MOODY'S INVESTORS SERVICE

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31 May 2018

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West African Development Bank – Baa1 Stable

Annual credit analysis

RATINGS

BOAD

	Rating
Senior Unsecured	Baa1
Long-Term Issuer Rating	Baa1

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OVERVIEW AND OUTLOOK

The credit profile of the West African Development Bank (BOAD, Baa1 stable) reflects its strong liquidity balanced against the credit risks arising from its role as the strategic promoter of economic development in the West African Economic and Monetary Union (WAEMU). Its shareholders are the member states of the WAEMU and its central bank, the Central Bank of West African States (BCEAO).

BOAD's strong liquidity stems from its access to a refinancing window at the BCEAO under the same conditions as commercial banks, and a strategic mandate in the region that makes its principal shareholders highly willing to support it. In line with its strategic plan for 2015-19, BOAD is increasing its loan activity and leverage. The bank is also upgrading its risk management policy in line with international best practice.

Its main credit weakness stems from a relatively low capital position because of low borrower quality and a difficult operating environment in a region that has had periods of economic and political turmoil. The high correlation between borrower credit quality and the capacity of its shareholders to support the bank in case of need is also a credit weakness.

The outlook is stable. BOAD is managing a safe expansion of its loan portfolio. However, its rating could be downgraded if the expansion in lending activity were to put pressure on asset quality. Upward pressure on the rating could develop if BOAD continues to manage the safe expansion of its loan portfolio while demonstrating a track record of low nonperforming loans (NPLs) and international capital market debt issuance management.

This credit analysis elaborates on BOAD's credit profile in terms of capital adequacy, liquidity and strength of member support, which are the three main analytic factors in Moody's Supranational Rating Methodology.

Organisational structure and strategy

The WAEMU's regional development bank

BOAD was formed in 1973 as a development finance institution that would operate in conjunction with the BCEAO. Both the BCEAO and BOAD are key financial institutions of the WAEMU (see box on page 5).

The bank is the primary promoter of balanced development and economic integration of the member countries of the WAEMU. BOAD members include eight countries, Benin, Burkina Faso, Côte d'Ivoire (Ba3 stable), Guinea-Bissau, Mali, Niger, Senegal (Ba3 stable) and Togo, in a region with 115 million inhabitants and a GDP of $116 billion. While the region has experienced economic and political turmoil, real economic growth was 6.8% in 2017 and the outlook remains healthy.

BOAD's shareholders comprise WAEMU member countries (47%), the BCEAO (47%), both referred to as Group A shareholders, and non-regional members (6%), referred to as Group B shareholders. The later comprises of France (Aa2 positive), Germany (Aaa stable), Belgium (Aa3 stable), EIB (Aaa stable), AfDB (Aaa stable), ExIm Bank of India (Baa2, stable), China (A1 stable) and Morocco (Ba1 positive). An objective of the bank with regards to capital structure is to grow the Group B shareholding to up to 25% of the total, even though BOAD has not yet managed to grow this type of shareholding.

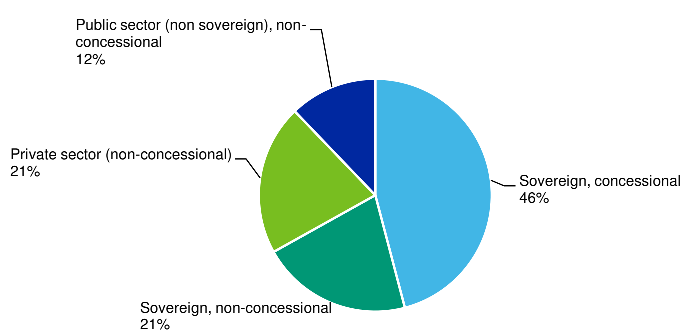
As is the case for many other multilateral development banks (MDBs), BOAD benefits from both paid-in capital, which is paid according to a pre-defined schedule, as well as callable capital. All capital payments have been honoured according to the original schedule with the exception of Guinea-Bissau, whose payments have been rescheduled (1% of BOAD's paid-in capital).

A traditional business model

The majority of BOAD's outstanding development portfolio comprises loans to the public and private sectors. At the end of 2017, 67% of these loans were to sovereigns (see Exhibit 1). The public sector accesses loans via a commercial and a concessional financing window. The latter is composed of two funds: one for general purposes, called the Development and Cohesion Fund (FDC); and one dedicated to energy, the Energy Development Fund (FDE). BOAD lends to the private sector through the commercial window only.

Exhibit 1

BOAD's loan portfolio is mainly composed of sovereigns
Exposure, % of total loans (2017)



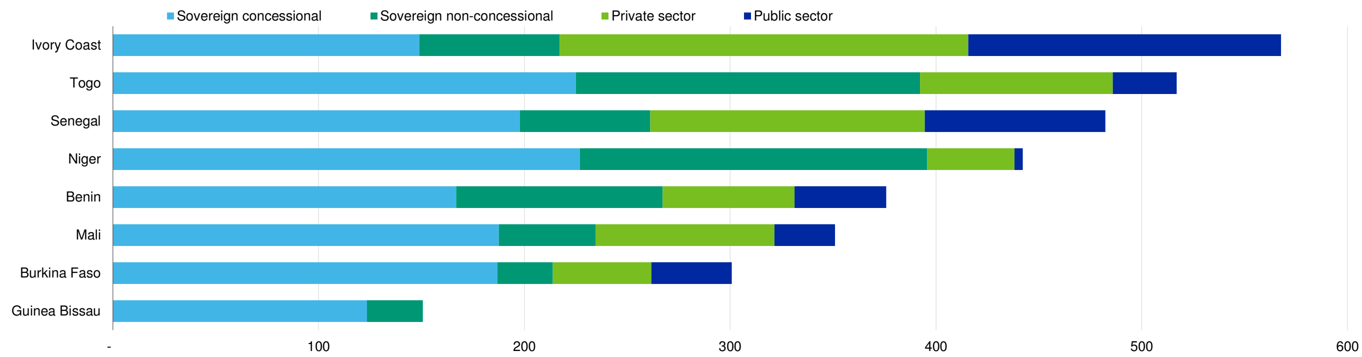
Sources: BOAD, Moody's Investor Services

Since 2016, the interest rate BOAD earns on concessional loans made at below market interest rates has been supplemented by an interest-subsidy fund to the extent such loans are financed by non-concessional borrowings.[1] The differential in interest rate incurred is covered by the interest-subsidised fund. This fund receives annual contributions principally from the BCEAO on behalf of member states and the Commission of the WAEMU, the body's executive arm.

The majority of the bank's lending is for infrastructure, followed by agriculture, financial services, industry, tourism and the environment. As a rule, the bank finances no more than 50% of a given project in the private sector, as one of its objectives is to catalyse other funding sources, including other supranationals, to support the financing of large infrastructure projects in the region.

Since BOAD started its activities, its total commitment to the WAEMU region has amounted to approximately $8 billion, equivalent to over 6% of the region's GDP. BOAD's outstanding loans at the end of 2017 were broadly diversified (see Exhibit 2).

Exhibit 2
BOAD's outstanding loans vary across member countries
USD millions (2017)



Sources: BOAD, Moody's Investors Service

BOAD's financing increasingly comes from market sources. It has been a long-standing debt issuer on the WAEMU capital markets. In recent years it has diversified its funding sources by accessing international capital markets, tapping them for the first time in May 2016 with a $750 million five-year fixed-rate bond. It returned in July 2017 with an $850 million 10-year fixed-rate issuance. Both include a euro hedge on their principal, thereby limiting currency risk in view of the CFA franc's pegged rate to the euro. In addition, the bank's fixed rate lending with an average maturity of eight years constrains both interest and refinancing risks.

