilient economies. However, a perception of problematic governance and weak performance means that these banks may be overlooked, both in terms of their potential role in supporting national development, and as partners for international development finance institutions (DFIs), international climate funds, donors and private actors.

This perception is especially strong for African NDBs. Many operate in contexts of institutional weakness and problematic governance, presenting challenges both to the autonomy of NDBs from political interests, and the capacity of these institutions to fulfil their mandates.

This study explores whether these negative perceptions of governance and financial performance are valid, and examines the extent to which the governance of NDBs in Africa affects their financial performance. Combining quantitative and descriptive analysis based on a novel time-series dataset of 33 banks in 21 countries, we explore the governance and financial trends that characterise these banks over the period 2014 to 2019, and use an econometric analysis to measure the specific impact of political influence on governance, and the financial performance of banks.

1.1 Key findings

1.1.1 Finding 1

African NDBs are growing in number and size. Although the balance sheets and lending operations of the sampled NDBs are expanding, they remain small relative to gross domestic product (GDP), limiting their potential to support national development objectives in a material way.

African NDBs show remarkable diversity in their age, size and governance structures. Many

are legacies of social banks established in the decades post-independence, but many have been created in the last decade.

Almost every bank studied has grown its balance sheet and lending portfolio. This growth has largely been funded through increases in debt finance rather than equity capitalisation, reflected in increased gearing ratios. These gearing ratios remain low, however, reflecting overall low levels of capitalisation. This means that banks have limited ability to leverage their balance sheets and support economic transformation goals.

1.1.2 Finding 2

Although financial performance varies among African NDBs, it is sound for about 50% to 60% of sampled banks. The profitability of many sampled NDBs compared favourably with that of European DFIs, but asset quality does appear to be an issue for African NDBs compared to NDBs in other regions.

Financial performance varies widely between banks, as measured by three metrics: gearing ratios; non-performing loan ratios (NPL) and return on assets (ROA). Two-thirds of the sample banks are profitable, comparing favourably to European DFIs. However, half of our sample banks have high NPL ratios, indicating issues with asset quality. This suggests that country-level factors, or the wider *enabling environment*, plays an important role in influencing the profitability of banks. Compared to other parts of the world, these challenges are more pronounced for NDBs in Africa.

1.1.3 Finding 3

Most African NDBs have traditional corporate governance structures, and political appointments are prevalent.

Many of the sampled NDBs have a traditional corporate governance structure in line with international norms, with a board

of directors and a chief executive officer (CEO), who is separate from the chair of the board. The vast majority have some degree of government representation on the board, but the proportion can vary significantly. This form of representation can be important as it can help with embeddedness with government, which is beneficial in terms of policy steer and alignment, but needs to be balanced with a degree of independence so as to avoid undue political influence. The head of state is directly involved in the appointment of CEOs and/or board members in around one-third of our sample banks.

1.1.4 Finding 4

The governance structures of NDBs condition financial performance. Crucially, higher levels of political influence through political appointments are associated with weaker financial performance. This effect is mitigated with board independence, and this mitigation effect is stronger in countries where the enabling environment is weaker.

This study finds strong evidence that the governance structures of banks condition financial performance, even when controlling for the country environment. Crucially, the political appointment of executive management by the president or head of state is associated with poorer financial performance.

Board composition matters. While many banks have some degree of government representation on the board, a higher proportion of independent members is associated with stronger financial performance. Our analysis shows a conditional relationship: this effect is stronger in countries where the enabling environment is weaker, showing that governance structures can have a magnified impact in weak institutional contexts.

1.1.5 Finding 5

Transparency is poor. For the vast majority of African NDBs, very little information and data is publicly available, which limits understanding of these banks and undermines accountability.

For the vast majority of African NDBs, very little information on governance, operations, financial performance and development impact is publicly available. The study catalogued

107 NDBs, only 48 of which provided online documentation (i.e. annual reports or financial statements), and only 16 had current information and data up to 2019/2020.

Recommendations

These findings make the case that the internal governance of a bank matters more than who or what owns it. Political interference in banks may be well-intentioned for developmental purposes or driven by corrupt practices, both of which can lead to high-risk activities and poor financial performance. Weak financial performance undermines the ability of development banks to deliver on their mandate, their ability to fund operations and their attractiveness to international and private partners.

The remit of this analysis extends only to financial metrics of performance. We cannot adequately evaluate the development effectiveness of banks that operate in diverse contexts and in multiple economic sectors. The long-term effectiveness of an NDB depends on its financial soundness, which is in turn a prerequisite in attracting further finance from private sector or international partners.

Recommendation 1

NDBs and their shareholders should explore reforms of governance structures which increase the institutional distance between ownership and management. While sole and centralised government ownership is a reality for the majority of banks, increasing institutional distance from ownership by depoliticising appointments of executive management, and increasing the representation of independent board members, can lower the risks of poor financial performance. This can help in providing sufficient independence and capacity to help mitigate against political interference, developmental or corrupt, that threatens long-term financial performance.

With this purpose in mind, many newer banks have been established with international or private shareholding to dilute government influence and boost governance, but other, internal governance arrangements can also be effective. For example,

entrusting CEO appointments to the board, not political actors, may be more salient, increasing the institutional distance between ownership and management. Maintaining a ratio of independent board members relative to government members may also help balance the policy direction of the bank with greater independence for the board and management. This independence of the board can have a magnified impact in weak enabling environments in improving banks' performance.

Recommendation 2

African governments should boost the capitalisation of well-governed and strongly performing NDBs and international development partners should step up their engagement with these banks.

Boosting governance is not enough. This study finds a fair number of strongly performing

banks in Africa, but almost all remain too small to have a significant economic impact. This study argues that well-governed banks need sufficient capitalisation from government and support from international partners, to enhance their capacity to operate at a scale that can support transformative investment and inclusive economic growth.

Recommendation 3

Efforts should be made to strengthen the transparency of African NDBs.

At a minimum, shareholders and international partners should encourage and support NDBs to publish audited financial statements and annual reports on a timely basis. This is an essential component of accountability and a prerequisite for most external partners to lend and partner with these banks.

1 Introduction

NDBs have huge potential to support their country's development strategies and their transition to low-carbon, climate-resilient economies (Stuart and Gallagher, 2016; Griffiths-Jones et al., 2020; Muñoz Cabré et al., 2020). However, in Africa a perception of problematic governance and weak performance means that NDBs may be overlooked, both in terms of their potential role in supporting national development, and as partners for international development finance institutions (DFIs), international climate funds, donors and private actors. This study examines the governance and financial performance of African NDBs to understand if negative perceptions of governance and performance are valid, and to understand how political influences affect the financial performance of NDBs in the region.

As development actors, NDBs have distinct advantages: they are well-integrated within the public sector and well-connected to the domestic private sector, making them a powerful instrument to support the implementation of governments' development strategies. Indeed, this intimate political *embeddedness* is one of their comparative edges over multilateral or regional development banks. At the same time, the economic, institutional and regulatory context strongly conditions the sectors in which NDBs operate, their capacity and resources, their day-to-day operations and ultimately their financial performance. Political influence can help align a state's development goals with a bank's financial lending, but there may be trade-offs and risks in this embeddedness.

Proponents of government intervention often point to the prevalence of agency problems. The cost of monitoring banks means governments may give insufficient supervision, giving them incentives to under-perform (Barth et al., 2004). Unlike commercial banks,

NDBs can be harnessed to support public development objectives and the implementation of government priorities. However, they also need to maintain their financial viability, which may be problematic due to the existence of soft budget constraints (Kornai et al., 2003) and moral hazard. Given that NDBs are not entirely profit-motivated, as they can receive government bailouts, they may engage in riskier lending. Greater government supervision could thus help in mitigating excessive risk-taking.

Opponents of government intervention often point to political economy concerns. Political involvement can lead to poor performance if governments influence the allocation of funds towards patronage or unviable sectors of the economy (Djankov et al., 2002; Quintyn and Taylor, 2002). In this regard, there is a need for a level of independence from government influence to insulate banks from undue pressure, which could endanger their financial soundness or developmental purpose. Striking a balance between embeddedness and independence will be key to creating a virtuous circle where African NDBs are effective delivery partners, integrated into national and international policy frameworks and with access to increased resources and support.

Our focus on the financial performance of African NDBs is motivated by several considerations. First, unlike commercial banks, they have significant potential – if well-managed – to implement national policy objectives, aiding industrial growth and supporting domestic industries, as well as playing a counter-cyclical role in mitigating economic crises and protecting livelihoods (Culpeper, 2012). Given the impact of Covid-19, this role is particularly urgent (see Appendix 1). Second, these banks must sustain a minimum level of financial performance to survive as viable financial institutions, and to

attract financial partners that can help scale investment to support development objectives. Finally, as largely publicly owned entities, NDBs are embedded within a structure of accountability through which government actors play an influential role. As such, examining the interaction between corporate governance and channels of political influence can offer important policy insights in identifying key factors affecting financial performance.

The objectives of this paper are threefold. First, we provide an assessment of the landscape of NDBs in Africa, focusing on their governance structures and trends in financial performance. Second, we use econometric analysis to assess the relationship between corporate governance structures and financial performance, and draw conclusions around how governance arrangements – independent of country-level governance – influence a bank's performance. Third, we draw policy implications regarding governance in NDBs.

We present the following key results: first, we find that African NDBs are numerous, and growing in number and size. Second, although the majority of the banks in our sample are profitable (see Table A1), they tend to be small, have limited financial leverage, rely on long-term debt and have high ratios of non-performing loans compared to NDBs in other regions. Third, many NDBs have traditional corporate governance structures, but we find a prevalence in political appointments from the president or head of state. Fourth, we find that corporate governance arrangements that increase institutional distance between political actors and bank management are associated with better performing banks. Using panel regressions, we find that political influence through appointment practices is negative associated with financial performance, suggesting that this is one of the most influential channels undermining a bank's performance. Crucially, we find that, for countries with a *weak* enabling environment, corporate governance arrangements that allow for greater independence from governments are *more* important to the performance of the bank compared to a bank situated in countries with *strong* enabling environments. Finally, our study

highlights the lack of transparency and data availability in many of these banks.

Our findings indicate a significant relationship between corporate governance and financial performance, suggesting that increasing the institutional distance between ownership and management by depoliticising appointments and strengthening the independence of the board of directors could potentially improve the financial performance of banks. This is especially important for NDBs operating in countries with a weak enabling environment. In addition, we argue that ensuring sufficient capitalisation of well-governed banks will enhance their capacity to operate at a scale to support transformative investments.

This paper makes three major contributions to the academic and policy discourse around NDBs. First, we contribute to the policy debate on the determinants of financial performance of development banks. We build on existing theory and literature around bank performance with a specific focus on nationally owned development banks within a single region to highlight particular governance challenges. By showing that the political appointment of executive management is a key predictor of poor financial performance, we provide additional evidence on the salient features of NDB governance that can significantly shape the extent to which they can operate effectively.

Second, our findings provide specific evidence from a region that has received less attention in the literature. Emerging research on NDBs has often focused on larger banks from China, Germany, Brazil and other Latin American countries (Ban and Tillekeratne, 2016; Griffiths-Jones and Ocampo, 2018; Dünhaupt and Herr, 2020), with less attention to small developing countries. Studies of African NDBs have tended to concentrate on well-known, high-capacity banks such as the Development Bank of South Africa (Scott, 2007; Bradlow and Humphrey, 2016); these are valuable, but do not speak to the challenges of many small and medium-sized banks. We also generate new analysis for a region where data availability is challenging. By compiling a database on 33 NDBs in Africa, we can compare across national contexts and sub-regionally, to understand the commonalities and differences in bank performance.

Our third contribution is methodological. Existing studies of NDBs, conducted at the global level using survey or national accounts data, tend to under-represent African countries, and rarely capture the landscape of governance challenges in these countries (De Luna-Martínez and Vicente, 2012; De Luna-Martínez et al., 2018). Surveys of African NDBs, such as the Prudential Standards, Guideline and Rating System (PSGRS) of the African Association of Development Finance Institutions (AADFI), rely on self-reported data and are not accessible. In part due to data challenges, other studies have tended to use qualitative approaches such as case studies, which have limited external validity. Our paper improves on these

approaches by drawing on a dataset constructed using bank-level data. Using the bank as the unit of analysis, we can provide robust estimates using techniques that mitigate econometric concerns such as omitted variable bias.

