



NORD/LB Issuer Guide 2023 – German Agencies

NORD/LB Markets Strategy & Floor Research

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Marketing communication (see disclaimer on the last pages)

NORD/LB ISSUER GUIDE 2023 German Agencies

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Covered Bonds/Banks

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The German agency market – an overview

Authors: Dr Norman Rudschuck, CIIA // Christian Ilchmann

Promotional banks shape the German agency market alongside winding-up vehicles

The German agency market is the largest of its kind in Europe. As at the reporting date, the volume of outstanding bonds issued by the agencies included in this Issuer Guide amounts to the equivalent of EUR 667.1bn overall. The issuers within this market can essentially be divided into three categories: national promotional banks (e.g. KfW) and regional institutions (e.g. NRW.BANK), as well as winding-up agencies (e.g. EAA). While the promotional banks have traditionally played a highly significant role in the management of economic policy at the level of both federal government (Bund) and the individual Laender, the winding-up agencies only came into existence a few years ago. Founded in the wake of the global financial crisis, the role of these institutes has been to systematically reduce assets that were hived off as part of state-backed support measures (e.g. Hypo Real Estate). Regional promotional banks round off this market, although in some cases they differ considerably with regard to their primary market activities. As the largest of the 17 regional development banks, NRW.BANK is one of the most important bond issuers on the German agency market. However, the institutes covered in this Issuer Guide also use instruments such as sub-benchmarks and SSD deals for refinancing purposes.

German agencies - an overview

Institution	Туре	Owner(s)	Guarantee	Risk weighting	
Kreditanstalt für Wiederaufbau (KfW)	Promotional bank	80% Germany, 20% Laender	Explicit guarantee & institutional liability	0%	
Landwirtschaftliche Rentenbank	Promotional bank	-	Explicit guarantee & institutional liability	0%	
FMS Wertmanagement (FMS-WM)	Winding-up vehicle	100% Sonderfonds Finanzmarktstabilisierung (SoFFin)	Explicit guarantee & loss absorption mechanism	0%	
Erste Abwicklungsanstalt (EAA)	Winding-up vehicle	~48.2% Federal State of NRW, ~25.0% RSGV, ~25.0% SVWL, ~0.9% LVR, ~0.9% LWL	Loss absorption mechanism	0%	
NRW.BANK	Promotional bank	100% Federal State of North Rhine-Westphalia	Explicit guarantee, institutional liability & guarantor liability	0%	
Landeskreditbank Baden-Württemberg – Förderbank (L-Bank)	Promotional bank	100% Federal State of Baden-Württemberg	Explicit guarantee, institutional liability & guarantor liability	0%	
WIBank	Promotional bank	100% Helaba	Explicit guarantee & guarantor liability	0%	
LfA Förderbank Bayern (LfA)	Promotional bank	100% Free State of Bavaria	Explicit guarantee, institutional liability & guarantor liability	0%	
Investitionsbank Schleswig-Holstein (IB.SH)	Promotional bank	100% Federal State of Schleswig-Holstein	Explicit guarantee, institutional liability & guarantor liability	0%	
Bayerische Landesboden- kreditanstalt (BayernLabo)	Promotional bank	100% BayernLB Holding AG	Explicit guarantee & guarantor liability	0%	
Investitionsbank Berlin (IBB)	Promotional bank	100% Federal State of Berlin	Explicit guarantee & institutional liability	0%	
Investitionsbank des Landes Brandenburg (ILB)	Promotional bank	50% Federal State of Brandenburg, 50% NRW.BANK	Explicit guarantee, institutional liability & guarantor liability	0%	
Sächsische Aufbaubank (SAB)	Promotional bank	100% Free State of Saxony	Explicit guarantee, institutional liability & guarantor liability	0%	
Investitions- und Strukturbank Rheinland-Pfalz (ISB)	Promotional bank	100% Federal State of Rhineland-Palatinate	Explicit guarantee, institutional liability & guarantor liability	0%	
Hamburgische Investitions- und Förderbank (IFBHH)	Promotional bank	100% Free and Hanseatic City of Hamburg	Explicit guarantee, institutional liability & guarantor liability	0%	