Organisation and oversight

BOAD's board of directors controls the bank from an operational standpoint, deciding on all matters relating to the utilisation of BOAD funds, including shareholder capital, equity investments, lending operations and facility agreements. The board of directors consists of the president of BOAD, the governor of the BCEAO, two representatives from each member country, and representatives of Category B shareholders. In total, Group A shareholders have 17 representatives (67%) on the board, while Group B's shareholder representation is limited to eight seats (33%). As such, non-regional shareholders are given more than their capital-proportionate representation. From a credit perspective, this is positive as it provides checks and balances, while broadening the technical knowledge and experience of the board of directors in making decisions.

Similar to other MDBs, the board of directors relies on dedicated committees, such as a credit committee that uses the inputs of the bank's risk management system and rating scale to assess risk. The bank has also set prudential norms as part of its risk management framework. Among them are a cap on the bank's leverage to three times equity, various lending limits to avoid concentration risks, liquidity rules and asset-liability management stress-testing practices.

BOAD comes under the authority of the Council of Ministers of the WAEMU, a high-level committee that oversees WAEMU's broad activities and consists of ministry representatives from each WAEMU member country. Each country has two representatives, of whom only the minister of finance has the right to vote. The Council of Ministers has ultimate control of the bank. Among other prerogatives, the Council of Ministers appoints the president of the bank, selects the accounting firm in charge of the bank's audit, and approves the strategic development plan of the bank, as well as its status and financial statements. Matters brought before the Council of Ministers are first reviewed by the board of directors.

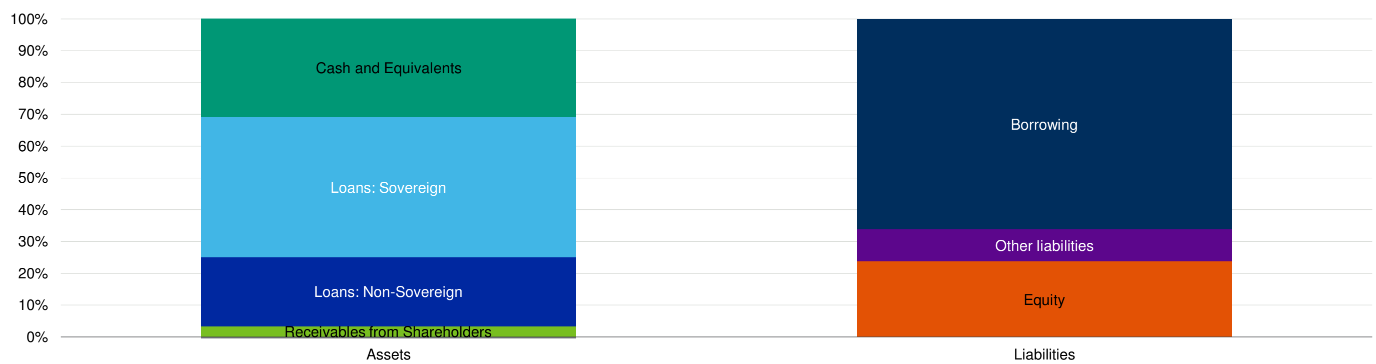
Above the Council of Ministers is the Council of the Head of States, which brings together the heads of state from all member countries. It defines broad strategic objectives and outlines the means to achieving them.

Risk management

The bank is overhauling its risk management practices to bring them more in line with international best practice among MDBs. The treasury risk management function will be embedded into a broader framework thanks to the adoption of an asset and liability management platform. This will enable stress tests of liquidity and profitability indicators, among others, by considering forecasts based on market scenarios. One area of work involves the development of a unique credit risk rating scale with the first version expected for 2018. The bank receives the support of a management consultancy firm and aims to complete the migration by 2020.

In September 2017 BOAD changed its lending limits due to the absorption of FDE's capital in 2014. The integration of the FDE in the reference capital doubled the limits to $1,150 million in 2017 from $570 million in 2016. In turn, the limits of lending per operation, borrower, country and sector were halved to bring them in line with 2016 levels.

Exhibit 3
Stylised balance sheet – a bank with moderate leverage
% of balance sheet (2017)



Sources: BOAD, Moody's Investors Services

Strategy 2015-19

BOAD's 2015-2019 strategic plan focuses on: (1) accelerating regional integration through financial support of infrastructure development; (2) supporting inclusive growth, food security and sustainable development; (3) assisting private businesses and member countries to develop financial engineering and services; and (4) intensifying resource mobilisation. The bank has executed its strategic plan well so far. The targets for annual committed capital, both disbursed and pledged, have increased since the strategy was drawn up in 2015. As of 2017, the bank had disbursed 95% of the long-term lending it had planned for and had mobilised 96% of its financing target (Exhibit 4). The low realisation for concessional loans, however, highlights the bank's difficulty in accessing such financing.

Exhibit 4
Good execution of strategic plan to date
USD millions

	Forecast				Committed				Realised			
	2015	2016	2017	Total	2015	2016	2017	Total	2015	2016	2017	Total
Sovereign, concessional	0	201	229	429	0	129	146	275	0%	64%	64%	64%
Sovereign, non-concessional	166	257	293	716	189	252	277	717	114%	98%	95%	100%
Total sovereign	166	458	521	1145	189	380	423	992	114%	83%	81%	87%
Private and public sector non sovereign & non-concessional	124	225	256	605	154	227	291	673	124%	101%	114%	111%
Total long-term lending	290	683	777	1750	344	607	714	1665	118%	89%	92%	95%
Short-term lending	71	72	82	226	99	59	75	233	138%	82%	91%	103%
Equity	12	12	14	38	7	21	16	44	60%	171%	115%	115%
Total financing	374	767	873	2015	450	687	805	1942	120%	90%	92%	96%

Source: BOAD

Relationship with its strategic partner, the BCEAO

The BCEAO is more than BOAD's main shareholder. Various arrangements, statutes and practices mean that the BCEAO is also a key liquidity support factor for the bank.

First, BOAD has statutory right to access under Article 38 of its Establishment Agreement to a BCEAO refinancing window under the same conditions as commercial banks, as per BCEAO's decree. This clause is by nature permanent, though BOAD has never had to rely on it.

Secondly, the scheduled capital payments ("paid-in" capital) from member states entail a unique arrangement with the BCEAO, underscoring BOAD's importance in the WAEMU region and supporting its liquidity. The BCEAO levies a tax on non-regional financial transfers on behalf of member countries, with funds being accrued in the accounts of member countries at the BCEAO. These accumulated funds are drawn down first to pay the scheduled capital payments of member countries to BOAD, before being accessible to the sovereign itself. Any dividends that the BCEAO may pay to its member countries are treated similarly.

Thirdly, most of BOAD's liquidity is deposited at the central bank. BOAD's policy mandates that at least 25% of its total liquidity be deposited at the BCEAO.

The West African Economic and Monetary Union and its central bank

The West African Economic and Monetary Union (WAEMU) is a customs and currency union created in its current form in 1994. Broadly speaking, WAEMU promotes the economic integration of eight member countries that share a common currency, the West African CFA (Communauté Financière Africaine) franc. Those countries are: Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo. WAEMU's objectives are (1) to promote greater economic and financial competitiveness; (2) to converge macroeconomic policies and indicators; (3) to create a common market based on the free exchange of people, goods, services and capital; (4) to coordinate policies in national sectors; and (5) to harmonise fiscal policies.