This paper is in five sections. Chapter 2 provides a review of the literature on the links between financial performance of NDBs and corporate governance. Chapter 3 delves into the data to present a descriptive analysis of the landscape of NDBs in Africa, while Chapter 4 outlines our quantitative methodology. Our empirical findings are presented in Chapter 5 and we highlight takeaways and policy implications in Chapter 6.

2 Governance and financial performance of NDBs

This chapter reviews the literature on corporate governance and political influence, and the impact on financial performance. We identify salient issues to inform the regression analysis in Chapter 4.

2.1 Political influence and corporate governance

NDBs occupy a position of ‘embedded autonomy’, to borrow from Evans (1995). While they have a certain degree of independence in decision-making, they remain embedded within an *enabling environment* of political and economic institutions by virtue of their public ownership (Thorne and du Toit, 2009). When this tension is well-balanced, an NDB can be a powerful instrument in the service of an active, developmental state in pursuing industrial policy, supporting domestic firms to grow and fostering new industries (Lin, 2011; Mazzucato, 2013). In developing countries where the enabling environment might be weak, a competent NDB can be a ‘second-best’ instrument to pursuing industrial policy goals, where other institutions may be weak (Rodrik, 2004).

There are also risks. A bank that is insufficiently independent could face greater political interference, which may lead to poor performance. This interference may be a product of poor governance: governments in countries with weaker institutional contexts may influence the allocation of funds towards patronage or unviable sectors of the economy (Djankov et al., 2002; Quintyn and Taylor, 2002). Likewise, government interventions may be developmental

rather than corrupt in purpose but still financially risky, endangering a bank’s financial soundness if it is unable to independently make assessments or push back against politically motivated projects.

‘Weaknesses in corporate governance’ have been frequently cited as the root of problems afflicting state-owned financial institutions (Scott, 2007). For African NDBs, the problem of *political interference* is especially salient, as Calice (2013: 4) notes: ‘most of the poor performance of DFIs is explained by shortcomings in corporate governance structures, which are instrumental to political interference and poor managerial skills’. Likewise, the World Bank’s survey of development banks globally notes the need to reduce undue political interference, and to give banks greater autonomy to resist political pressure (De Luna-Martinez et al., 2017). These weaknesses not only risk the financial stability of the bank, but can also have repercussions for the wider financial system (Scott, 2007). Government-owned banks have also been shown to lend funds to non-viable sectors of the economy for political purposes, especially during elections (Cole, 2009). Political cycles and state ownership of banks are also linked to incentives to smooth income in their financial reporting – i.e. to over- or under-report in response to electoral cycles (Doan et al., 2020).

Other research indicates how this political interference occurs. Chen et al. (2018), looking at the financial crisis, show that banks with politically connected Chief Executive Officers (CEOs) exhibit riskier lending behaviour and

have higher default rates than government banks with less well-connected CEOs. In both developed and developing countries, banks where executive appointments coincide with electoral cycles are associated with poorer financial performance compared to non-politicised government banks or private sector banks (Shen and Lin, 2012). Clearly, politicisation of appointments plays a major role.

Practices of good corporate governance have emerged almost as a canon to define a structure of accountability between banks and their shareholders (OECD, 2015). Many of these corporate governance practices serve to mediate the relationship between a bank's operations and the political institutions that own it. Overwhelmingly, the consensus appears to favour increasing bank independence by widening the institutional distance between ownership and control (Fama and Jensen, 1983), for instance via a bank's shareholding structure, where diversified or private shareholding is seen to mitigate the monopoly power of governments as owners (some newer NDBs have been established with this in mind (World Bank, 2016a)). Likewise, central bank supervision is encouraged, as it is associated with greater discipline and financial soundness among commercial banks (Doumpos et al., 2015; Marques and Saito, 2015). However, there is live debate as to whether NDBs should be regulated in the same way as commercial banks, for example under the banking regulatory framework of Basel III (Gottschalk et al., 2020). The AADFI PSGRS survey encourages separate institutions of ownership and supervision within government-owned development banks, to minimise conflicts of interest.

Another component held as standard is the board of directors, through which shareholders should exercise oversight, but without distorting the operations of the institution (OECD, 2015). Both the composition and the size of the board matter for bank performance (Ghosh and Ansari, 2018). For NDBs, representation of government officials on the board may also

be a channel for political influence. As such, the inclusion of independent directors, and the separation of board and management, is held as best practice (Aguilera and Cuervo, 2004; Scott, 2007; Calice, 2013; OECD, 2015). Given the potential for bank appointments to be used as political patronage (Djankov et al., 2002; Scott, 2007; Shen and Lin, 2012), appointments to and dismissals from the board and executive management are a crucial component.

The capability of a development bank to fulfil its mandate also depends on its financial and human resources (Fukuyama, 2013), and the 'professionalism, good conscience and seriousness of purpose' of its staff (Quayle and Gao, 2019). The professional backgrounds of staff, such as having private sector experience, can influence the wider institutional culture (Ban and Tillekeratne, 2019); the gender of CEOs may also affect bank performance and risk-taking (Skala and Weill, 2018; Vähämaa et al., 2020). Even within adverse enabling environments, 'pockets of excellence' may be possible,¹ through the meritocratic selection of professional staff (a process that may be damaged when banks are politicised (Leonard, 2010)).

Much of the corporate governance literature argues for governance structures that increase a bank's independence from political government. However, there needs to be a balance. There is the risk of principal-agent issues for the government over a bank that is insufficiently 'embedded', for example, going beyond its developmental mandate from the government and leading to 'mission creep'. Given that NDBs are not entirely profit-motivated and can receive government bailouts, this could also create financial risks due to the soft budget constraints government-owned banks enjoy (Kornai, 2003), generating moral hazard and allowing banks to engage in more risky lending. Lack of sufficient embeddedness or cohesion between state agencies also undermines a bank's effectiveness within national development frameworks (Chibber, 2002; Luna, 2020).

1 Sometimes interchangeably called 'pockets of productivity' or 'pockets of effectiveness', all referring to public administration agencies that are high functioning within an environment that is hostile to reform.

2.2 Measuring governance and performance in development banks

Transparent reporting systems and practices are integral to an NDB's ability to evaluate its own performance, and key to good corporate governance. The ability to measure the *outputs* of a public institution is integral to understanding its *impact* on public good – which matters ultimately more in what we consider good governance than just internal bureaucratic structure (Rotberg, 2014).

Measuring developmental impact is, however, an imperfect science, while for financial reporting, procedures are standardised. This in turn depends on structures of transparency, which are also emphasised as good corporate governance: for example, the presence of internal audit structures that report to the board; regular external audits; the use of internationally recognised standards and reporting procedures to shareholders and legislatures and access to information for the general public (Calice, 2013; Jose Romero, 2017). The use of international rather than government auditors is also

associated with better results as it offers more credibility and there is less incentive to skew results (Feltenstein and Lagunoff, 2005).

A bank's willingness and ability to assess its performance, project outcomes and challenges contributes to long-term policy decisions and strategy and, ultimately, to its developmental impact (Thorne and du Toit, 2009). A number of banks are in the process of developing social and environmental management systems, though this has tended to focus more on managing environmental than social impacts (Korth and Richter, 2016). Participation by civil society or impacted communities and their integration into consultative processes, and the presence of a framework for managing social and environmental impact, have implications for the long-term sustainability of projects, and their financial and social returns (Thorne and du Toit, 2009; Jose Romero, 2017). Engaging with international norms around participation, fairness and transparency can also increase the external legitimacy of an institution (Woods, 1999), making NDBs more attractive to international partners (Johnson, 2015).

3 The landscape of African NDBs

This chapter outlines the landscape of NDBs in Africa, drawing from our mapping exercise and data collection (see Box 1). We analyse further the small-N sample data in the econometric analysis in Chapters 4 and 5. Our mapped dataset of banks shows remarkable heterogeneity in their history, size and financial performance. We find that ownership is still commonly held in central government bodies, and there is a high degree of political influence in appointment processes. Financially, African NDBs tend to be small, and their performance varies widely. We explore this in more detail below.

3.1 Distribution and characteristics

3.1.1 Geography and history

NDBs are ubiquitous across Africa. With the exceptions of Somalia and South Sudan, every African country has at least one NDB, and many have more. Nigeria has the highest number of NDBs, at 11, followed by South Africa, with 7. The number of banks is not necessarily correlated to the size of a country's economy: several small countries have high concentrations of NDBs, including Eswatini, with five, and Botswana with four.

Some of these banks have remarkable longevity. The oldest bank in our dataset dates to 1909 (the Development Bank of Ethiopia, DBE) and many trace their establishment to the end of the colonial era and early independence:

30 new banks were established between 1950 and 1970. In the case of former French colonies, many were formerly 'social banks', created under colonial rule to serve basic needs in housing and agriculture, and then subsequently transformed into 'development banks' when states became independent. Banks in this period operated through providing a subsidised interest rate in sectors such as housing and agriculture. However, banks were often prey to political pressure, lending to projects or entities favoured by political actors, resulting in bad loans.²

The creation of new NDBs slowed in the 1980s. NDBs were increasingly perceived as ineffective and market distorting, and Structural Adjustment Programs promoted by the World Bank through the 1980s and 1990s led to the liberalisation of financial sectors and interest rates, preventing NDBs from lending at subsidised interest. Alongside this, growing population sizes in many African economies meant that new emerging commercial banks could become profitable, capturing some of the market niches that NDBs once filled. All these factors weakened the competitive advantage of NDBs and led to the dismantling of many.

This trend has dramatically reversed in the last decade: 23 new banks were created after 2010, and many others have emerged out of mergers and restructures of older institutions. Four banks were established in 2019, all in West Africa: in Benin, Burkina Faso, Côte d'Ivoire and Guinea.

² Interview, AFD, 26 May 2020.

Box 1 Data collection

Table 1 Dataset breakdown

Dataset	Size	Information available
Population	107 NDBs	Basic: name; year established; region; ownership/shareholding; mandate (sector)
Sample	33 NDBs	Basic: name; year established; region; ownership/shareholding; mandate (sector) Governance: supervision; board composition; appointment of board and management; reporting practices Financials: financial capacity; loan portfolio; NPLs; returns on assets; gearing ratios

We conducted a large-scale mapping study, collating multiple sources of data from the AADFI, World Bank surveys of NDBs and the AFD dataset on public development banks (AFD, n.d). Through this, we scoped the ‘known universe’ of African NDBs, gathering data on the name, age, mandate and shareholding structure of 119 development banks in Africa with public ownership, 107 of which we classified as NDBs.

Lack of data was a challenge, and publicly available information for NDBs was limited to a minority of banks. Only 48 of the 107 NDBs had online documentation (i.e. annual reports or financial statements), and only 16 were current up to 2019/2020. From banks with publicly available data, we gathered data for 33 spanning the period 2014–2019. This allowed us to look at variation over time as well as between institutions. This sample size struck a balance between the availability of data and the capacity of the researchers to extract it.

While other survey datasets of African NDBs exist – from the World Bank and AADFI – we were unable to access them. However, we used the AADFI PSGRS survey template in our mapping study to generate the catalogue of African NDBs, as well as to inform our governance metrics and classification criteria.

Our data coverage does not match the AADFI surveys, though it has several advantages: first, it is based on objective published data, rather than self-reported responses; and second, we use expert assessments of key financial criteria to generate raw measures, instead of an index or categorical measures, which may obscure variation in financial performance.

The reliance on annual reports and published information means our sample reflects a major selection bias in terms of transparency standards. The 33 banks we were able to collect data on do not reflect most of the universe of NDBs. For the vast majority of African NDBs, transparency standards are poor.

3.1.2 Mandate

A bank’s mandate outlines its stated scope and mission, but also has implications for its independence and financial performance. Banks with a broad economic development mandate may have greater resources and greater flexibility and scope to determine their operations. They may have a more diversified portfolio of investments compared to banks mandated to a specific sector (e.g. housing, agriculture), which may be more affected by sector-specific economic shocks. However, a narrow mandate can help avoid mission creep, allowing governments to keep a

tighter rein on banks and keep them accountable (World Bank, 2016a).