Source: Issuers, NORD/LB Markets Strategy & Floor Research



Institutional liability (Anstaltslast)

Institutional liability is a special feature of the German agency market. It comprises the legal obligation on the part of the guarantor to secure the financial basis for the institution. Furthermore, functionality must be maintained. In this respect, any financial shortfalls must be settled through subsidies or by some other means. Specifically, the institutional liability is an obligation on the guarantor to provide the institution with the resources it needs to function properly. This means that, de facto, it is equivalent to a liquidity guarantee, although the institution does not have to bear any costs in this regard. The legal commitment between institution and guarantor is governed by the institutional liability as far as their internal relationship is concerned. As a result, if there are any liquidity shortfalls, only the institution can assert a claim against the guarantor. Investors do not have the right to claim against the guarantor. The institutional liability is not limited either in amount or time and is regarded as a general principle of law. However, it is only relevant for investors under certain circumstances: all German agencies with institutional liability also have an explicit guarantee (see below).

Guarantor liability (Gewährträgerhaftung)

Like institutional liability, guarantor liability is a special feature of the German agency market and implies an obligation of the guarantor to step in should the institution become insolvent. It comprises the guarantor's unlimited legal liability for the institution's liabilities in the event of insolvency or liquidation. An institution's creditors therefore have a direct claim against the guarantor if the institution's assets are insufficient to service the creditors' claims. Liquidation and the occurrence of liability are not necessarily closely linked in terms of time. There is no amount or time limit on guarantor liability and, as in the case of institutional liability, it is not associated with any costs. Unlike institutional liability, however, it is not regarded as a general principle of law. Instead, it requires a legal basis, such as legislation or a regulation. Again, guarantor liability is only relevant for investors under certain circumstances: all German agencies with guarantor liability also feature an explicit guarantee in parallel to this.

Explicit guarantee

The explicit guarantee is expressly laid down in the relevant laws establishing the particular agency and, as a consequence, it can only be revoked by an amendment to the law. If an agency runs into payment difficulties, this form of guarantee offers investors a direct and unconditional claim against the guarantor. As such, it is the strongest form of state support. Consequently, the explicit guarantee represents the ultimate criterion for a risk weighting of 0% under <u>CRR</u> and Basel III.

Loss absorption mechanism (Verlustausgleichspflicht)

With the creation of winding-up agencies around 2009/10, a new form of liability was added to the existing guarantee arrangements of German agencies. This form of liability is regulated under Article 7 of the statutes of FMS Wertmanagement and Erste Abwicklung-sanstalt and contains an obligation on the part of the liable parties to offset all losses. The liable parties are also required to provide the institution with the funding needed to settle its liabilities (liquidity guarantee) at any time. Ultimately, the loss absorption mechanism therefore equates to an implicit guarantee.

Strong liability mechanisms result in a 0% risk weighting

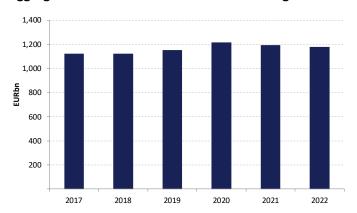
Strong support from the respective guarantors, which is inherent in all forms of liability, means that a risk weighting of 0% is applicable under CRR/Basel III to all bonds issued by agencies of this kind.



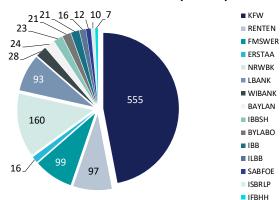
Close links to the federal government and respective German Land

Last but not least, the guarantee mechanisms result in very close ties between the agencies and Bund (federal government of Germany) or respective German Land. The promotional banks, in particular, are a key tool in implementing economic policy. An analysis of the Laender, whose creditworthiness is crucial to a large number of the agencies examined here, is available in the most recent version of our <u>Issuer Guide – German Laender 2023</u>.