The Central Bank of West African States (BCEAO) is the central bank of the WAEMU and issues the CFA franc on behalf of member countries. The CFA franc is fixed against the euro at a rate of 655.957, with its convertibility ensured by the French Treasury via an unlimited, euro-denominated overdraft facility. Safeguard clauses are in place to avoid protracted overdrafts. WAEMU countries are required to pool their currency reserves at the BCEAO and at least 50% of those reserves must be deposited in the BCEAO's account at the Banque de France. In the event of external pressures depleting the reserves, the BCEAO must contract the monetary base, and potentially force private sector entities to redeem their foreign-currency assets in return for CFA francs, to prevent the overdraft from being activated.

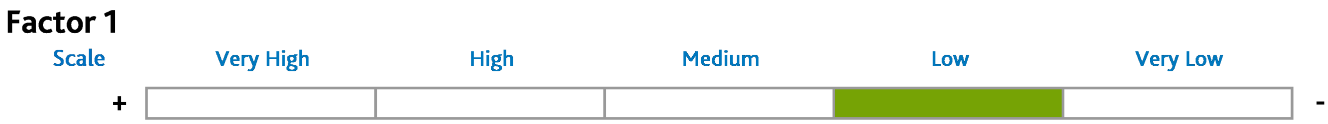
The BCEAO has low levels of leverage, while both equity and foreign exchange reserves are high at $3.7 billion and $10.5 billion, respectively, in 2017. The BCEAO's equity level is an important consideration since any recapitalisation of BOAD would be financed by the central bank's equity. BOAD's callable capital from the BCEAO is $0.7 billion (19% of the BCEAO's equity) and total callable capital is $1.5 billion (40% of the BCEAO's equity).

CREDIT PROFILE

Our determination of a supranational's rating is based on three rating factors: capital adequacy, liquidity and strength of member support. For MDBs, the first two factors combine to form the assessment of intrinsic financial strength, which provides a preliminary rating range. The strength of member support can provide uplift to the preliminary rating range. For more information please see our Supranational Rating Methodology.

Capital adequacy: Low

Deteriorating asset coverage and leverage from relatively sound levels; asset quality is a key constraint



Capital adequacy assesses the solvency of an institution. The capital adequacy assessment considers the availability of capital to cover assets in light of their inherent credit risks, the degree to which the institution is leveraged and the risk that these assets could result in capital losses.

We assess BOAD's capital adequacy as "Low" because of the low borrower quality and moderate levels of NPLs. A relatively healthy balance sheet structure tempers the risk. The bank's capital adequacy trend is toward rising leverage but improving loan performance, as shown by NPLs now at 2.2% of total loans, versus 8.3% in 2008. The NPL ratio provides a lagging measure of the loan portfolio's quality given that loans benefit from a grace period,[2] particularly in times of large expansion in the loan portfolio, making the maintenance of a low NPL ratio key.

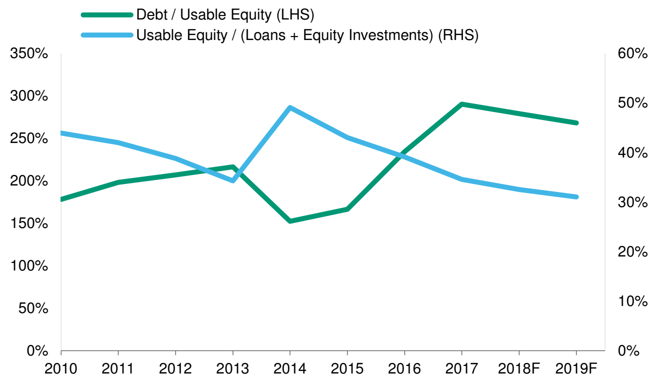
Capital adequacy is gradually deteriorating on a controlled path

BOAD's asset coverage ratio (ACR), which looks at the coverage of total development-related assets (mainly loans) by usable equity, and leverage, measured as debt over usable equity, deteriorated over 2014-17. However, this deterioration was in line with projections we made in 2014 when we first assigned the Baa1 rating. As such, it is already embedded in our Baa1 rating. Based on the Basel II definition, BOAD's capital adequacy was 22% in 2017.

In 2014, BOAD's usable equity increased markedly as the funds it received from the WAEMU (though the FDE) were shifted to equity, which improved the ACR from around 34% in 2013 to 50% that year. BOAD's leverage increased in 2017 following its international bond issuance to 2.9x from around 1.6x in 2015.

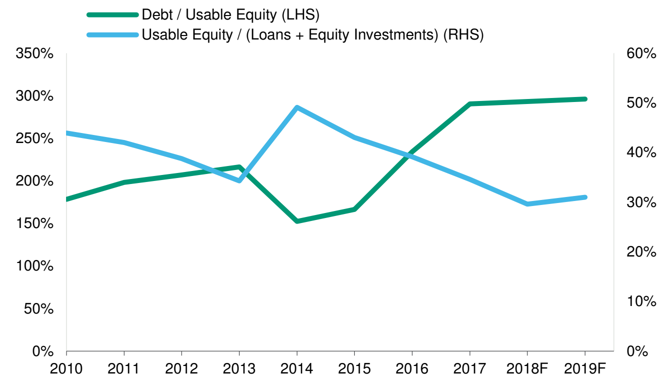
We expect BOAD's leverage to remain below 3x in the medium term and the ACR to reach lower levels of around 30% (see Exhibit 6). This projection is roughly in line with BOAD's strategic plan for 2015-19 (see Exhibit 5), which foresees an intensification of resource mobilisation by accessing international capital markets and raising about $1.6 billion on regional and international capital markets. Over 2015-2017, BOAD had issued $1.6 billion on international markets and under $0.3 billion regionally.

Exhibit 5
BOAD's leverage likely to peak at 2.9x under BOAD's strategy



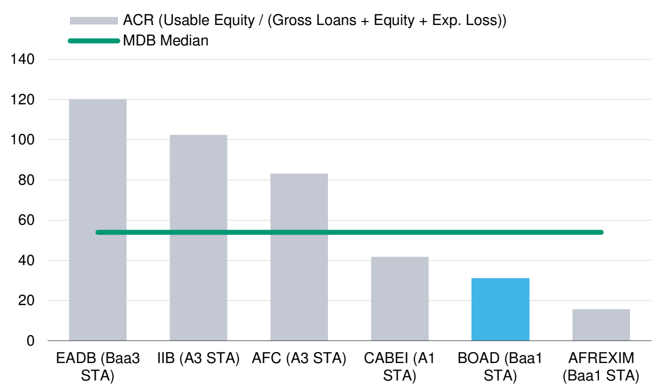
Sources: BOAD, Moody's Investors Service

Exhibit 6
BOAD's leverage likely to peak at 3.0x under Moody's scenario



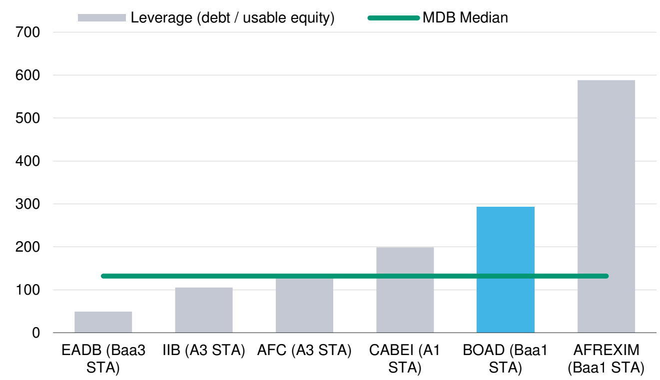
Sources: BOAD, Moody's Investors Service

Exhibit 7
Asset coverage is weak compared with peers
%



Peers based on 2016 audited financials
Source: BOAD, Moody's Investors Service

Exhibit 8
... While leverage is high
%



Peers based on 2016 audited financials
Source: BOAD, Moody's Investors Service

Low asset quality is a key credit constraint

Most of BOAD's development assets are composed of loans to sovereigns (67%), while the remainder consists of loans and equity investments to the public and private sector (33%). We assess BOAD's asset quality levels as low, which is not unique to the bank, as other Africa-focused MDBs also exhibit low borrower quality.