We use the classification of the AFD database (AFD, n.d), which separates mandates based on whether they are general development (GENDEV) or targeted to specific sectors (e.g. housing, agriculture, export-import). The majority of African NDBs have a broad, general development mandate, followed by banks with a focus on micro, small and medium-sized enterprises (MSMEs) (Figure 1). Some banks with a narrow sectoral focus, such as agricultural development banks in Ghana and Zimbabwe, have been able to expand their operations over time.

3.2 Governance characteristics

3.2.1 Transparency and reporting

Figure 1 Mandate type of African NDBs



Note: NDB, national development bank; AGRI, agriculture; EXIM, export-import; GENDEV, broad; HOUS, housing; MSME, micro, small and medium-size enterprise.

Source: ODI data

Only around half of the population of NDBs in Africa we identified had published information, and a smaller subset had up-to-date or relatively recent reporting. Of the banks we reviewed, transparency and reporting standards were relatively high, but this does not reflect the majority of NDBs in Africa.

All but three of the banks in our sample used international standards of accounting or financial reporting in their annual statements (the three exceptions used national accounting standards). The quality of financial reporting was generally high. Only in two banks did we see cases of qualified opinions from an external auditor in consecutive annual reports, signifying reporting issues, while five banks in our time-series sample had received a qualified opinion.

All banks in our sample had an internal audit department or an internal audit function outsourced to another company. In just under half of our cases, internal audit had a clear functional reporting line to the board of directors, sometimes via an audit committee, while other banks had reporting lines to executive management.

While this was not a universal standard, 13 banks in our sample (mostly larger institutions with broad mandates) had published formal

social and environmental impact frameworks, and many more addressed corporate social responsibility (CSR) activities in annual reports. These were mainly large South African banks (the Industrial Development Corporation (IDC) and the Development Bank of South Africa (DBSA)), though smaller banks, including Uganda Development Bank (UDB), have also been pursuing sustainability and climate-oriented activities (Box 2).

Box 2 Sustainability and impact – the case of Uganda Development Bank

UDB is fully central government-owned with no mixed or private shareholding. Until 2020 it was supervised by a parastatal monitoring body, which was then moved to the Central Bank to follow international practice (The Independent Uganda, 2020). Appointment of the chief executive is determined by the Board of Directors; however the CEO is part of national planning bodies and the President's Council, and well-connected with government decision-making bodies.

The bank is thus well-embedded in national government development priorities. While it remains strongly focused on the agricultural sector as part of its mandate, it has successfully mainstreamed environmental and social governance into its investment activities, and has been seeking to expand its portfolio of green finance projects, both within and beyond the agriculture sector (Griffith-Jones et al., 2020). It is currently in the process of gaining accreditation to the Green Climate Fund (GCF), which would allow it access to additional external financing to support green and low-carbon projects. However, accreditation to the GCF is an onerous process, and requires banks to have an international credit rating, making it difficult for smaller banks that do not have the financial scale or staffing capacity to undertake the process.

3.2.2 Ownership, regulation and supervision

A majority of banks are owned by a single central government entity, but there is some variation in ownership structures and mixed shareholding is not uncommon. There is also no single dominant model of supervision: just under half of the banks in our sample are supervised by a central bank, but regulation around banking supervision for NDBs varies widely.

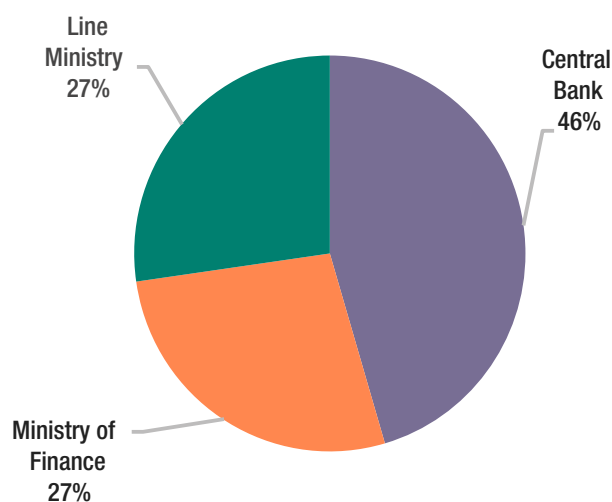
While 80% of banks in the population dataset are wholly publicly owned, the institution of ownership can vary. Around two-thirds (66%) are owned by a single central government institution, often the Ministry of Finance or another line ministry (in our sample of 33, this is 58%). In others shareholding is divided between public bodies, including local governments, state-owned investment trusts, pension funds or the central bank. Only a minority of banks (21%) have external shareholding, usually in the form of private banks or individuals, or international shareholding from other DFIs. This ranges widely, from as low as 0.1% in the case of Nigeria's Bank of Industry (BOI) to as high as 75% for the Bank for Development and Investment in Liberia.

Diversifying shareholding structures has been championed as a contributor of good governance in AADFI surveys, as increasing accountability towards multiple shareholders rather than a single government is seen to have a disciplining effect. External shareholding can be a way to increase institutional distance and reduce potential political influence, though conversely it can also reduce the ability of political actors to set a bank's developmental agenda.

A number of banks diversified their shareholding in the period under study, often in the direction of increasing institutional distance from the government. The government of Rwanda transferred its shareholding in the Development Bank of Rwanda to its main sovereign wealth fund, the Agaciro Development Fund, in 2018; likewise, the Agriculture Development Bank (ADB) Ghana, Banca de Poupança e Crédito (BPC) Angola and the Development Bank of Nigeria (DBN) (Box 3) have also reduced the shareholding of central government agencies in the last five years.

AADFI surveys and much of the corporate governance discourse emphasises Central Bank supervision – with the same institution that regulates private sector banks regulating the state-owned bank – and just under half of our sample (15 banks) are central bank supervised. The majority are supervised by government ministries (Figure 2).

Figure 2 Supervisory body of NDBs



Note: NDB, national development bank.

Source: ODI dataset, based on sample of 15 banks

This has implications in terms of competence – whether the ministry (particularly a line ministry) has sufficient capacity in financial and prudential oversight – but also in potential conflicts of interest. We recorded 14 banks where supervisory institutions overlapped or could not be distinguished from ownership, for example where shareholding and supervisory functions are both situated under the Ministry of Finance. In a small number of cases supervision has shifted away from ministries towards Central Bank oversight. In 2015, the Infrastructure Development Bank of Zimbabwe (IDBZ) was moved from the supervision of the Ministry of Finance, its majority shareholder, to the remit of the Reserve Bank of Zimbabwe, in compliance with amendments to the Banking Act. In 2020, UDB was placed under the supervision of the Bank of Uganda (Box 2).

Curiously, none of the South African banks in our sample – some of the largest on the continent – are supervised by the Central Bank: the IDC

Box 3 Ownership and supervision of Nigerian development banks

Nigeria has the largest number of NDBs in our dataset, at 11, including state-level as well as federally owned banks. Three of the largest are included in our study, and span multiple periods of history, sectors and governance structures: the BOI, created in 1959; the Nigeria Export-Import bank (NEXIM), established in 1991; and the youngest, DBN, created in 2017 as part of an international partnership with the World Bank and AFD. The DBN was explicitly designed to reflect international best practice in corporate governance.

The three banks have different mandates: the BOI has a broad economic development mandate, while DBN and NEXIM focus on micro, small and medium-sized enterprises (MSMEs) and export-import, respectively. All are majority government owned: NEXIM is split in its shareholding between the Ministry of Finance and the Central Bank; BOI is 95% owned by federal ministries; and as of 2018 DBN has 60% of its shareholding owned by the federal government, 15% held by the sovereign investment authority, and 25% held by international shareholders, the African Development Bank (18%) and the European Investment Bank (7%).

The three banks have contrasting supervision arrangements through the Central Bank of Nigeria (over DBN), the Ministry of Industry, Trade and Investment (over BOI) and the Ministry of Finance (over NEXIM). DBN is the only bank of the three where the appointment of the board and CEO is the responsibility of the shareholders and the Ministry of Finance, respectively, while in the two other banks the chair of the board and CEO have historically been appointed by the President of Nigeria.

Although all three banks operate within the same enabling environment, they show contrasting outcomes. The younger DBN was created with a public-private ownership structure intended to act as a safeguard against political intervention, and with a ‘tight’ mandate to avoid the ‘mission creep’ and over-expansion of past DFIs (World Bank, 2016a). The DBN has recorded strong financial performance, with an average return on assets (ROA) of 6% and an average NPL percentage of 1.0% during the period 2016–2019. This is in stark contrast to NEXIM, which has experienced high turnover in senior management in recent years and an average ROA of –2.5% (2014–2018). NPLs accounted for 92% of its portfolio in 2017.

is under the Department of Trade, Industry and Competition, while the DBSA and Land Bank are supervised by the National Treasury (the finance ministry). Land Bank’s supervision was switched from the Ministry of Agriculture in 2009 (World Bank, 2016b).

3.2.3 Board composition

The African NDBs in our sample tend to follow international corporate governance norms around the composition of the board. A significant majority of banks maintain some degree of government representation, though this varies significantly, with an average in our sample of around 28% of board membership. Banks generally conform to good practice norms

regarding the composition and structure of boards of directors, which are separate from management, and a significant number report the independent status of directors.

We also find a fairly consistent model of board governance in our sample of banks, in conformity with AADFI best practice governance standards. Boards of directors are, on average, majority non-executive (usually with the exception of a managing director), and the role of board chairman is non-executive and separate from the CEO. As noted, a majority of banks (around 70% of our sample) have some government representation on the board, usually from a shareholding ministry, though this can vary widely, from 1–2 board members to – in the

case of the DBE – all of the seven-strong board. In one-third of our sampled banks, the chair of the board in the previous five years has been a current government official or political advisor. We also note in our sample that 15 banks have in the past five years had a female chair or CEO.

There are a few notable variations in board structures in the case of the *Caisse des Dépôts* (CDC) banks, which we see in our sample in Gabon, Morocco and Tunisia. In these banks, there is no ‘board of directors’. Instead, a supervisory commission oversees the bank and executive management. In the case of Morocco and Tunisia, 50–60% of the commission are government representatives (in Morocco’s case, the chair is also the Central Bank governor by law); in Gabon’s CDC, government representation is above 80%.³

There are some exceptions to the general norm separating board and management. The Export Development Bank of Egypt (EBE) and BPC Angola both have executive chairs, conflating board and management roles. In both banks supervisory and executive power are concentrated in a single body. In Ethiopia’s case, the government-represented ‘board of management’ is executive in its function and chaired by the Minister of Finance. In Angola, the BPC’s previously non-executive ‘board’ went through a major restructure in 2018, removing non-executive members, reducing membership from 12 to 5, and merging the functions of the chair and the CEO.

3.2.4 Appointments and dismissals

Appointment of the board and of executive management is one of the key channels for political influence over an NDB’s operations. We find that, in around a third of the banks we studied, the head of state played a decisive role in nominating or approving appointments to the board or executive management. In around a third of banks, we also see irregular dismissals or restructures, indicating direct political intervention in a significant proportion of NDBs.

Many banks have board charters that explicitly lay out appointment processes. For example, around a fifth of banks in our

sample note explicitly that board appointments come via the annual general meeting (AGM) of shareholders. In under half of the sample, decisions over the board and chair were taken by the head of the supervisory or ownership ministry. In the case of Morocco’s Caisse de Dépôts et de Gestion, the chairman of the board is the head of the supervising ministry – i.e. the Central Bank governor. In around a third of our banks (10), the head of state is involved in appointing the chair or other board members, giving presidents or prime ministers direct channels of influence over the board.

Less information is available on the appointment of executive management. In 11 banks, the head of state is involved in appointing the CEO, while in 10 the board of directors appoints the CEO. In the rest of our sample, appointments are determined by shareholding ministries, though in some cases the final decision-making power of a minister as against a head of state is unclear.