Aggregated balance sheet totals of German agencies



Comparison of balance sheet totals (EURbn)

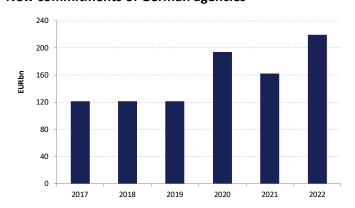


Source: Issuers, NORD/LB Markets Strategy & Floor Research

Slight contraction in balance sheet totals and sharp rise in volume of new commitments

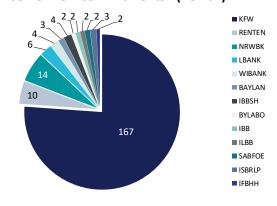
After the aggregated balance sheet totals of German agencies included in this Issuer Guide was characterised by growth between 2017 and 2020, the declining trend that first appeared in 2021 continued in 2022. In comparison with the previous year, a decline of -1.2% to EUR 1,180.4bn was recorded. The winding-up vehicles were a key factor in this development, as they are gradually reducing their portfolio holdings. The largest absolute decline of EUR -25.3bn year on year to EUR 99.0bn was recorded by FMS-WM. At the same time, this represented the highest relative balance sheet contraction in our coverage (-20.4%). None of the promotional banks recorded a significant decline in their balance sheet total compared with the previous year; the majority actually increased their assets. NRW.Bank, for example, recorded an increase in its balance sheet total of EUR +6.8bn Y/Y to EUR 160.0bn. The volume of new commitments in 2022 rose to EUR 219.3bn (EUR +56.8bn Y/Y) on an aggregated basis. This was mainly due to KfW, whose new commitments increased by EUR +59.9bn (or +56.0%) year on year. In fact, KfW accounted for more than 76% of the volume of new commitments attributable to German promotional banks.

New commitments of German agencies*



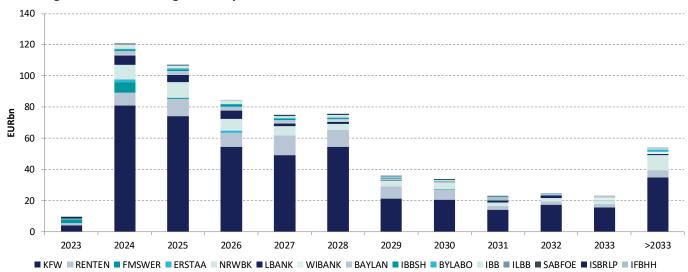
* Excluding FMS-WM und EAA. Source: Issuers, NORD/LB Markets Strategy & Floor Research

Comparison of new commitments* (EURbn)

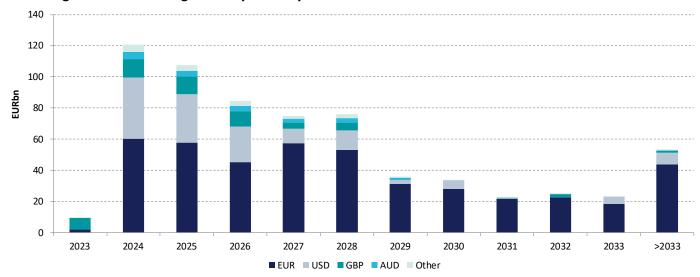




German agencies: outstanding bonds by issuer



German agencies: outstanding bonds by currency



NB: Foreign currencies are converted into EUR at rates as at 22 November 2023. Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Broad range in various currencies

The German agency market offers a very wide range of bonds, especially in the maturity segment up to 2026. There is a substantial volume of outstanding bonds, of which a large number are benchmark bonds, particularly in EUR. Overall, a total of EUR 225.3bn of the outstanding volume is denominated in 16 foreign currencies, with the USD clearly at the forefront of the FX offering. KfW, NRW.BANK and L-Bank in particular boast high volumes and conduct their refinancing activities across a broad spectrum of foreign currencies. With the exception of these three issuers, the German agency market is geared towards comparatively short-term refinancing – longer maturities tend to be more of a rarity.