Of the eight member countries in which BOAD operates, we rate Côte d'Ivoire and Senegal, which together accounted for 22% of BOAD's loans to sovereigns and 15% of all of its loans as of the end of 2017. Benin, Burkina Faso, Guinea-Bissau, Mali, Niger and Togo are all nonrated entities and represent the remainder of BOAD's loan portfolio.

We assess BOAD's average borrower quality as "Low", using a conservative approach (which maps with a B3 rating assessment under our methodology for rating MDBs). This is in line with BOAD's peers, including Africa Finance Corporation (AFC, A3 stable), African Export-Import Bank (Afrexim, Baa1 stable), and the International Investment Bank (IIB, Baa1 positive), which all have "Low" average borrower ratings.

Some of BOAD's loans to the private sector are guaranteed by entities such as the Fonds African de Garantie et de Coopération Économique (FAGACE), which specialises in the promotion of public and private investment, or collateralised via cash that is deposited at the BCEAO. At the end of 2017, the average rate of guarantee was 44% for public enterprises and 32% for the private sector.

NPLs have been declining recently and provisioning has risen, but track record remains short

Despite the expansion of BOAD's loan portfolio over the last five years, the share of NPLs has remained relatively low and has progressively decreased to reach 2.2% in 2017. The improvement in the NPL ratio from 8.3% in 2008 to 3% in 2014 can in part be explained by the rapid growth in BOAD's loan book. During that period, gross NPLs grew by 3%, while the overall loan book grew 60%. However, between 2014 and 2017 gross NPLs decreased by 4% while the loan book continued to rise (+60%).

Low NPL ratios can also be explained by the large size of the sovereign loan portfolio – MDBs are usually perceived by member countries as a preferred creditor – and the bank's credit risk management.

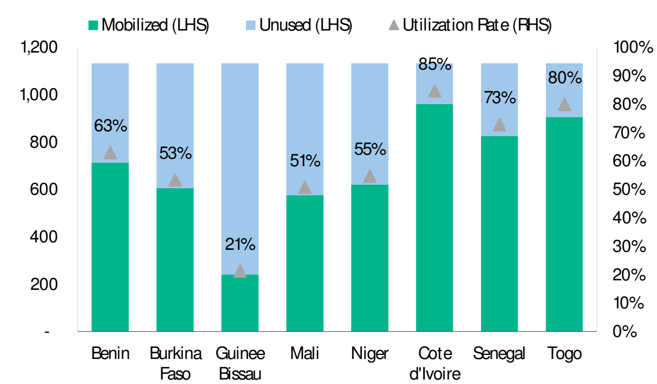
While the recent improvement in NPL levels is encouraging, we remain cautious about their evolution in the medium term. Indeed, over the last five years, when BOAD's activities substantially expanded, loans were granted with grace periods. Some of these grace periods have not yet ended, and as such the performance of a part of BOAD's outstanding loans is not reflected into the current NPL levels.

The overall level of provisioning for NPLs has steadily improved over the years to reach 69% at the end of 2017, up from 41% in 2010. Adding the guarantees (which apply to the private sector loans portfolio only and encompass cash collateral and guarantees from specialized institutions), coverage of total NPLs reached a high 95% in 2017, up from 71% in 2010.

Loan portfolio is relatively diversified

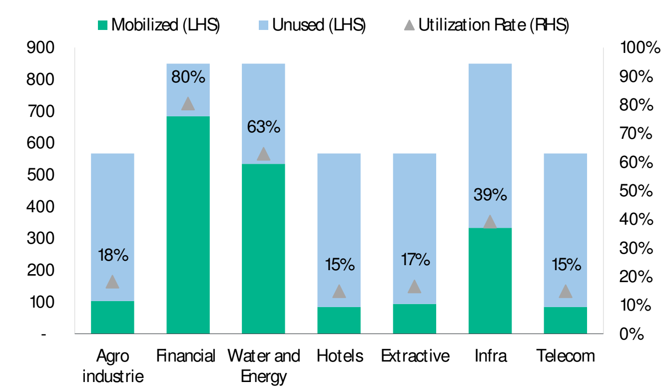
While the regional concentration of BOAD's loan portfolio is naturally high, considering its mandate, country and sector concentrations remain low, as the MDB participates in a variety of sectors and balances its portfolio among member countries. In fact, BOAD maintains exposure rules both in terms of sectoral and country participation: for sovereigns and the private sector, no single transaction can exceed 5% of equity, and in the case of private sector transactions, the share of the project financed by BOAD cannot exceed 50% of the total cost of a project or transaction (see Exhibits 9 and 10).

Exhibit 9
BOAD's utilisation rate is consistently below limits but varies across countries...
2017; USD millions (LHS); % (RHS)



Note: the utilisation rate and limits per country only relate to the sovereign and don't include the non-sovereign loans and equity investments. Utilisation includes non-disbursed loans, which are discounted at 50%
Sources: BOAD, Moody's Investors Service

Exhibit 10
...and sectors
2017; USD millions (LHS); % (RHS)



Utilisation includes non-disbursed loans, which are discounted at 50%
Sources: BOAD, Moody's Investors Service

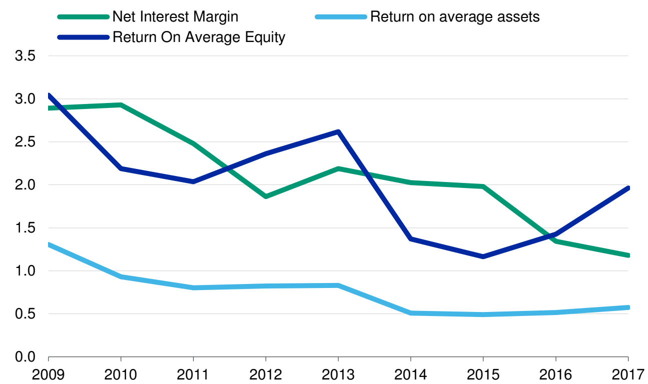
Declining profitability amid scarcity of concessional funding

BOAD's net margin has been declining as the bank has had to increasingly rely on funding at market rates (see Exhibit 11). The net interest margin fell to 1.2% of gross loans in 2017 from 2.9% in 2009, before provisions. The decline in margin can be explained by two factors: (1) increased competition in market lending where commercial banks operate, and (2) increased lending to sovereigns financed by market rate funding. In 2017 the share of non-concessional sovereign lending stood at 31% of the total, up from 19% the year before. Much of this lending used to be provided in the concessional window and was matched by concessional funding. Declining profitability limits the capacity of the bank to increase its capital organically and increases its reliance on shareholder support.

Exhibit 11

Decline in net interest margin has affected profitability ratios

%

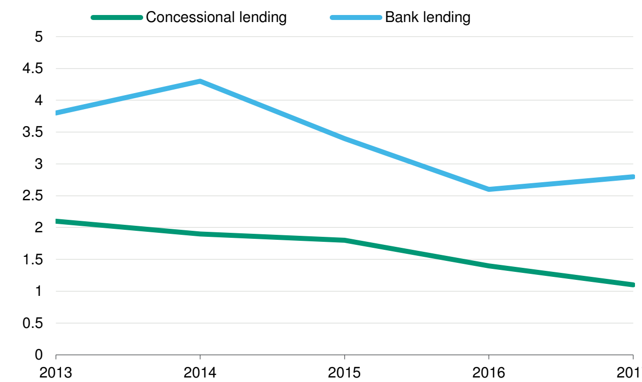


Source: BOAD, Moody's Investors Service

Exhibit 12

Margins on both concessional and market lending have declined

%



Source: BOAD, Moody's Investors Service

Liquidity: High

BOAD's substantial liquid assets and central bank refinancing window are key credit supports

Factor 2

Scale	Very High	High	Medium	Low	Very Low
+					-

A financial institution's liquidity is important in determining its shock absorption capacity. We evaluate the extent to which liquid assets cover debt service requirements and the stability of the institution's access to funding.