The appointment of the CEO is the most direct channel of leverage that governments can exercise in influencing the operations of a bank. Even within the same country, for example in Nigeria and Tunisia, we see cases of presidential appointments in some banks but not others.

The politicisation of appointment processes can lead to high turnover in board and management, which in turn can affect the long-term stability of governance and strategic management. We tracked regular turnover for bank leadership in almost all banks for the years where data was available. In 16 cases across 10 banks, we classified turnover in governing structures as *irregular* – either outside of the normal contracted terms (e.g. a dismissal from post) or a restructuring of the board. In four banks, this was the case for two or more consecutive years between 2014 and 2019. Appointments and irregular dismissals – particularly of management – in the banks in our sample have sometimes coincided with cases of fraud or corruption.

In a few cases, CEOs have been held to account for fraudulent behaviour and mismanagement. In three cases in three countries

3 Information on Gabon’s CDC board composition is limited to 2015, which is the only year the annual report published detailed information on the profiles of board members.

in the last five years, we found instances of CEOs not only being dismissed but criminally prosecuted for corruption and embezzlement that harmed the bank's interests. Some of these dismissals came directly from the head of state. While this is a case of political intervention, it also illustrates that sanction structures exist and are functioning.

3.3 Financial characteristics and performance

3.3.1 Size of African NDBs

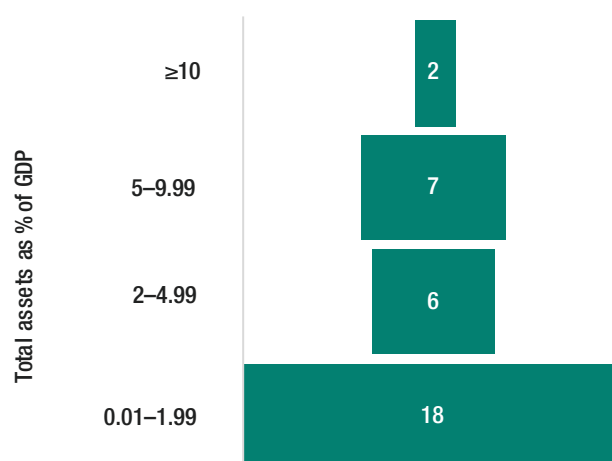
Most of our sample NDBs are strikingly small (Figure 3). The size of African NDBs in our sample (total bank assets/country GDP) ranges from 23% (Caisse de Dépôts et de Gestion in Morocco) to 0.04% (Small Enterprise Finance Agency (SEFA) of South Africa). Nine had total assets to GDP greater than 5% and only two had total assets over 10%. Just over half (18) had less than 2%, and 11 of these had assets less than 1%. We also found very little correlation between size of NDB and country financial depth, suggesting that their size and existence are driven by wider development and political concerns, rather than how advanced financial markets are.

3.3.2 Balance sheet expansion and gearing

Nearly all of the NDBs in our sample grew during the period 2014–2019. Of our sample of 33,⁴ 30 NDBs (94%) saw their balance sheets grow. Total assets of these banks rose from 231% (Development Bank of Namibia, DBNA) at the upper end to 13% (Eswatini Development and Savings Bank) at the lower. Almost a third saw their total assets at least double (Figure 4), and for only two banks did balance sheets shrink.

With three exceptions, this balance sheet expansion has translated into increased lending activity for all sample banks. Figure 5 plots the growth in total assets and gross loan portfolios over the period 2014–2019 for our sample banks and shows a strong positive correlation. The 45-degree orange line represents an equal increase in both (i.e. a 100% pass through where a hypothetical increase of NDBs' capital

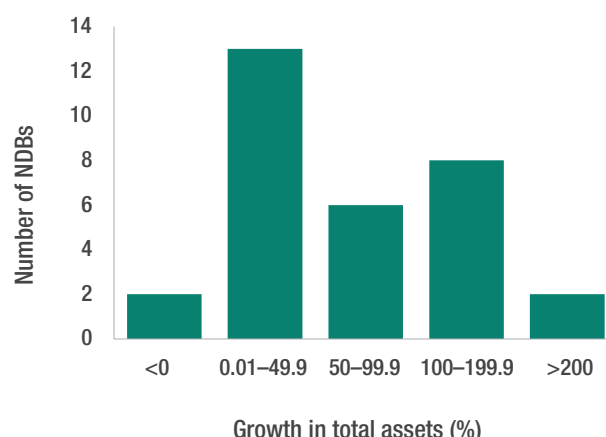
Figure 3 NDB assets as a percentage of GDP



Notes: NDB, national development bank; GDP, gross domestic product. Calculated in local currency unit (LCU) in current prices, using latest available financial statements of NDBs.

Source: Authors' calculations based on ODI dataset (for total assets of NDBs) and World Bank Development Indicators (for GDP)

Figure 4 Growth in total assets of African NDBs 2014–2019



Notes: NDB, national development bank. Calculated using simple averages for each NDB for periods where data was available and in LCU in current prices. Excludes Zimbabwean NDBs due to currency changes during the period under review.

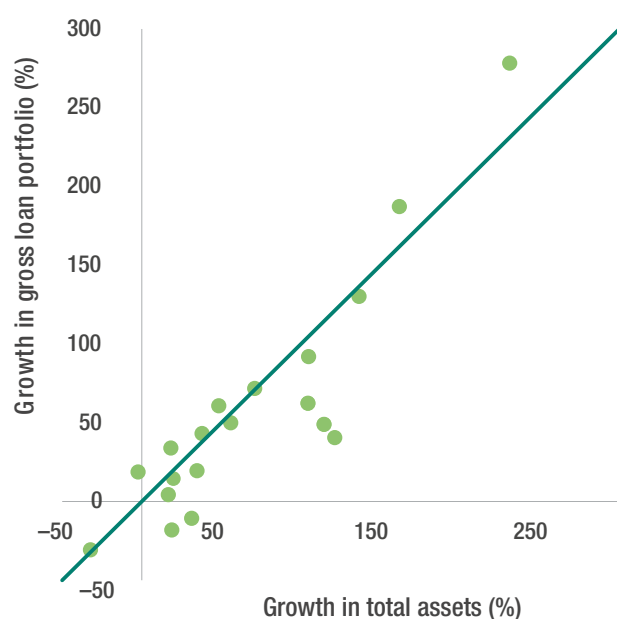
Source: Authors' calculations based on ODI dataset for 2014–2019, where data is available

⁴ We exclude two development banks from Zimbabwe due to the introduction of new currencies during the period under review.

by \$100 million translates to an increase in lending of \$100 million). Figure 5 shows that some banks have managed to leverage increases in lending activity over and above the increase in total assets (above the green line). This suggests that these banks have been efficient at absorbing and utilising these increases in funding and have been efficient in pumping money into the economy. The proximity to the 45-degree line also suggests that there is demand for this capital in the economy.

The source of funding for this growth varies (Table 2). For two-thirds of our sample, growth has been funded by a combination of increases in equity (capital injections and/or increases in retained earnings and other reserves, including revaluation reserves on equity and property portfolios) and long-term borrowing. About

Figure 5 Growth in total assets compared to growth in loan portfolio 2014–2019



Notes: Calculated using simple averages for each NDB for periods where data was available and in LCU in current prices. Excludes Zimbabwean banks due to currency changes during the period under review, and DBN (Nigeria) and Botswana Development Corporation (BDC) as outliers. Source: Authors' calculations based on ODI dataset for 2014–2019 where data is available

two-thirds of our sample banks (21) received some form of capital injection, but much of the growth has been funded by an increase in long-term borrowing (Figure 6). We see this in the change in gearing ratio for our sample banks.⁵ Two-thirds of NDBs studied saw increases in their gearing ratio during the period 2014–2019. Despite this, gearing ratios overall remain low, reflecting the small capital base of many of our sample banks and their limited ability to leverage their balance sheets (Figure 7).

Table 2 Changes in funding of African NDBs

Change in source of funding	Number of banks
NDB growth	
Growth in both debt and equity funding	20
Growth in equity and reduction in debt funding	3
Growth in debt funding and reduction in equity funding	7
NDB decline	
Decline in both debt and equity funding	1

Note: NDB, national development bank.

Source: ODI sample dataset

Figure 6 Growth in total assets compared to growth in loan portfolio 2014–2019



Notes: Calculated in LCU in current prices and using simple averages for each NDB using data for the period 2014–2019 where available. Excludes Zimbabwean NDBs. Source: Authors' calculations based on ODI dataset 2014–2019 where data is available

5 Calculated as the ratio of long-term debt (liabilities with an original maturity of over two years) to equity.

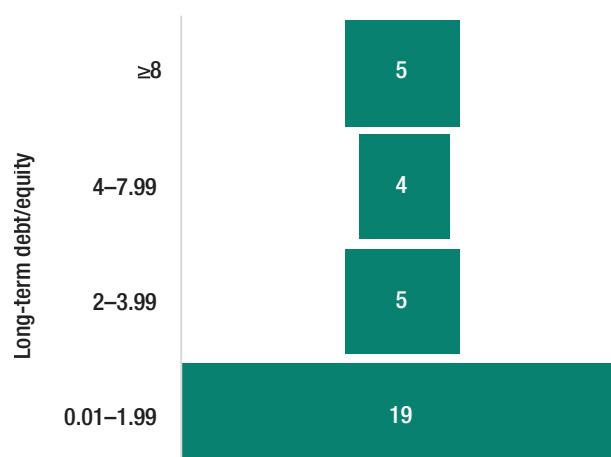
The majority of our sample NDBs (73%) met the AADFI PSGRS gearing standard of less than 4, indicating that their funding structure is relatively sound (Figure 7). Only five NDBs were highly geared, indicating excessive riskiness in their funding structures. Many of these banks are not highly geared (just under half had ratios less than 1).

3.3.3 Return on assets and non-performing loans

NDBs need to be financially sustainable and function as viable banks. This is important to ensure that these banks can attract and mobilise external capital from partners such as international development banks, international climate funds, donors and private actors, both domestically and internationally. In the current context of Covid-19 and fiscally constrained governments, this issue becomes even more pertinent.

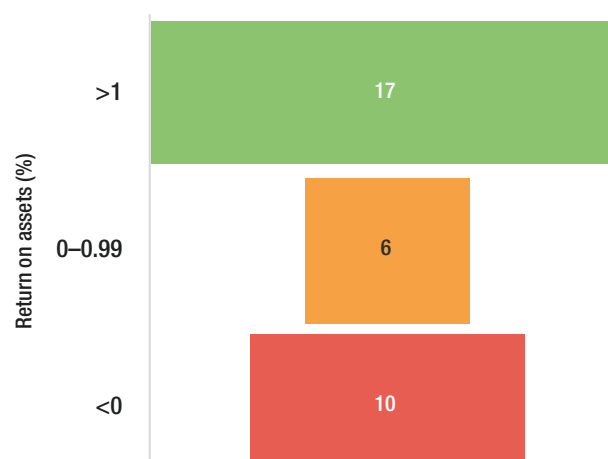
A common criticism of African NDBs is that asset quality problems adversely impact the viability of these banks, often due to perceived or real political interference. Two key financial indicators can be used to shed light on the financial health of our sample NDBs in this regard: ROA, which measures profitability by how well an NDB uses its total assets to generate profits;⁶ and NPL percentage, which measures asset quality.⁷ We find mixed results on profitability for our sample NDBs. Just over two-thirds were profitable on average during the period 2014–2019 (Figure 8). Indeed, the ROA for the majority of our sample of African NDBs compares favourably to European DFIs. The average ROA for the latter group was –1.32% in 2019, 0.6% in 2018 and 2.2% in 2017.⁸ Even a large institution such as the International Finance Corporation (IFC) reported an ROA of –1.7% in 2020 and 0.1% in 2019 (IFC, 2020). While profitability is not, and should not be, the priority for banks whose mandates

Figure 7 Gearing ratios of selected African NDBs



Notes: NDB, national development bank. Calculated in LCU in current prices and simple averages for each NDB using data for the period 2014–2019, where available.
Source: Authors' calculations based on ODI dataset

Figure 8 Profitability of African NDBs



Notes: NDB, national development bank. Calculated in LCU in current prices and using data where available for the period 2014–2019.
Source: Authors' calculations based on ODI dataset

⁶ Calculated as profit after tax divided by total assets.