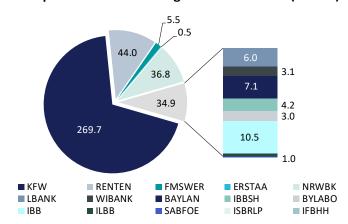


A comparison of outstanding bond volumes (EURbn)

10.2 3.4 78.2 25.1 60.5 4.6 71.2 13.4 6.1 4.7 442.0 12.0 1.5 1.5 2.4 ■ KFW ■ RENTEN **■** FMSWER NRWBK ERSTAA LBANK BAYLAN ■ IBBSH BYLABO **■** WIBANK IBB ISBRLP ILBB SABFOE ■ IFBHH

NB: Benchmarks are defined as bonds with a minimum volume of EUR 0.5bn. Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

A comparison of outstanding EUR benchmarks (EURbn)



German agencies – an overview (EURbn/EUR equivalent)

Name	Ticker	Rating (Fitch/Moody's/S&P)	Outstanding Volume	EUR volume	Funding target 2023	Maturities 2023	Net Supply 2023	Number of ESG bonds	ESG volume
KfW	KFW	AAAu/Aaa/AAA	442.0	284.9	90.0	70.8	19.2	48	57.2
Rentenbank	RENTEN	AAA/Aaa/AAA	78.2	45.2	11.0	9.6	1.4	13	6.2
FMS-WM	FMSWER	-/Aaa/AAA	10.2	5.5	6.0	6.3	-0.3	0	0.0
EAA	ERSTAA	AAA/Aa1/AA	3.4	0.7	2.0	4.3	-2.3	0	0.0
NRW.BANK	NRWBK	AAA/Aa1/AA	60.5	47.5	12.0	10.1	1.9	20	12.2
L-Bank	LBANK	AAAu/Aaa/AA+	25.1	10.3	6.0	5.7	0.3	0	0.0
WIBank	WIBANK	-/-/AA+	4.6	4.6	2.9	0.0	2.9	0	0.0
LfA	BAYLAN	-/Aaa/-	13.4	13.4	2.8	1.6	1.2	0	0.0
IB.SH	IBBSH	AAA/-/-	6.1	6.1	1.3	0.4	0.9	0	0.0
BayernLabo	BYLABO	-/Aaa/-	4.7	4.7	1.1	0.7	0.4	2	1.0
IBB	IBB	AAA/-/-	12.0	12.0	2.8	1.7	1.1	2	1.0
ILB	ILBB	AAA/-/-	1.5	1.5	1.5	0.0	1.5	1	0.1
SAB	SABFOE	-/-/AAA	1.5	1.5	0.8	0.0	0.8	0	0.0
ISB	ISBRLP	AAA/-/-	1.5	1.5	0.5	0.0	0.5	0	0.0
IFBHH	IFBHH	AAA/-/-	2.4	2.4	0.6	0.1	0.5	2	0.4
Total			667.1	441.8	141.3	111.3	30.0	88.0	78.1

NB: Foreign currencies are converted into EUR at rates as at 22 November 2023.

On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality. Source: Bloomberg, issuers, NORD/LB Markets Strategy & Floor Research

Comment

With its very high supply of both EUR and FX bonds, the German agency market is the largest of its kind in Europe. The supply of new bonds, which includes a large number of EUR benchmark bonds in particular, is high. This means that the bonds of German agencies are spread across the entire maturity spectrum. On account of the major importance of the individual banks, and taking into consideration their respective guarantee and liability mechanisms, all issuers benefit from a risk weighting of 0% from our perspective.



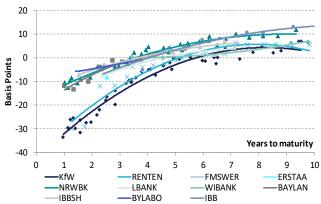
Germany

A comparison of spreads





German agencies – a comparison

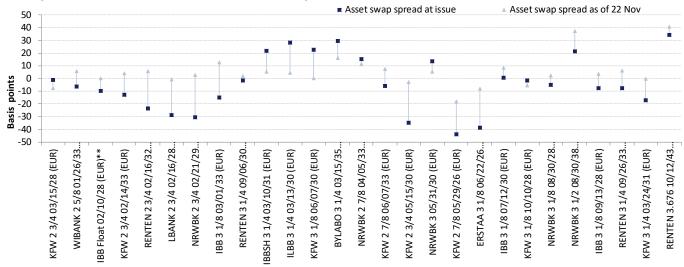


^{*} Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn. Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

Germany

Primary market activities – an overview

Development of benchmark issues 2023 (fixed coupon)



NB: Benchmarks are defined as bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Increased issuance volumes during years of crisis