BOAD has robust liquidity. Unlike most of the MDBs we rate, BOAD is eligible for access to a refinancing window at the BCEAO under the same conditions as commercial banks. This is an important element supporting our assessment of "High" liquidity for BOAD.

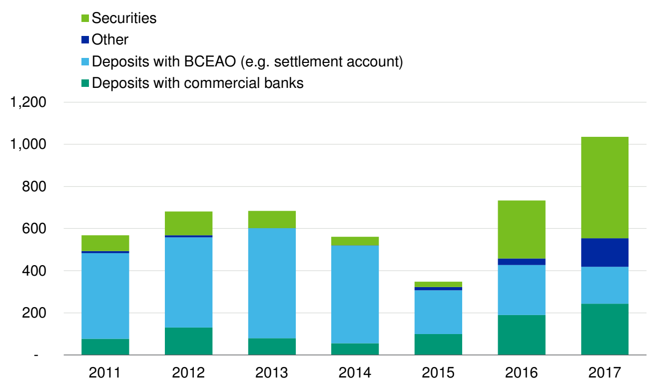
Liquidity position is solid compared with debt obligations

BOAD's liquidity is composed of cash at hand, short-term deposits with banks, which consist mostly of commercial banks and the BCEAO, as well as treasury notes issued by the sovereigns of member countries. The liquidity is entirely denominated in CFA francs. BOAD aims to deposit at least 25% of its liquidity at the BCEAO, but has usually kept a much higher percentage at the central bank. BOAD invests in debt securities issued by the countries of the WAEMU. Although the liquidity of these debt securities is probably weak, they are eligible as collateral for access to the BCEAO's refinancing window.

Our preferred measure of the adequacy of an MDB's liquidity consists of comparing short-term debt and debt maturing within the coming 12 months relative to discounted liquid assets at a given moment (at the end of the year), which we refer to as the debt service coverage ratio. This ratio reached around 38% at the end of 2017, after it temporarily deteriorated to 99% at the end of 2015. Compared with most of its peers, BOAD's ratio is slightly weaker (see Exhibit 14).

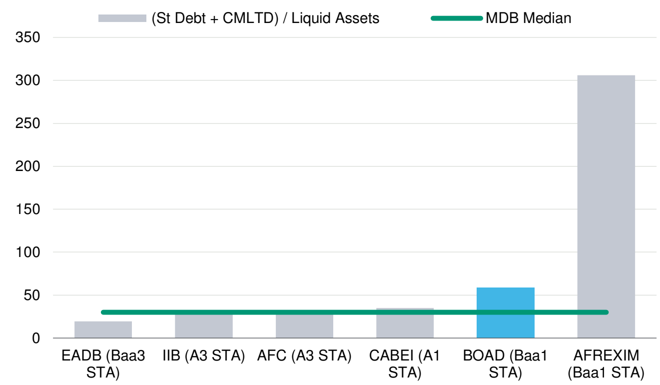
In the past two years the bank has significantly expanded its portfolio of treasury assets. The value of its treasury assets increased 75% in 2017 from 2016 to reach $481 million. A share of the eurobonds proceeds was used to grow the treasury portfolio (see Exhibit 13). As a result, the bank far exceeds its internal coverage rule, which stipulates that it must hold at all times the equivalent of nine months of loans disbursement and debt servicing. In 2017 the treasury covered 25 months, up from 12 in 2016. According to management, the increase was made to fund upcoming debt redemptions, which stand at $383 million in the next 12 months. Excluding BCEAO deposits, the yield on the treasury portfolio was 5.84%, which was just enough to cover the funding cost of the eurobonds.

Exhibit 13
Part of eurobond proceeds re-Invested in treasury assets
USD millions



Sources: BOAD, Moody's Investors Service

Exhibit 14
BOAD's debt service coverage ratio is slightly weaker than most of its peers
(ST Debt + CMLTD) / Discounted Liquid Assets, 3-year average (2015-2017)



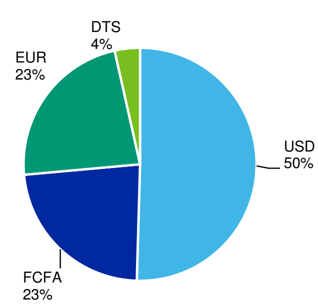
Sources: BOAD, Moody's Investors Service

Interest rate risks have been increasingly controlled

BOAD aims to avoid maturity mismatches by matching the maturity of its borrowing with that of the loans it grants. The bank's asset and liability profile shows no meaningful negative gap on a cumulative basis over the medium term. The bank borrows fixed and lends fixed too, limiting interest rate risk. Interest rates offered by BOAD are typically revised at a maximum of twice a year, but the bank can revise them regardless of this cycle in the event of a sharp change in its own cost of funding. BOAD has a formalised assets-liability management framework, which shows very low interest rate and foreign exchange risk.

The bank started hedging against foreign currency risk at the end of 2015. Before then, it limited such risk by borrowing in euros and CFA francs for the vast majority of its debt – the bank lends in CFA francs. Euro-denominated debt represents a quasi-nil risk in that regard because of the credible arrangement that underlies the CFA franc's peg to the euro. Foreign exchange risk, therefore, came primarily from US dollar (50% of debt in 2017) and Special Drawing Rights (SDR, 3.5% of debt in 2016) (see Exhibit 15). Both risks are now covered by deliverable-forward and non-deliverable-forward swap agreements with French commercial banks and MDBs.

Exhibit 15
High share of US dollar debt
2017



Sources: BOAD, Moody's Investors Service

Liquidity management framework is clearly formalised but weaker than for some other highly rated MDBs

BOAD sets liquidity adequacy under formalised rules. The first rule states that BOAD's liquidity should cover at a minimum between nine and 12 months of expected net outflows related to its loan activity (loan disbursement – loan reimbursement), plus debt payments. At the end of 2017, BOAD's liquidity covered 25 months of these net outflows, up from 12 months in 2016.

The bank also uses a liquidity coverage ratio (inspired by Basel III) to define liquidity adequacy over the short term under a stress scenario. This ratio is defined as the bank's liquid assets of high credit quality over the maximum of the two following amounts: net outflows over nine months or 25% of outflows under stressed conditions. BOAD set the following targets for its liquidity coverage ratio: 60% in 2015, subsequently adding 10% every year to reach 100% by 2019.

The standard set by the medium-term rule for BOAD's liquidity adequacy is slightly weaker than that observed by other highly rated MDBs, most of which target between 12 months and three years of liquidity needs. However, BOAD can easily accommodate it given its access to the BCEAO's financing window, a last resort facility that has not been used to-date. Moreover, the creation of a liquidity committee has further institutionalised liquidity policy within the bank.

Funding is relatively diversified and backed by BOAD's access to the central bank's refinancing window

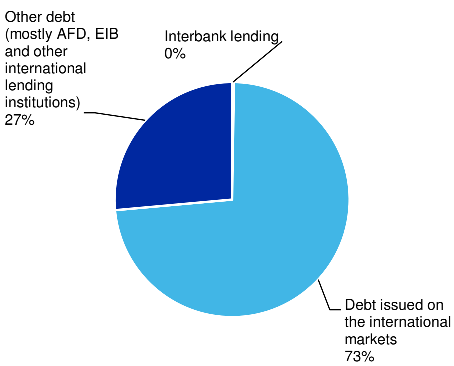
BOAD's access to the central bank refinancing window is critical to our assessment of BOAD's liquidity strength. Among the MDBs we rate, only the European Investment Bank (EIB, Aaa stable) benefits from similar central bank support – in its case, from the European Central Bank.