⁷ Calculated as NPLs divided by gross loan portfolio. Where data on NPLs is unavailable this has been proxied by NPL balance sheet provision.

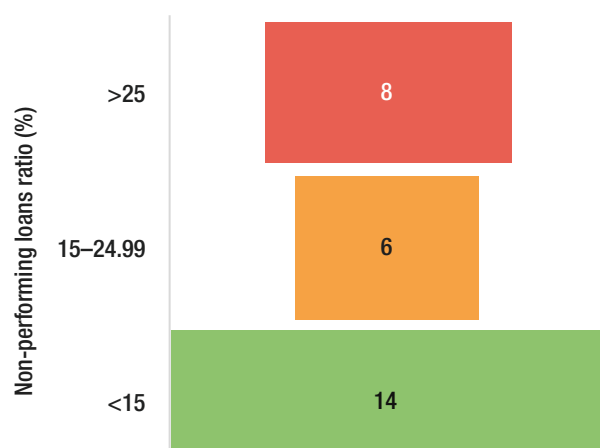
⁸ Author calculations based on individual European DFI annual financial reports. A number of European DFIs have significant or sizeable equity portfolios versus debt, which will affect the ROA and its variability, so we use an average for these. IFC has a majority debt portfolio (85%) more consistent with the majority debt composition of our sample NDBs.

are developmental, *consistent loss-making* may indicate poor financial management. Our time-series shows that this is a challenge in a small minority of banks.

Asset quality does appear to be a problem for many banks. Just under a third of NDBs in our sample (10) had a negative ROA, of which nine had NPL ratios of over 10%. Using the PSGRS benchmarks, half of our sample had high NPL percentages (greater than 15%).⁹ Just under one-third (eight) had NPL percentages over 25% (Figure 9), in turn affecting the profitability of the banks, as can be seen by the inverse relationship shown in Figure 10.

If we compare our sample with the NPL% thresholds and distribution of the World Bank survey on NDBs in 2017, which covered 64 NDBs from different parts of the world (De Luna-Martínez et al., 2018), we can see that there does appear to be an issue with asset quality specific to African NDBs (Table 3).

Figure 9 Non-performing loan ratio of African NDBs



Notes: NDB, national development bank. Calculated in LCU in current prices and using data where available for the period 2014–2019.

Source: Authors' calculations based on ODI dataset

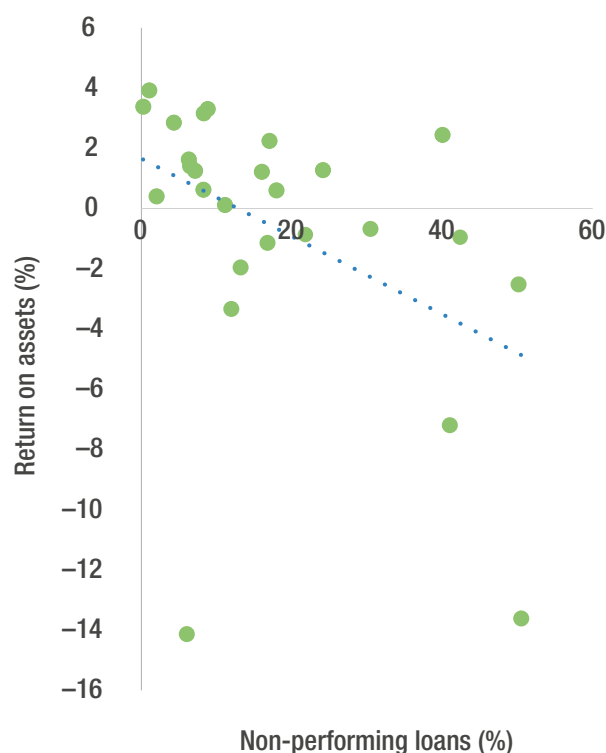
Table 3 Comparison of African NDB non-performing loans percentages

World Bank survey NPL% thresholds	Percentage falling within each threshold (%)	
	World Bank 2017 survey – end of 2015	ODI sample average 2014–2019
>30	7	29
5 to 30	32	57
<5	61	14

Note: NDB, national development bank.

Source: Authors' calculations based on ODI dataset and World Bank 2017 survey on NDBs

Figure 10 Inverse relationship between non-performing loans and and returns on assets



Notes: Calculated in LCU in current prices and using data where available for the period 2014–2019.

Source: Authors' calculations based on ODI dataset

⁹ Our sample reduces from 33 to 28 NDBs as we were unable to calculate NPL% for 5 NDBs.

4 Quantitative methodology

Using the governance and financial data outlined above, the following sections analyse the relationship between corporate governance and financial performance. They detail the data used in the empirical analysis in Chapter 5, define key variables and provide details about the data used in the analysis, and outline our methodological approach.

4.1 Data

The sample comprises 33 African NDBs in 21 countries, over the period 2014–2019. Our panel is unbalanced as countries have different numbers of banks. As noted in Chapter 3, this study's reliance on publicly available data has implications for the extent to which results can be generalised to the entire set of NDBs in Africa. All measures of financial performance (ROA, NPL and gearing) are expressed as ratios to allow for comparability across time, and banks with different characteristics. To capture factors related to the enabling environment we use macroeconomic indicators, obtained from World Bank development indicators, while country-level governance indicators come from the Worldwide Governance Indicators database. All variables used in the study, as well as their definitions, are summarised in Table A2 in the Appendices.

4.2 Econometric analysis

The baseline specification takes the form:

$$y_{it} = \beta_0 + \beta_1 P_{it} + \beta_2 X_{it} + \beta_3 S_{it} + \beta_4 Z_{it} + \eta_t + \epsilon_{it} \quad \text{Eq (1)}$$

Where the Eq (1) is estimated at the bank level and the subscripts i , t and j represent bank, year and country respectively. The coefficient

of interest is denoted by β_1 and captures the association between measures of bank governance and performance, while holding all other factors constant. As such, our results aim to capture correlational effects rather than causation.

y_{it} is the outcome variable that measures the financial performance of a bank. Following industry standards on financial management and reporting, we rely on four variables:

- (1) ROA, which captures the extent to which a bank's assets are used to generate profits;
- (2) NPL, which measures the ratio of non-repaid loans to the total value of a bank's outstanding loans;
- (3) gearing ratio, measured by the ratio of a bank's long-term borrowing to equity, and used as an indicator of financial leverage; and
- (4) a financial performance index computed using principal component analysis with ROA and NPL.

P_{it} is a vector of variables that aims to capture the channels through which political influence affects banks' financial performance. Four variables are used: first, whether the CEO or the managing director of a bank is appointed by the president as opposed to government ministers, shareholders or the board of directors; second, the degree to which the board of directors is appointed by the president, prime minister or monarch, as opposed to government ministries or shareholders. The third variable aims to capture whether the institution that supervises a bank overlaps with the ownership of the bank. A positive value on either of these indicators is expected to undermine the bank's financial performance. The fourth variable captures the degree of representation of independent directors, including international or private sector shareholders on the board. A positive value would indicate less political influence

and increase the scope for better financial performance.

X_{it} represents time varying bank-specific controls. These include a binary indicator capturing whether a bank's financial records are audited by government or an international firm, the gender of the CEO, whether a bank adheres to international standards in keeping its accounts, and a variable indicating the auditor's opinion on the accuracy of financial statements. The inclusion of these variables follows studies showing their influence on a bank's financial performance, and helps in mitigating the omitted variable bias. For instance, international auditors have been found to perform better than government auditors due to their credibility and lesser incentive to skew audit results (Feltenstein and Lagunoff, 2005). Several studies show that a bank's evaluation of its financial statements affects its performance via its credit standing (Firth, 1980; Boolaky and Quick, 2016). In addition, the gender of the CEO affects a bank's performance showing lower appetites to risk-taking (Palvia et al., 2015; Skala and Weill, 2018).

In order to take into account the effects of economic policies which may simultaneously affect political factors and financial performance, Z_{it} is a vector of macroeconomic, regulatory and institutional controls (Ghosh and Ansari, 2018; Gupta and Kashiramka, 2020). We include inflation rate, measured by the consumer price index, to proxy a country's macroeconomic stability and the credibility of its monetary authorities, depth of credit information index,¹⁰ and control for corruption, rule of law and governance effectiveness as proxies for a country's overall enabling environment.

S_{it} is a dummy variable that captures any sector-specific factors that might affect a bank's performance. We control for whether a bank has a broad mandate or is mandated to specific sectors, such as housing or agriculture, which may impact profitability.

The year dummies (η_t) are incorporated to capture aggregate time trends, such as financial shocks that are not accounted for by the

control variables, but that might affect banks' performance. All regressions are based on robust standard errors clustered at the country level, the highest level of aggregation.

4.3 Estimation technique

The empirical strategy is based on two econometric techniques. The first is panel data fixed effects and the second is System Generalized Methods of Moments (S-GMM) techniques. The results are quantitatively and qualitatively similar when either approach is used. We use panel data to perform these analyses. This has two important implications for the estimation of Eq (1).

First, by combining both the cross-section and time series dimension of the data, the increased number of observations for banks across multiple years increases the precision of the estimates. Second, unlike cross-sectional analysis, panel data can show how political influence might affect financial performance over time in different countries.

The panel fixed effect approach helps to control for average differences across banks in any observable or non-observable factors, such as differences in bank strategies, which might influence their financial performance. As such, the fixed effect coefficients absorb all the across-bank variation. This leaves the within-bank variation, which reduces the threat of omitted variable bias. Because fixed effects models rely on variation of variables within a bank, this requires repeated observations for each bank, as well as a reasonable amount of changes in the regressors (Cameron and Trivedi, 2005).

The second approach is to use the S-GMM techniques developed by Arellano and Bover (1995). The advantage of this approach is two-fold. First, it can be used to address endogeneity problems due to omitted variable bias and reverse causality. For instance, poor-performing banks might experience more political interference to keep them afloat, or banks that experience political interference might have different attributes – such as high profitability

10 This captures the availability and quality of information on credit sources and population growth, in order to capture the demand for credit.

– compared to those that do not. Second, the approach offers consistent estimates when using small sample sizes. The instruments are collapsed to ensure that they do not significantly exceed the number of countries (Roodman, 2009). The crucial assumption is that the first differences are not correlated with the unobserved bank effects. We test for the validity of the S-GMM estimators using the Hansen J test of over-identifying restrictions. Third, we

test for cross-sectional dependence using the Arellano-Bond auto-regression (AR) (2) test for autocorrelation. A potential concern is that the panel data can be subject to cross-sectional dependence whereby all units in the same cross-sections are correlated (Tugcu, 2018). This can be due to factors such as interest rates, or unobserved factors such as risk that are common to all banks, but affect them through different channels.

5 Empirical results

This chapter presents the main results of our analysis. We provide a descriptive analysis and correlation between the model's main variables, and then proceed to a discussion of the results. The chapter concludes with robustness checks.

We find significant variation in the dependent variables of financial performance, illustrating the significant influence of country-level effects on the profitability of our NDBs. However, our regression analysis shows that, when controlling for country- and bank-level characteristics, governance structures play an influential role in financial performance. We find political appointments of senior staff, particularly the CEO, by the president or head of state have a systematic and negative impact on various measures of financial performance. On the other hand, we do find a positive association between financial performance measures and a higher representation of independent board members, and we find that this effect is stronger when the enabling environment of the country is weaker. These results are explored in more detail below.

5.1 Descriptive statistics

Table A3 in Appendix 3 provides the summary statistics. For each variable, we calculate the mean, the number of observations and the within- and across-country standard deviation. The results highlight high variation in the performance and characteristics of the banks under analysis.

For instance, we find the mean value of the ROA is around 8.9% for the entire sample, with the lowest bank having an ROA of -66% and the highest 19%. This large variation reflects the inability of some banks to make positive returns from their assets. As reported in Table

A3, the standard deviation of ROA in the sample is around 7%. Similarly, the mean ratio of NPL is 22.72%, with a standard deviation of 23.61, while the average gearing ratio is 4.14, with a between-country variation of 6.5 standard deviation. Overall, these findings, coupled with the wide variation between the minimum and maximum values, suggest that country-level factors play an important role in influencing a bank's profitability.