After the capital market activities of FMS-WM and EAA had in particular led to a significant influx of fresh supply a few years ago, these institutes have now scaled back their primary market activities quite considerably. However, the financing of COVID-19 measures since 2020 and hardship aid in connection with the energy crisis have in particular led to increased refinancing requirements on the part of promotional banks. For 2023, we expect issuance volumes to be largely on a par with the previous year. In this context, ESG bonds represent an element that is increasingly growing in importance. While the ESG label does not automatically lead to improved conditions for issuers, they do at least boost the appeal of the bonds for a broader investor basis. In general, we anticipate further growth in the area of sustainability-related bonds (ESG bonds). In particular, KfW has made successful forays into this market segment with EUR benchmarks and is responsible, together with the EU and EIB, for driving the dynamic development of the green bond market. However, other German agencies have now started to become successfully established on the market as ESG issuers too.





Homepage

Investor Relations

Owner(s)

80% German federal government, 20% Laender

Guarantor(s)

Germany

Liability mechanism

Explicit guarantee and institutional liability

Legal form

Public law institution

Bloomberg ticker

KFW

Ratings	Long-term	Outlook
Fitch	AAAu	stab
Moody's	Aaa	stab
S&P	AAA	stab

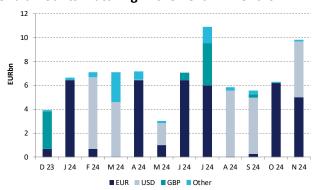
Kreditanstalt für Wiederaufbau (KfW)

Kreditanstalt für Wiederaufbau (KfW) was established in 1948 as a public law institution (Anstalt öffentlichen Rechts) with the initial mission of supporting the reconstruction of the German economy in the wake of the Second World War. Since this time, the promotional bank has offered low-interest loans for investment purposes, although the target groups of potential borrowers as well as the variety of funding programmes on offer have both been expanded over time. KfW divides its business activities into six segments: SME Bank and Private Clients (e.g. promotional funding for SMEs and provision of student loans), Customised Finance and Public Clients (corporate/ bank financing and financing municipal infrastructure), KfW Capital (private equity and venture capital), Export and Project Financing (KfW IPEX-Bank), Promotion of Developing Countries and Emerging Economies, and finally, Financial Markets. In 2022, with a funding volume of EUR 166.9bn, KfW recorded the strongest year of promotional activity in its history. The majority of this figure, at EUR 136.1bn, was attributable to domestic promotion. Loans are generally granted through the respective house bank, which passes on the KfW funding to the customer once an application has been approved (house bank principle). KfW does not operate any branches and has no customer deposit business. To counteract the impacts of the war in Ukraine, KfW's volume of new commitments in 2022 rose by EUR +59.9bn (+56.0% Y/Y) versus the prior year. A key aspect in this development were the mandated transactions on behalf of the Bund to safeguard the country's energy supply. Today, the focus of its activities is on supporting the transition towards a climate-friendly economy and society. KfW is 80% owned by the Bund, while the Laender maintain a stake of 20%. Section 1a of the Act governing the KfW (KredAnstWiAG) stipulates an explicit guarantee on the part of the Bund for the existing and future liabilities. The explicit and direct guarantee is supplemented by the provision of institutional liability on the part of Germany. For 2023, KfW has defined a funding target of EUR 90bn. Of this figure, at least EUR 10bn is to be raised via the issuance of Green Bonds.

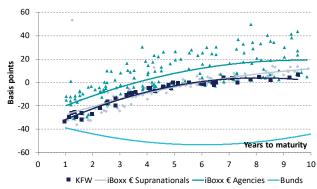
Bonds by currency



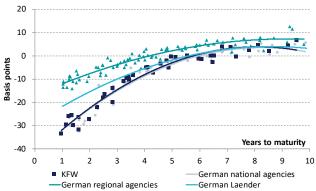
Bond amounts maturing in the next 12 months



KFW vs. iBoxx € indices & Bunds



KFW vs. German SSAs





Risk weighting according to CRR/Basel III (standard approach)	Liquidity category according to Liquidity Coverage Ratio (LCR)	Haircut category according to ECB repo rules	Leverage ratio/BRRD
0%	Level 1	П	Does not apply