BOAD can access the central bank's refinancing window under the same conditions offered to commercial banks, as stipulated in Article 38 of BOAD's establishment agreement. Conditions include a limit on the overall financing the bank can obtain (35% of the bank's liabilities) and the requirement to post eligible collateral. Regarding the latter, all short-term debt ("bons", whose maturities can go up to 728 days) of private and public sector entities is eligible and receives a 10% haircut, while medium- and long-term debt ("obligations", with typical maturities of five to seven years) can also be eligible on a case-by-case basis, at the discretion of the Monetary Policy Committee of the BCEAO, which meets every three months.

BOAD successfully issued its inaugural bond on international capital markets in May 2016, raising $750 million. The bond carries a five-year maturity, 5.75% coupon rate and was swapped against euros. A second bond of $850 million was issued in July 2017 with a 10-year maturity and 5.25% coupon rate (see Exhibits 16 and 17).

Exhibit 16

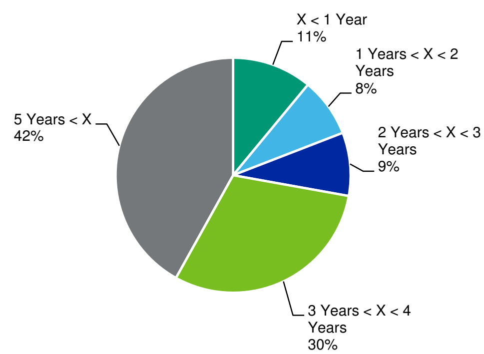
International market debt is the first financing resource
% of total debt (2017)



Sources: BOAD, Moody's Investors Service

Exhibit 17

Debt is mostly long term
% of total debt (2017)



Sources: BOAD, Moody's Investors Service

Strength of member support: Medium

High levels of callable capital, but members' risk correlation constrains assessment

Factor 3

Scale Very High | High | Medium | Low | Very Low

\+ -

Contractual support primarily manifests itself in the callable capital pledge, which is a form of emergency support. Extraordinary support is a function of shareholders' ability and willingness to support the institution in ways other than callable capital. Strength of member support can increase the preliminary rating range determined by combining factors 1 and 2 by as many as three scores.

Our assessment of the strength of member support results from considerations of the bank's capital structure and its importance in the WAEMU.

Our "Medium" assessment reflects (1) contractual support that is assessed as "High"; (2) extraordinary support that is also assessed to be "High"; and (3) specific factors that are a constraint on overall support – in particular the economic, monetary and financial linkages among WAEMU countries that support BOAD and the risk stemming from many of BOAD's borrowers also being shareholders (or what we generally refer to as the "Correlation of Members and Assets").

Exhibit 18

BOAD's shareholder capital status

Millions USD

Shareholder	(1) Paid-in	% of total (1)	(2) Callable Capital	% of total (2)	(3) Receivable Capital	% of total (3)
Group A	325.9	92.1%	1418.4	93.9%	147.0	95.9%
Benin	20.6	5.8%	88.6	5.9%	9.0	5.9%
Burkina Faso	20.6	5.8%	88.6	5.9%	9.0	5.9%
Côte D'Ivoire	20.6	5.8%	88.6	5.9%	9.0	5.9%
Guinea Bissau	17.1	4.8%	88.6	5.9%	12.4	8.1%
Mali	20.6	5.8%	88.6	5.9%	9.0	5.9%
Niger	20.6	5.8%	88.6	5.9%	9.0	5.9%
Sénégal	20.6	5.8%	88.6	5.9%	9.0	5.9%
Togo	20.6	5.8%	88.6	5.9%	9.0	5.9%
BCEAO	164.7	46.5%	709.2	46.9%	71.7	46.8%
Group B	28.1	7.9%	92.2	6.1%	6.3	4.1%
France	13.5	3.8%	52.7	3.5%	4.1	2.7%
Germany	3.7	1.0%	0.0	0.0%	0.0	0.0%
Belgium	2.6	0.7%	7.7	0.5%	0.0	0.0%
EIB	1.8	0.5%	5.5	0.4%	0.0	0.0%
AfDB	1.9	0.5%	8.2	0.5%	0.8	0.5%
ExIm Bank of India	0.3	0.1%	1.0	0.1%	0.1	0.1%
PBoC - PRC	4.2	1.2%	16.5	1.1%	1.3	0.8%
Morocco	0.2	0.1%	0.7	0.0%	0.0	0.0%
Total	354.0	100.0%	1510.6	100.0%	153.3	100.0%
% of Total Capital		18%		75%		8%

Sources: BOAD, Moody's Investors Service

Callable capital is large, credit support derives from BCEAO

The size of callable capital from member countries covered around 45% of BOAD's debt in 2017. But taking into account only callable capital stemming from the BCEAO and the smaller investment grade shareholders (which we consider likely to be provided if called), debt as a percentage of discounted callable capital increases to around 422%, or coverage of 24%.

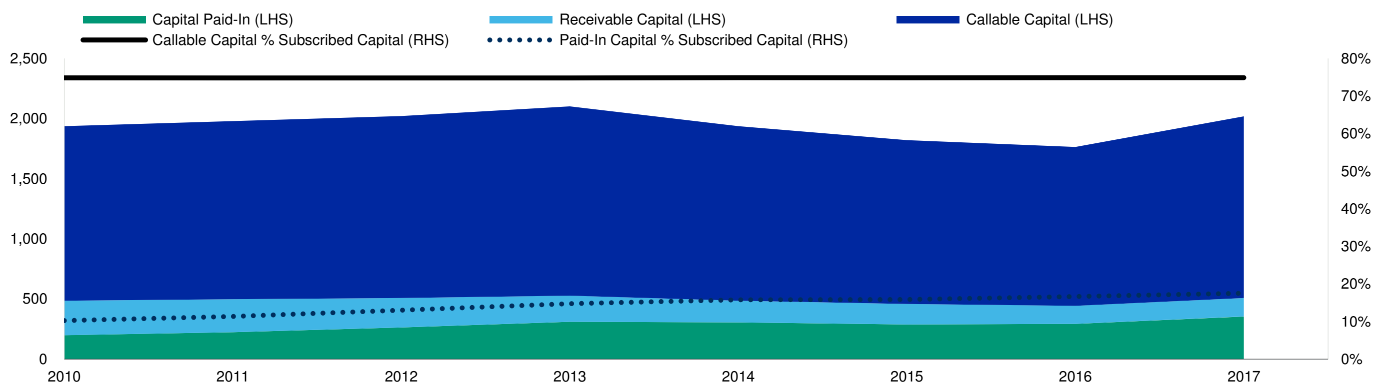
As per BOAD's status, the callable capital can only be called in a situation where the bank expects to face an issue with the payment of capital, interest or other financial costs related to its debt or the debt it has guaranteed (Article 7 of BOAD's establishment agreement). To prevent the default happening before the board of directors can decide to call the capital, dispositions have been taken so that the board can take such action to prevent a default. The creation of a liquidity committee that meets every month supports the process.

A mechanism is in place that enables the payment of the called capital directly from the BCEAO to BOAD on behalf of Group A shareholders under the instruction of the president of the Council of Ministers of the WAEMU.