Table A4 in Appendix 3 summarises the correlation between the variables included in Eq (1). While only reflecting associations, the results provide suggestive evidence in support of our key hypotheses. First, there is an inverse relationship between a bank's financial performance and the degree of politicisation in appointments. For instance, the correlation between ROA and having a CEO appointed by the president is -0.067, and -0.016 if the board is appointed by the president, although neither is significant. Second, the results show a positive and statistically significant association between ROA and having an independent board (0.403). Third, the results suggest that a bank's supervision arrangements do affect its financial performance and its operational model. Being supervised by an entity that is not separated from the ownership of the bank is associated with a higher gearing ratio of 0.20. This relationship turns out to be statistically significant at the 1% level, which suggests that less rigorous supervision might lower a bank's financial leverage and appetite to borrow. Finally, the correlation among the variables signals potential multicollinearity, which we address in the econometric analysis by sequentially adding the control variables across the different specifications.

5.2 Political influence in bank management: econometric results

Table 4 presents the first set of our main results. The specifications in columns 1–5 are estimated using panel fixed effects. The control variables in the different columns are included in a stepwise manner, both for robustness and as a precautionary approach to avoid the multicollinearity problem. The specification in column 1 is a simple binary relationship, while column 2 includes bank-specific controls. The specification in column 3 further includes year fixed effects to control for time invariant characteristics, while column 4 includes sectoral factors. Column 5 includes country-wide macroeconomic and institutional controls. In column 6, we present the S-GMM results, which include the full set of control variables.

The lower panel presents the diagnostic tests to assess the validity of the estimates. The goodness of fit tests, as indicated by the R-squared, suggest that the model performs relatively well in explaining the variation in profitability in our sample. In addition, the p-values corresponding to the Hansen J test confirm the exogeneity of the instruments used, while the Arellano test of order (2) fails to reject the null hypothesis of no autocorrelation in the residuals. The p-values corresponding to the Pesaran test (Pesaran, 2004) also reject the hypothesis that the data is correlated across panel groups.

Overall, these results provide evidence of an *inverse relationship* between a bank's financial performance and political influence in corporate governance, proxied by political appointment. Across the different specifications, the main coefficient is negative and statistically significant at the conventional levels, suggesting that presidential appointments of the CEO are associated with lower profitability. In terms of magnitude, the coefficients remain consistently negative, suggesting that presidential appointment of a CEO implies a lower ROA by an average of 6%. This ranged from 2% to 11% in our

various model specifications. This effect is not only statistically significant, but also financially meaningful given that only two-thirds of the banks in our sample were profitable during the period under analysis, and measures of ROA in our sample ranged widely, both negative and positive.

Table 5 examines the extent to which political intervention in a bank affects its financial leverage. The coefficient of interest is obtained from re-estimating Eq (1) and replacing the outcome variable with a bank's gearing ratio. Columns 1 to 5 present panel fixed effect results, while column 6 presents the S-GMM results. Across most of the specifications, the coefficient of interest is positive and statistically significant, suggesting that presidential appointment of the CEO influences a bank's funding structure, in terms of the mix of debt and equity to finance its activities. Banks whose CEO is appointed through political processes tend to borrow more to finance their operations, and thus commit to repayment obligations, compared to relying on equity, where repayment is contingent on making positive returns.

Given that a bank's major decisions, especially those that might affect its returns, might be undertaken by the board and not the CEO per se, Table 6 presents estimates obtained from re-estimating Eq (1), but replacing the main independent variable with presidential influence in the selection of board members. The results in columns 1 to 5 are based on panel fixed effects while those in column 6 are estimated using S-GMM. Across all the specifications, the coefficient is negative and statistically significant at various levels. The results suggest convincingly that political appointments of board members by heads of state are also associated with lower financial performance. The magnitude of the coefficients ranges widely, between 2.5% and 11%. This result reinforces the finding that political appointment at senior levels of bank management and decision-making plays a role in conditioning the operations and outcomes of bank activities.

Table 4 Relationship between returns on assets and presidential appointment of CEO

	Dependent variable: return on assets (ROA)					
	Panel fixed effects					S-GMM
	(1)	(2)	(3)	(4)	(5)	(6)
Presidential appointment of CEO	−0.0274*** (0.0089)	−0.0544*** (0.0179)	−0.117*** (0.0332)	−0.0909*** (0.0275)	−0.0683*** (0.0231)	−0.0794** (0.0269)
Bank characteristics	No	Yes	Yes	Yes	Yes	Yes
Year fixed effects	No	No	Yes	Yes	Yes	Yes
Sector controls	No	No	No	Yes	Yes	Yes
Country-wide controls	No	No	No	No	Yes	Yes
Observations	117	101	101	101	94	96
R-squared	0.153	0.338	0.633	0.678	0.790	-
Number of banks						25
Cross-sectional dependence test	0.738	0.580	0.057	0.314	0.657	
Number of instruments						14
Hansen test (p-value)						0.280
AR (2) test (p-value)						0.170

Notes: CEO, chief executive officer; S-GMM, System Generalized Methods of Moments. Bank characteristics include whether accounts are audited, gender of the CEO, whether international accounting standards are followed, auditors' qualified opinion. Sector controls include housing, agriculture, broad mandate. Country-wide controls include inflation, population growth, depth of credit information. Robust standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Table 5 Relationship between gearing ratio and presidential appointment of CEO

	Dependent variable: gearing ratio (%)					
	Panel fixed effects					S-GMM
	(1)	(2)	(3)	(4)	(5)	(6)
Presidential appointment of CEO	6.770*** (1.935)	3.506* (1.978)	0.260 (0.969)	2.000 (1.301)	2.499*** (0.893)	1.815 (3.756)
Bank characteristics	No	Yes	Yes	Yes	Yes	Yes
Country and year fixed effects	No	No	Yes	Yes	Yes	Yes
Sector controls	No	No	No	Yes	Yes	Yes
Country controls	No	No	No	No	Yes	Yes
Observations	117	101	101	101	76	96

Table 5 Relationship between gearing ratio and presidential appointment of CEO (cont.)

	Dependent variable: gearing ratio (%)					S-GMM
	Panel fixed effects					
	(1)	(2)	(3)	(4)	(5)	(6)
R-squared	0.177	0.255	0.707	0.722	0.972	-
Number of banks						25
Cross-sectional dependence test	0.314	0.212	0.000	0.314	0.220	
Number of instruments						22
Hansen test (p-value)						0.163
AR (2) p-value						0.267

Notes: CEO, chief executive officer; S-GMM, System Generalized Methods of Moments. Bank characteristics include whether accounts are audited, gender of the CEO, whether international accounting standards are followed, auditors' qualified opinion. Sector controls include housing, agriculture, broad mandate. Country-wide controls include inflation, population growth, depth of credit information. Robust standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Table 6 Relationship between return on assets and presidential appointment of board members

	Dependent variable: return on assets (ROA)					
	Panel fixed effects					S-GMM
	(1)	(2)	(3)	(4)	(5)	(6)
Presidential appointment of board	−0.0242* (0.0129)	−0.0385* (0.0201)	−0.0815*** (0.0210)	−0.102*** (0.0246)	−0.088*** (0.025)	−0.1141* (0.0714)
Bank characteristics	No	Yes	Yes	Yes	Yes	Yes
Year fixed effects	No	No	Yes	Yes	Yes	Yes
Sector controls	No	No	No	Yes	Yes	Yes
Country-wide controls	No	No	No	No	Yes	Yes
Observations	129	112	112	112	104	110
R-squared	0.016	0.123	0.525	0.626	0.764	-
Cross-sectional dependence	0.125	0.838	0.314	0.260	0.916	28
Number of banks						23
Number of instruments						0.134
Hansen test (p-value)						0.972
AR (2) p-value						

Notes: S-GMM, System Generalized Methods of Moments. Bank characteristics include whether accounts are audited, gender of the CEO, whether international accounting standards are followed, auditors' qualified opinion. Sector controls include housing, agriculture, broad mandate. Country-wide controls include inflation, population growth, depth of credit information. Robust standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

5.2.1 Does board independence matter?

Table 7 examines the degree to which the independence of board members from political influence affects banks' performance. Columns 1 to 5 present panel fixed effect results, while column 6 presents the S-GMM results. Due to the unbalanced nature of the dataset, the number of observations varies in the different columns. Overall, the results suggest that a higher proportion of independent and private sector representatives on the boards of national banks has a small, but positive and significant, effect on profitability. This result is in line with several studies showing a strong relationship between performance and the composition of the board (Ghosh and Ansari, 2018). This could be suggestive of the fact that inclusion of independent members leads to better skills and knowledge on a bank's operations – a more technocratic and less political leadership (Shleifer and Vishny, 1998; Ghosh and Ansari, 2018). It is also plausible that independence of the

board improves profitability through enhanced accountability and systems of monitoring, or greater links between the bank and the private sector (Fama and Jensen, 1983). Fundamentally, independence of board members also mitigates potential conflicts of interest among board members who may have financial stakes in bank projects or lending.

Table 8 examines the relationship between a bank's supervision and its NPLs. Panel fixed effect estimations are reported in columns 1 and 2, while S-GMM results are in columns 3 and 4. The results suggest that not having institutional separation of ownership and supervision is associated with worse financial performance. The coefficients in columns 1 and 3 are positive and statistically significant, suggesting higher NPLs for banks without independent supervision. The coefficients in columns 2 and 4 are negative and statistically significant, suggesting that independence in bank supervision is associated with lower NPLs. Banks with a high NPL ratio

Table 7 Relationship between return on assets and independence of the board

	Dependent variable: return on assets					
	Panel fixed effects				S-GMM	
	(1)	(2)	(3)	(4)	(5)	(6)
Independent representative (%)	0.0017*** (0.0004)	0.0028*** (0.0006)	0.0043*** (0.0013)	0.0030* (0.0015)	0.0026* (0.0013)	0.005** (0.002)
Bank characteristics	No	Yes	Yes	Yes	Yes	Yes
Year fixed effects	No	No	Yes	Yes	Yes	Yes
Sector controls	No	No	No	Yes	Yes	Yes
Country-wide controls	No	No	No	No	Yes	Yes
Observations	68	60	60	60	56	59
R-squared	0.162	0.440	0.728	0.843	0.890	-
Cross-sectional dependence	0.629	0.821	0.756	0.776	0.367	20
Number of banks						19
Number of instruments						0.378
Hansen test (p-value)						0.496
AR (2) p-value						

Notes: S-GMM, System Generalized Methods of Moments. Robust standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Table 8 Relationship between financial performance and supervision of bank

Dependent variable: non-performing loans (%)				
Variables	Panel fixed effects			S-GMM
	(1)	(2)	(3)	(4)
Same entity as ownership	17.50* (10.87)		9.605 (577.18)	
Independent representative (%)		-1.129** (0.592)		-1.809*** (0.5794)
Bank characteristics	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Sector controls	Yes	Yes	Yes	Yes
Country-wide controls	Yes	Yes	Yes	Yes
Observations	82	45	95	51
R-squared	0.462	0.855	-	
Cross-sectional dependence	0.583	0.429	27	17
Number of banks			17	16
Number of instruments				0.044
Hansen test (p-value)			0.570	0.197
AR (2) p-value				

Notes: S-GMM, System Generalized Methods of Moments. Robust standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

are likely to be at greater risk of loss or default on their borrowing if loans are not recovered, and potential investors are less likely to invest in banks where NPLs are high, which might reduce the bank's stock price (if listed), value (if not listed), credibility and future profitability. While many factors can contribute to NPLs, this result supports the argument for institutional separation between ownership and supervision.

5.2.2 Under what conditions does the independence of the board matter?

Having established the importance of board independence, we examine under what conditions it matters for the financial performance of banks. We re-estimate the baseline equation and include an interaction term that conditions the influence of board independence with variables that proxy a country's enabling environment. We use three

indicators: control of corruption, government effectiveness and rule of law. We define a country to have a weak enabling environment if its score is below the mean of the sample.

Table 9 reports the results. In column 1, we present results where the enabling environment is defined using control of corruption; in column 2 we use government effectiveness; and in column 3, rule of law. Across the different specifications, the interaction term is positive and statistically significant at the conventional level. This finding suggests that, for banks located in countries with poor governance, board independence can help insulate a bank from political influence and enhance its financial performance as measured by ROA. This effect is particularly large and significant at 1% for control of corruption. This implies that, in countries where the enabling environment is poor, the independence of board structures matters *more*.

Table 9 Supervision of bank, enabling environment and financial performance

	Dependent variable: returns on assets		
	(1)	(2)	(3)
Independent representative (%)	−0.0011 (0.001)	0.00137* (0.0007)	0.0010 (0.001)
Control of corruption	0.00187 (0.0011)		
Independent representative (%) X weak environment	0.118*** (0.0349)		
Government effectiveness		0.0184 (0.0203)	
Independent representative (%) X weak environment		0.0022** (0.0010)	
Rule of law			0.0299 (0.0267)
Independent representative (%) X weak environment	Yes	Yes	Yes
Year effects	Yes	Yes	Yes
Bank characteristics	Yes	Yes	Yes
Sector controls	Yes	Yes	Yes
Bank characteristics	Yes	Yes	Yes
Country-wide controls	Yes	Yes	Yes
Observations	63	56	56
R-squared	0.910	0.443	0.448
Cross-sectional dependence	0.914	0.915	0.730

Notes: Bank characteristics include whether accounts are audited, gender of the CEO, whether international accounting standards are followed, auditors' qualified opinion. Sector controls include housing, agriculture, broad mandate. Country-wide controls include inflation, population growth, depth of credit information.

Robust standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

5.3 Robustness checks

This section provides a series of robustness checks to examine the validity of the main results. We adopt three different approaches.

5.3.1 Computation of a financial performance index

First, we compute a financial index that combines ROA and NPL to capture the effect of political influence on the overall financial performance of a bank. This addresses the concern that some metrics such as NPL might not significantly affect a bank's overall financial stability if it can receive bailouts from the government. In addition, while different metrics of a bank might differ, overall performance might provide a better signal about its potential to deliver on its mandate. The financial performance index is calculated using the principal component analysis

procedure. High values of the index denote poor financial performance. Table 10 reports the results. The coefficient of interest across the three specifications is positive and statistically significant, suggesting that the presidential appointment of both CEOs and board members, as well as non-separation of ownership and supervision bodies, undermines banks' overall financial performance.

5.3.2 Influence of outliers

Second, we examine whether the results are being driven by the inclusion of large banks that may be well-capitalised or situated in richer countries. We re-estimate the baseline equation and exclude all national banks located in South Africa, as they tend to be highly capitalised compared to the rest. The results in Table 11 show that CEO appointment is still

Table 10 Overall financial performance and political influence

	Dependent variable: financial performance index		
	(1)	(2)	(3)
Presidential appointment of CEO	1.354** (0.558)		
Presidential appointment of board		0.104*** (0.037)	
Same entity supervising bank			0.929** (0.370)
Bank characteristics	Yes	Yes	Yes
Country controls	Yes	Yes	Yes
Sector controls	Yes	Yes	Yes
Observations	80	87	90
R-squared	0.651	0.507	0.533
Test for cross-sectional dependence	0.593	0.482	0.660

Notes: CEO, chief executive officer. Bank characteristics include whether accounts are audited, gender of the CEO, whether international accounting standards are followed, auditors' qualified opinion. Sector controls include housing, agriculture, broad mandate. Country-wide controls include inflation, population growth, depth of credit information.

Year fixed effects are included in all specifications.

Robust standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Table 11 Re-estimating results using S-GMM results: excluding South African banks

Variables	Dependent variable: return on assets		
	(1)	(2)	(3)
Presidential appointment of CEO	−0.0289** (0.011)		
Presidential appointment of board		−0.0222 (0.091)	
% of independent members on board			.0008*** (0.0002)
Bank characteristics	Yes	Yes	Yes
Country and year fixed effects	Yes	Yes	Yes
Country-wide controls	Yes	Yes	Yes
Constant	−0.077 (0.119)	0.059 (0.193)	0.0111 (0.038)
Observations	72	85	40
Number of countries	20	23	16
Number of instruments	22	22	17
F stat	23.89	0.75	44.49
Hansen test	0.665	0.062	0.494
AR(2) test	0.248	0.300	0.432

Notes: S-GMM, System Generalized Methods of Moments; CEO, chief executive officer. Bank characteristics include whether accounts are audited, gender of the CEO, whether international accounting standards are followed, auditors' qualified opinion. Sector controls include housing, agriculture, broad mandate. Country-wide controls include inflation, population growth, depth of credit information.

Robust standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

negative and statistically significant, and effects are consistent with previous analyses. This reinforces the evidence that our findings are not driven by outliers.

5.3.3 Controlling for a country's overall level of governance

Finally, we re-estimate our main results and control for a country's overall quality of institutions using different governance metrics. The results are reported in Table 12. We control for a country's level of corruption in columns 1, 4 and 7; rule of law in columns 2, 5 and 8; and

government effectiveness in columns 3, 6 and 9. The specifications in columns 1–3 use ROA as the measure of financial performance, those in columns 4–6 use NPL, while those in columns 7–9 use the financial performance index.

Across the different specifications, the coefficient for presidential appointment of CEOs continues to portray a negative and statistically significant effect. In columns 1–4 the results show that it lowers ROA, while columns 4–6 show that it increases the share of NPL. The results in columns 6–9 further suggest that it lowers a bank's overall performance.

Table 12 Relationship between returns on assets, non-performing loans, financial performance index and presidential appointment of CEOs

Dependent variable	Dependent variable: Returns on assets								
	Return on assets			Non-performing loans (%)			Financial performance index		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Presidential appointment of CEO	−0.0692*** (0.0227)	−0.0712*** (0.0228)	−0.0701*** (0.0233)	34.40*** (8.395)	37.57*** (7.841)	35.68*** (8.222)	1.517** (0.705)	1.511** (0.602)	1.461** (0.675)
Control of corruption	Yes	No	No	Yes	No	No	Yes	No	No
Rule of law		Yes			Yes			Yes	
Government effectiveness			Yes			Yes			Yes
Bank characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country-wide controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sector controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	94	94	94	77	77	77	80	80	80
R-squared	0.795	0.800	0.795	0.887	0.890	0.886	0.643	0.671	0.643

Notes: CEO, chief executive officer. Bank characteristics include whether accounts are audited, gender of the CEO, whether international accounting standards are followed, auditors' qualified opinion. Sector controls include housing, agriculture, broad mandate. Country-wide controls include inflation, population growth, depth of credit information.

Regressions are panel fixed effects and include bank and year fixed effects.

Robust standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

6 Conclusions, policy implications and further research

6.1 Conclusions

This study has presented a novel dataset drawing from 33 African NDBs from an identified 107 to quantitatively assess the relationship between governance of NDBs and their financial performance. We highlight the diversity of banks across the continent, their characteristics and their governance structures. We see wide variation in the financial performance of banks, in their gearing ratios, NPLs and ROAs, which suggests that country-level factors – the *enabling environment* – play an important role in influencing the profitability of banks. We highlight, with reference to other regions, the financial challenges many African NDBs face.

Beyond the country level, however, we find strong evidence that the governance structures of banks themselves condition performance. We confirm through novel econometric analysis the hypothesis that greater political influence in bank governance is *negatively associated* with the financial performance and profitability of NDBs. Additionally, we find this effect is stronger in countries where the enabling environment is weaker.

We find that the *political appointment of executive management* is one of the most salient predictors of poor financial performance. This effect is consistent when we test for appointment of the board. Even when we condition for the influence of the *enabling environment* on banks, controlling for bank characteristics, country-level and time fixed effects, there is still a systematic, statistically significant and negative effect on financial

performance when political appointment extends to the senior management or board of the bank. This impacts direct measures of financial performance, in terms of ROA and NPLs. However, the effect also extends to the risk appetite of the bank through the gearing ratio, indicating that political appointment may condition a bank's operational structure and willingness to accept risk in its operational model.

Board composition matters. While not all banks have a uniform 'Board of Directors', the independence and supervisory role of the board plays a significant and positive role in strengthening the financial performance of banks. Although a large proportion of the banks we looked at have government representation on the board of directors, our study shows that increasing the number of independent members of the board has a significant impact on financial performance, and makes a case for further strengthening board independence through its membership.

This study proves a strong relationship between governance structures and performance, but can only prove correlation, not the causal mechanisms that impact performance. However, it builds on existing literature to demonstrate the real impact corporate governance can have. We do not explore in depth the mechanisms by which appointment might impact performance, but we highlight some potential overlapping factors. First, high turnover, which we recorded in several banks: political discretion in the appointment of management may entail greater turnover of staff, which leads to less stability

in operations and loss of institutional memory and capacity and may negatively impact long-term strategy. Second, potential pressure: the power of appointment may also imply the power of dismissal, and opens up possibilities where executive management may be pressured by political actors, at the cost of the financial interests of the bank. Third, though not visible in our dataset, the literature notes that political discretion offers opportunities for patronage, leading to potentially less qualified appointees, or a ‘revolving door’ between government and bank institutions.

Our findings make the case that the internal governance of a bank matters more than who or what owns it. Political interference in banks may be well-intentioned for developmental purposes, or driven by corrupt practices, both of which can lead to high-risk activities and poor financial performance. The long-term effectiveness of a bank depends on its financial soundness, and requires bank to have sufficient independence and capacity to help mitigate this kind of political interference.

To this purpose, many new banks have been established with greater international or private shareholding to diversify control away from government via its shareholding. However, our results *do not* suggest that banks are better performing by virtue of being *less* public. Many banks with 100% government shareholding have strong financial performance. Diversifying shareholding is often used to dilute government influence and boost governance, but other, internal governance arrangements can also be effective. For example, entrusting CEO appointments to the board, not political actors, may be more salient in improving governance and performance simply by increasing the institutional distance between ownership and management. Maintaining a ratio of independent board members relative to government members may also help balance the ‘embeddedness’ and ‘autonomy’ that banks need to meet their potential.

Finally, although NDBs in Africa are numerous and growing in number, they are small relative to GDP. Nearly all our sample NDBs have grown their balance sheets and lending portfolios, indicating that their role is being recognised

by national governments, and that there is an appetite from governments to support and expand their NDBs’ operations. This growth has in large part been funded by an increase in long-term debt, reflected in increased gearing ratios. However, these gearing ratios remain relatively low, reflecting low levels of capitalisation and limited ability to leverage NDB balance sheets. In turn, this makes it more difficult for well-governed banks to fulfil their role in support of national development objectives, or in scaling transformative investment.

As mentioned, we find that financial performance varies significantly between banks: around two-thirds of our sample banks are profitable, comparing favourably to European DFIs and the IFC. About half of our sample banks have issues with asset quality with high NPL ratios, and this problem seems to be particularly pronounced in Africa compared to a wider sample of development banks from different parts of the world. These weaknesses in financial performance undermine the ability of NDBs to deliver on their mandate, their ability to fund their operations and their attractiveness to international and private partners.

6.2 Policy implications

Together, these findings point to some broad policy implications for national governments:

1. First, while sole and centralised government ownership is a reality for the majority of banks, increasing institutional distance from ownership by depoliticising appointments of executive management and increasing the representation of independent board members can reduce the risks of poor financial performance.
2. Second, efforts should be made to ensure that well-governed and well-performing NDBs are sufficiently capitalised, in order to be able to operate at a scale that enables them to fulfil their mandates and support transformative investment.
3. Third, efforts should be made to increase the transparency of African NDBs. For the large majority, very little information is publicly available. At a minimum, shareholders

should encourage and support their banks to publish audited financial statements and annual reports in a timely way. This is an essential component of accountability and a prerequisite for most external partners to lend to and partner with these banks.