Exhibit 19

BOAD's capital history, a steady but slow increase

Millions USD



Sources: BOAD, Moody's Investors Service

Member countries and the BCEAO ensure that capital payments are timely

Scheduled capital payments from shareholder countries have been structured through a special mechanism created at the BCEAO, with the express aim of ensuring BOAD's position as a priority in the region in support of economic development. The BCEAO levies a tax on financial transactions that occur between WAEMU countries and external countries of 0.6% of each transaction on behalf of member countries. This tax is collected and placed into the respective BCEAO account of each member country and is used to make the capital payments from member countries to BOAD in priority, before the country can even access these funds. As it stands, the overall amount of tax collected by the BCEAO every year on behalf of member countries more than covers the yearly capital payment to BOAD. If at the country level, the capital payment exceeds the tax levied on its behalf, the country has to complement the payment with their own funds. Overall, this mechanism provides comfort that payments are made on time and in full.

Of the total capital subscribed, approximately 75% is callable, while 18% has already been paid-in by member countries, leaving only 8% subscribed but not yet paid. The latter portion of the capital is due based on a predetermined payment schedule through 2024. BOAD has faced small capital payment arrears in the past related to Guinea-Bissau's capital payments, but we do not consider this to be symbolic of any weakness in shareholders commitment to support the mandate of the bank.

Willingness to support is assessed as High

We assess member states' willingness to support the bank based on two elements: (1) the propensity of members to support the bank in isolation and (2) the priority that members would give to recapitalising the bank in a systemic crisis. The first takes into account qualitative factors that allow us to gauge the likelihood of support. The second examines the priorities of shareholders were they faced with calls for support from multiple institutions in need of capital.

We assess member states as having a strong propensity to support BOAD, reflecting its economic importance in the region, and the fulfilment of its mandate to direct 100% of loans to the governments, public sectors or private sectors of its member states. This is largely based on BOAD's mandate, which is to finance integration and economic development in the WAEMU region, which all of its member states are a part of (see overview section for more details on the mandate). The strong incentive for shareholders to provide support in the event of need is reinforced by BOAD's role in financing important infrastructure, water and energy related projects in the region.

We assess the priority of support in the case of BOAD as being quite strong, given the relatively low commitments to other MDBs of the BCEAO and smaller investment grade shareholders, as well as BOAD's member states.

BOAD has a track record of some form of extraordinary support from shareholders. In 1994, when the CFA franc was devalued, the bank incurred losses, but shareholders compensated its financial losses.

BOAD-specific factors: shared exposure to systemic risks among shareholders and between shareholders and borrowers is the main constraint

Our assessment of BOAD's strength of member support also takes into account the “High” correlation of the bank's members and assets, as well as “Medium” economic and financial linkages between the shareholders. This may, in highly stressed scenarios, constrain members' capacity to fulfil their callable capital commitments. There is also no joint and several support in place, given that each member state is only liable for its own share of callable capital.

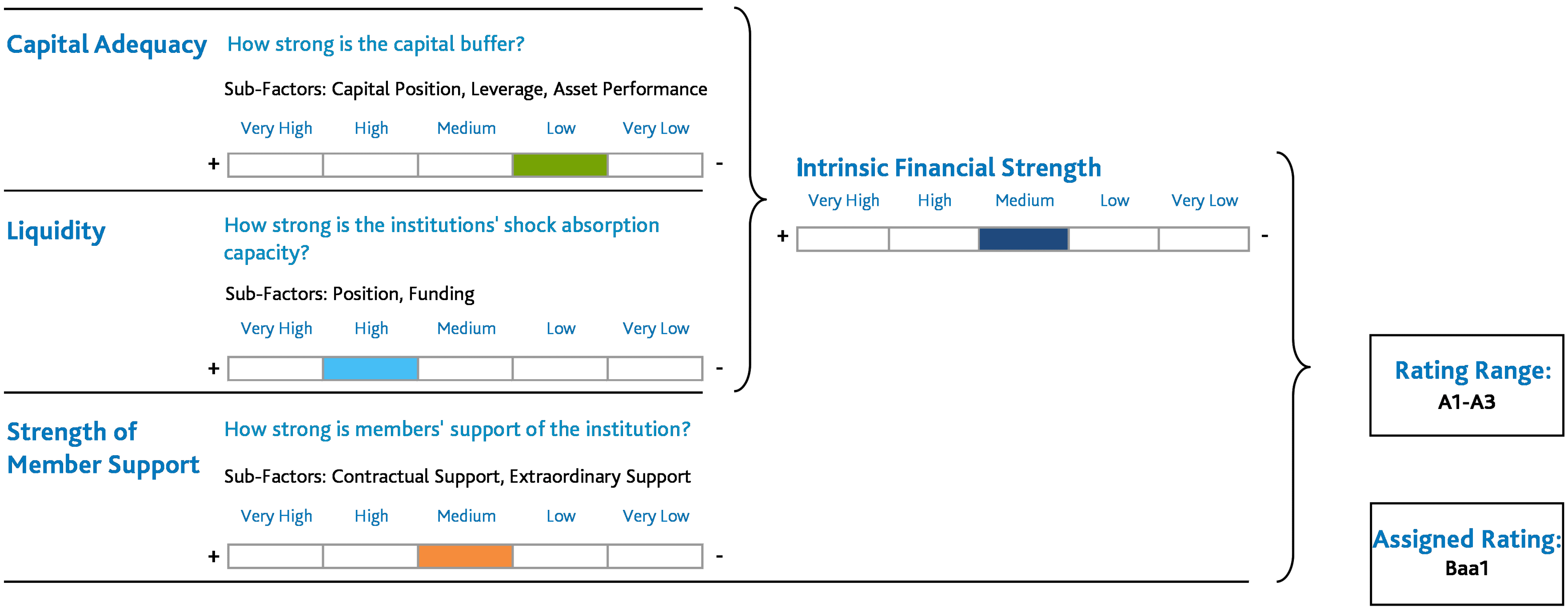
In the case of BOAD, 47% of callable capital comes from countries that are members of the WAEMU. While the WAEMU is an economic and monetary union, the level of integration remains limited, unlike in the euro area/EU, for instance. A small portion of the callable capital comes from non-regional members and brings some risk diversification. As a result, the risk from economic and financial linkages between shareholders is assessed as “Medium” for BOAD.

We also look at cases where borrowers can also be shareholders. Our assessment of BOAD's strength of member support takes into account the “High” correlation of the bank's members. Since BOAD's development assets are mostly composed of loans to sovereigns of the WAEMU region (around two-thirds), a circumstance in which BOAD's assets markedly deteriorate necessarily indicates that sovereigns themselves face economic and financial difficulties, which in turn may limit their capacity to support BOAD as shareholders. As a result, we consider the “Correlation of Members and Assets” as “High” for BOAD and hence weighs on our ultimate shareholder support assessment.

Rating range

Combining the scores for individual factors provides an indicative rating range. While the information used to determine the grid mapping is mainly historical, our ratings incorporate expectations around future metrics and risk developments that may differ from the ones implied by the rating range. Thus, the rating process is deliberative and not mechanical, meaning that it depends on peer comparisons and should leave room for exceptional risk factors to be taken into account that may result in an assigned rating outside the indicative rating range. For more information please see our Supranational Rating Methodology.

Supranational rating metrics: BOAD



Source: Moody's Investors Service

Comparatives

This section compares credit relevant information regarding BOAD with other supranational entities rated by Moody's Investors Service. It focuses on a comparison with supranationals within the same rating range and shows the relevant credit metrics and factor scores.