6.3 Further research

This study contributes to an emerging body of research focused on NDBs in Africa, as a region that has a high – and growing – number of banks, but which is still under-studied. The analysis is limited by data availability, and the limits of what data can measure. Our mapping

tracked over 100 banks across Africa, far more than are captured in this analysis. There is a need for data sharing and further data research, to understand the size, operations and governance structures of lesser-known banks and expand this analysis to include more African NDBs; and to investigate further the relationship between financial performance and the developmental impact of NDBs. Further in-depth qualitative research is also needed, through case study analysis of banks, to understand the relationship between governance and performance, not only in narrow financial terms, but also in terms of their economic and developmental impact; and to understand the wider political economy context within which these banks operate.

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Appendix 1

Note on Covid-19

African NDBs have played a dual role in addressing the impacts of the Covid-19 pandemic, in terms of the health impacts, and by buffering the economic shock of the pandemic in the first few months of the crisis.

Several banks have contributed donations towards health measures. The DBE, for example, donated 5 million birr (around \$135,000), ADB Ghana donated 1 million cedi (\$173,000) and the DBNA donated 1.4 million Namibian dollars (\$83,000) towards disaster relief funds. Other banks, including IDC South Africa and CDC Tunisia, have mobilised funds specifically for essential supplies and imports of personal protective equipment and hospital equipment. The IDC started a targeted lending facility for MSMEs to produce essential equipment.

Several banks mobilised economic support for their clients and sectors. These include Citizen Entrepreneurial Development Agency (CEDA) Botswana, Development Bank of Mauritius (DBM), Development Bank of Seychelles, SEFA South Africa, Namibia's Agricbank and DBNA, which issued relief schemes or emergency

funds to support clients in affected sectors. These typically include measures such as the rescheduling of loans, temporary moratoriums or 'payment holidays' for between three and six months, potential reductions of interest rates and emergency relief to cover working capital for affected firms. Namibia's DBNA also introduced the possibility of equity conversions for corporate borrowers.

There is an urgent role for African NDBs to play in providing counter-cyclical measures to address the national economic impacts of the pandemic. However, the economic slowdown will also impact the future capacity and financing of NDBs, many of which have already moved to reduce budgets and reprioritise project portfolios. A slowdown or diversion of government resources and international funds to fight the pandemic could squeeze smaller NDBs. The economic slowdown will be an ongoing challenge for the financial sustainability of African NDBs, but also a means to 'prove their relevance' through innovative approaches (AADFI, 2020).

Appendix 2 List of African NDBs in dataset

Table A1 African NDBs included in sample dataset

Country	Region (United Nations geoscheme)	Bank	Acronym	Established
Angola	Central Africa	Banco de Poupanca e Credito Angola	BPC	1956
Botswana	Southern Africa	National Development Bank	NDB	1963
Botswana	Southern Africa	Botswana Development Corporation	BDC	1970
Botswana	Southern Africa	Botswana Housing Corporation	BHC	1971
Côte d'Ivoire	West Africa	Banque Nationale d'Investissement	BNI	1959
Egypt	North Africa	Export Development Bank of Egypt	EBE	1983
Eswatini	Southern Africa	Eswatini Development & Savings Bank	EDSB	1965
Ethiopia	East Africa	Development Bank of Ethiopia	DBE	1909
Gabon	Central Africa	Caisse des Dépôts et Consignations Gabon	CDCGabon	2010
Ghana	West Africa	Agricultural Development Bank	ADB	1965
Kenya	East Africa	Industrial and Commercial Development Corporation	ICDC	1954
Liberia	West Africa	Liberian Bank for Development and Investment	LBDI	1961
Mauritius	East Africa	Development Bank of Mauritius	DBM	1988
Morocco	North Africa	Caisse de Dépôts et de Gestion	CDG	1959
Namibia	Southern Africa	Agricultural Bank of Namibia	AGRIBN	2003
Namibia	Southern Africa	Development Bank of Namibia	DBNA	2004
Nigeria	West Africa	Bank of Industry	BOI	1959
Nigeria	West Africa	Nigeria Export-Import Bank	NEXIM	1991
Nigeria	West Africa	Development Bank of Nigeria	DBNI	2017
Rwanda	East Africa	Development Bank of Rwanda	BRD	1967
Seychelles	East Africa	Development Bank of Seychelles	DBS	1977
South Africa	Southern Africa	Land Bank	Landbank	1912
South Africa	Southern Africa	Industrial Development Corporation	IDC	1940
South Africa	Southern Africa	Development Bank of Southern Africa	DBSA	1983
South Africa	Southern Africa	National Housing Finance Corporation	NHFC	1996
South Africa	Southern Africa	Small Enterprise Finance Agency	SEFA	2012
Tanzania	East Africa	TIB Development Bank	TIB	1970
Tanzania	East Africa	Tanzania Agricultural Development Bank	TADB	2015
Tunisia	North Africa	Banque Nationale Agricole	BNA	1959
Tunisia	North Africa	Caisse de Dépôts et Consignations Tunisie	CDCTunisie	2011
Uganda	East Africa	Uganda Development Bank	UDB	1972
Zimbabwe	East Africa	Agricultural Bank of Zimbabwe	AGRIBZ	1924
Zimbabwe	East Africa	Infrastructure Development Bank of Zimbabwe	IDBZ	2005

Appendix 3

Quantitative tables

Table A2 Description of variables

Variables	Type	Description
Mandate	Dummy	Based on classification of bank's mandate as broad (GENDEV), or sector-specific, such as micro, small and medium-sized enterprises (MSME), agriculture (AGRI), housing (HOUS) or export-import (EXIM)
Ownership	Continuous	Percentage by ownership structure of bank by shareholding, classified by percentage central/federal government, local government, other public institutions (central bank or state-owned financial institution) or private/international shareholding
Same entity as ownership	Binary	If supervisory institution overlaps with entity of majority shareholding
Supervising entity	Dummy	Whether: Central Bank; Ministry of Finance; or other Line Ministry
Board of directors: % composition	Continuous	Percentage composition of the board of directors: <ul style="list-style-type: none"> • proportion of non-executive • proportion representing government or ministry officials • proportion representing private/international shareholders
Appointment of board of directors	Categorical variable	Degree of direct political appointment of board of directors, whether appointments are determined by: head of state (prime minister, president or monarch); ministry of ownership (or ministry of finance if ownership unclear); ministry of supervision (or central bank); diverse shareholders appoint (such as through annual general meeting)
Appointment of CEO	Categorical	Degree of direct political appointment of managing director or CEO, whether appointments are determined by: head of state (prime minister, president or monarch); ministry of finance or other line ministry; diverse shareholders; or by board of directors
International accounting standards	Binary	If accounts are kept in accordance with international accounting standards allowed by national or central bank account requirements and in compliance with those requirements
Unqualified opinion	Binary	If the opinion is unqualified (auditor has NOT issued the opinion with reservations regarding the accuracy or truth of the financial statements, i.e. statements reflect a true and fair picture)
Internal audit	Categorical	Is there an internal audit department or qualified external auditor that provides internal audit which reports directly to board?
Audited accounts	Categorical	If accounts are audited by an international accounting firm or private domestic firm; accounted by government auditor; or both
Government effectiveness	Continuous	Perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies
Rule of law	Continuous	Perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police and the courts, as well as the likelihood of crime and violence
Control of corruption	Continuous	Perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as 'capture' of the state by elites and private interests

Table A3 Summary statistics

Variable		Mean	Std. dev.	Min	Max	Observations	
Index	overall	4.15E-10	1	-1.59727	1.660252	N = 114	
	between		0.82399	-1.56403	1.527292	n = 29	
	within		0.690879	-1.68195	1.961162	T	bar = 3.93103
Gearing ratio	overall	4.137462	7.72777	0	66.708	N = 151	
	between		6.508554	0.015947	31.57976	n = 34	
	within		3.756163	-10.8491	39.2657	T	bar = 4.44118
ROA	overall	0.0008942	0.07015	-0.66368	0.19315	N = 146	
	between		0.042808	-0.14141	0.088654	n = 33	
	within		0.055065	-0.52137	0.145623	T	bar = 4.42424
NPL	overall	22.72183	23.61008	0.2	94	N = 115	
	between		22.43649	0.2	91.5	n = 30	
	within		8.494605	-6.09817	64.50183	T	bar = 3.83333
Presidential appointment	overall	1.706349	1.23332	0	3	N = 126	
	between		1.212806	0	3	n = 28	
	within		0.413118	-0.29365	3.373016	T	bar = 4.5
Supervisory entity	overall	1.148649	0.811188	0	2	N = 148	
	between		0.814685	0	2	n = 33	
	within		0.073771	0.348649	1.348649	T	bar = 4.48485
Independent of board	overall	20.21918	12.59987	1	41	N = 73	
	between		12.50742	2	40.5	n = 22	
	within		4.248475	6.885845	44.88584	T	bar = 3.31818
Appointment of board	overall	1.852113	1.031058	0	3	N = 142	
	between		1.015619	0	3	n = 31	
	within		0.331556	-0.14789	3.185446	T	bar = 4.58065
Audited accounts	overall	0.979021	0.51002	0	2	N = 143	
	between		0.43211	0	2	n = 33	
	within		0.302959	-0.52098	1.979021	T	bar = 4.33333
Gender of CEO	overall	0.3287671	0.471382	0	1	N = 146	
	between		0.439072	0	1	n = 33	
	within		0.195642	-0.47123	1.128767	T	bar = 4.42424
International standards	overall	0.9078014	0.290338	0	1	N = 141	
	between		0.293353	0	1	n = 33	
	within		0.10351	0.157801	1.157801	T	bar = 4.27273
Auditor opinion	overall	0.9111111	0.285643	0	1	N = 135	
	between		0.249066	0	1	n = 32	
	within		0.132429	0.111111	1.161111	T	bar = 4.21875

Variable		Mean	Std. dev.	Min	Max	Observations	
Mandate	overall	1.629371	0.552565	1	3	N = 143	
	between		0.564401	1	3	n = 32	
	within		0	1.629371	1.629371	T	bar = 4.46875
Inflation	overall	6.140765	6.252902	-21.5317	32.3777	N = 153	
	between		4.656578	-1.02206	15.63248	n = 33	
	within		4.285646	-29.9166	23.99283	T	bar = 4.63636
Depth of credit	overall	5.624002	2.61072	0	8	N = 158	
	between		2.252586	0	8	n = 33	
	within		1.35646	0.124002	10.95734	T	bar = 4.78788

Source: Authors, based on ODI datasets

Table A4 Pairwise correlation matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) Index	1.000									
(2) Gearing	0.030	1.000								
(3) ROA	0.043	−0.016	1.000							
(4) NPL	0.372***	−0.206**	0.028	1.000						
(5) Presidential appointment	−0.008	0.309***	−0.067	0.152	1.000					
(6) Supervisory entity	−0.056	0.202**	−0.042	−0.189*	−0.026	1.000				
(7) Independent of board	−0.144	−0.082	0.403***	0.173	−0.187	0.065	1.000			
(8) Appointment of board	0.016	0.141*	−0.016	0.087	0.511***	−0.330***	0.040	1.000		
(9) Audited accounts	−0.206**	−0.007	0.004	0.126	−0.246***	0.108	0.216*	−0.006	1.000	
(10) Gender of CEO	−0.044	−0.090	0.052	−0.110	−0.282***	−0.160*	0.200*	0.048	0.293***	1.000
(11) International standards	0.130	−0.102	−0.050	0.181*	−0.129	−0.037	−0.237**	0.224***	0.040	−0.046
(12) Auditor opinion	−0.154	−0.014	0.270***	−0.287***	−0.063	−0.044	−0.034	−0.199**	−0.056	0.160*
(13) Mandate	−0.118	0.347***	0.017	−0.405***	0.134	−0.058	−0.183	0.279***	0.072	0.140*
(14) Inflation	0.043	−0.013	−0.079	0.012	0.167*	0.085	−0.080	0.028	−0.046	−0.098
(15) Depth of credit	0.090	−0.215***	−0.014	0.126	−0.220**	−0.095	0.328***	−0.334***	0.178**	0.257***

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: Authors, based on ODI datasets



ODI is an independent, global think tank, working for a sustainable and peaceful world in which every person thrives. We harness the power of evidence and ideas through research and partnership to confront challenges, develop solutions, and create change.

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