BOAD's capital adequacy (Factor 1) is assessed to be “Low”, in line with our assessment for International Investment Bank (IIB, A3 stable) and East African Development Bank (EADB, Baa3 stable), but lower than our “Medium” assessment for Africa Finance Corporation (AFC, A3 stable) and Eurasian Development Bank (EDB, Baa1 stable). The assessment of its liquidity profile (Factor 2) is “High”, a reflection of its substantial liquid assets and access to a central bank refinancing window. The combination of BOAD's Factor 1 and Factor 2 results in a medium assessment of its intrinsic financial strength, on par with EDB and EADB, but below AFC, which is why the latter is rated above BOAD and IIB. Ultimately IIB and BOAD are, however, rated on par at Baa1 because IIB benefits from a strength of member support (Factor 3) that is “High”, versus “Medium” for BOAD.

Exhibit 20

BOAD key peers

	Year	BOAD	AFC	EDB	EADB	IIB	Baa Median
Rating/Outlook		Baa1/STA	A3/STA	Baa1/STA	Baa3/STA	A3/STA	--
Total Assets (US$ million)	2016	3,637	3,430	3,255	394	930	3,637
Factor 1		**Low**	**Medium**	**Medium**	**Low**	**Medium**	**--**
Usable Equity/Gross Loans Outstanding + Equity Operations (%)[1]	2016	37.7	86.8	97.2	132.1	102.5	37.7
Debt/Usable Equity (%)[1]	2016	237.2	132.0	93.8	49.2	105.6	237.2
Gross NPLs/Gross Loans Outstanding (%)[2]	2016	2.2	0.0	4.7	7.0	3.9	2.8
Factor 2		**High**	**High**	**Medium**	**High**	**Medium**	**--**
ST Debt + CMLTD/Liquid Assets (%)[3]	2016	49.5	16.9	7.0	16.8	40.9	49.5
Bond-Implied Ratings (Long-Term Average)	2010-2016	Ba2	Ba1	Ba2	--	--	Ba2
Intrinsic Financial Strength (F1+F2)		**Medium**	**High**	**Medium**	**Medium**	**Medium**	**--**
Factor 3		**Medium**	**Very Low**	**Low**	**Low**	**High**	**--**
Total Debt/Discounted Callable Capital (%)[4]	2016	362.2	--	0.0	883.8	124.9	1320.2
Weighted Median Shareholder Rating (Year-End)	2016	Baa1	B1	Ba1	B2	Ba1	B2
Rating Range (F1+F2+F3)		**A1-A3**	**Aa2-A1**	**A2-Baa1**	**A2-Baa1**	**Aa3-A2**	**--**

[1] Usable equity is total shareholder's equity and excludes callable capital

[2] Non performing loans

[3] Short-term debt and currently-maturing long-term debt

[4] Callable capital pledge by members rated Baa3 or higher, discounted by Moody's 30-year expected loss rates associated with ratings.

Sources: Moody's Investors Service

DATA AND REFERENCES

Annual statistics

Exhibit 21

West African Development Bank

	2011	2012	2013	2014	2015	2016	2017
Balance Sheet, USD Millions							
Assets							
Cash & Equivalents	568	681	684	562	348	733	1,035
Securities	0	0	0	0	0	0	0
Derivative Assets	0	0	0	0	0	0	0
Net Loans	1,235	1,484	1,912	2,155	2,269	2,556	3,444
Net Equity Investments	66	80	100	122	130	116	161
Other Assets	294	265	243	221	214	232	210
Total Assets	**2,162**	**2,510**	**2,940**	**3,059**	**2,960**	**3,637**	**4,851**
Liabilities							
Borrowings	1,060	1,238	1,473	1,695	1,710	2,390	3,383
Derivative Liabilities	0	0	0	0	0	0	0
Other Liabilities	299	427	560	35	22	73	140
Total Liabilities	**1,366**	**1,674**	**2,044**	**1,740**	**1,742**	**2,476**	**3,535**
Equity							
Subscribed Capital	1,978	2,025	2,102	1,938	1,822	1,764	2,018
Less: Callable Capital	1,481	1,512	1,573	1,451	1,364	1,321	1,511
Less: Other Adjustments	26	26	18	15	12	9	7
Equals: Paid-In Capital	472	486	510	472	446	435	500
Retained Earnings (Accumulated Loss)	153	172	198	196	605	594	689
Accumulated Other Comprehensive Income (Loss)	21	25	28	482	19	21	29
Total Equity	**796**	**836**	**895**	**1,320**	**1,218**	**1,162**	**1,316**

Sources: West African Development Bank, Moody's Investors Service

Exhibit 22
West African Development Bank

	2011	2012	2013	2014	2015	2016	2017
Income Statement, USD Millions							
Net Interest Income	**45**	**40**	**57**	**55**	**52**	**44**	**53**
Interest Income	75	84	110	113	120	140	196
Interest Expense	31	44	53	58	68	96	143
Net Non-Interest Income	**11**	**26**	**22**	**469**	**9**	**17**	**22**
Net Commissions/Fees Income	3	6	3	4	7	2	3
Income from Equity Investments	5	4	4	5	4	6	4
Other Income	4	16	14	460	-2	9	15
Other Operating Expenses	**30**	**36**	**41**	**34**	**35**	**35**	**44**
Administrative, General, Staff	15	18	22	19	19	18	26
Grants & Programs	3	3	3	3	3	3	3
Other Expenses	12	14	16	12	14	14	15
Pre-Provision Income	**26**	**31**	**37**	**490**	**26**	**27**	**31**
Loan Loss Provisions (Release)	10	12	15	13	12	10	6
Net Income (Loss)	**16**	**19**	**23**	**477**	**15**	**17**	**24**
Other Accounting Adjustments and Comprehensive Income	0	0	0	0	0	0	0
Comprehensive Income (Loss)	**16**	**19**	**22**	**507**	**10**	**-16**	**-5**

Sources: West African Development Bank, Moody's Investors Service

Exhibit 23
West African Development Bank

	2011	2012	2013	2014	2015	2016	2017
Financial Ratios							
Capital Adequacy, %							
Usable Equity / (Loans + Equity)	41.0	38.2	33.8	50.1	43.7	37.7	32.0
Debt/Usable Equity	198.7	207.2	216.5	148.6	163.2	237.2	293.0
Allowance For Loan Losses / Gross NPLs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NPL Ratio: Non-Performing Loans / Net Loans	5.7	5.1	4.1	3.3	2.7	2.2	2.2
Return On Average Assets	0.8	0.8	0.8	15.9	0.5	0.5	0.6
Interest Coverage Ratio (X)	1.5	1.4	1.4	9.2	1.2	1.2	1.2
Liquidity, %							
St Debt + CMLTD / Liquid Assets	0.0	0.0	25.6	45.4	92.7	49.5	34.0
Bond-Implied Rating	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Assets / Total Debt	53.6	55.0	46.5	33.1	20.3	30.7	30.6
Liquid Assets / Total Assets	26.3	27.1	23.3	18.4	11.7	20.2	21.3
Strength of Member Support, %							
Callable Capital (CC) of Baa3-Aaa Members/Total CC	-	-	-	51.2	53.3	53.3	53.0
Total Debt/Discounted Callable Capital	148.1	169.8	194.3	243.2	250.9	362.2	450.6
Weighted Median Shareholder Rating (Year-End)				Baa1	Baa1	Baa1	Baa1

Sources: West African Development Bank, Moody's Investors Service

Moody's related publications

Rating action:

» Moody's affirms BOAD's Baa1 rating, maintains stable outlook, June 2017

» Moody's assigns provisional (P)Baa1 rating to BOAD's forthcoming US dollar denominated notes, April 2016

Credit opinion:

» West African Development Bank (The), November 2017

» West African Development Bank (The), June 2017

» Government of Senegal, April 2017

» Government of Cote d'Ivoire, March 2017

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Endnotes

1 Until 2015, the concessional window was financed by matching concessional sources, but constraints on these resources led BOAD to amend the FDC's financing model with the creation of an interest-subsidised fund.

2 Loans to sovereigns have a grace period of five years, others, three.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

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