Relative value

Attractivenes	Attractiveness vs. Bunds (G-spread; in bp)*		Attractiveness vs. Mid-Swap (ASW-spread; in bp)*			Index weighting	
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Agencies
2	43	56	-34	-5	7	12.0%	41.7%

Funding & ESG (EURbn/EUR equivalent)

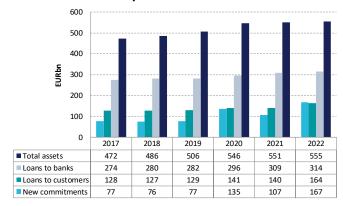
Target 2023	Maturities 2023	Net Supply 2023	Funding instruments	Central bank access	No. of ESG bonds	ESG volume
90.0	70.8	19.2	Benchmarks, ESG bonds, other public bonds, PP, CP	ECB	48	57.2

Outstanding volume (EURbn/EUR equivalent)

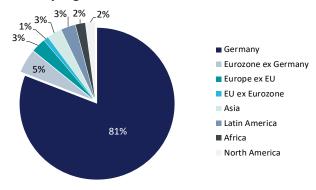
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
442.0	284.9	62	93.6	28	63.5

^{*} Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn.

Balance sheet development



Credit risk by region

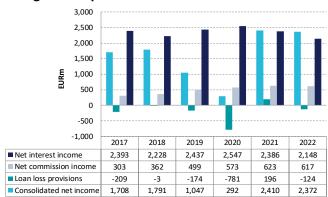


Source: Issuer, NORD/LB Markets Strategy & Floor Research

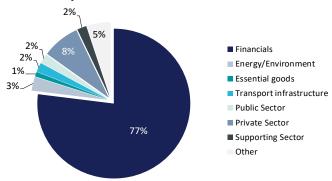
Strengths/Chances

- + Extremely high importance for the Bund
- + Explicit guarantee
- + Low liquidity risk

Earnings development



Credit risk by sector



- Concentration risks at financial institutes (mitigated by house bank principle)
- Possible amortisation from project financing and developing/emerging countries

^{**} Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies are converted into EUR at rates as at 22 November 2023. On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality. Source: Bloomberg, issuer, NORD/LB Markets Strategy & Floor Research





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Owner(s)

-

Guarantor(s)

Germany

Liability mechanism

Explicit guarantee and institutional liability

Legal form

Public law institution

Bloomberg ticker

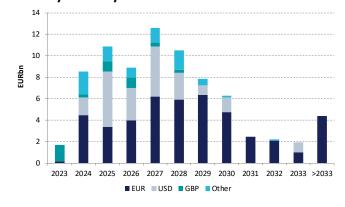
Ratings Long-term Outlook

atmgs	Long term	Out.oo.
Fitch	AAA	stab
Moody's	Aaa	stab
S&P	AAA	stab

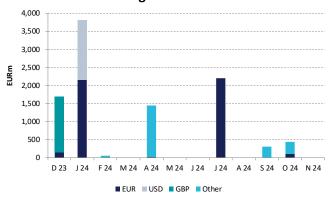
Landwirtschaftliche Rentenbank

Since Landwirtschaftliche Rentenbank (often simply referred to as Rentenbank) was established in 1949 as a public law institution (Anstalt öffentlichen Rechts), its mission has been to support agriculture and rural development in Germany. In November 2022, Rentenbank expanded its range of promotional products from six to seven segments, within which various programme loans are issued. The existing loan programmes, which are split into the categories of Agriculture (I), Forestry (II), Aquaculture and Fisheries (III), Agribusiness and Food Industry (IV), Renewable Energy (V) and Rural Development (VI), have been expanded to focus on Future Fields of Interest (VII). Through this comprehensive range of promotional activities, growth financing may be offered, for example, depending on the company or sector in question, while Rentenbank also provides support measures to safeguard liquidity. Rentenbank seldom grants loans directly to end customers. Instead, it refinances the house banks, which in turn pass on the programme loans to customers and bear the default risk. In the autumn of 2020, Rentenbank issued an inaugural public green bond. Up to September 2023, a total of eight green bonds have been issued. The bank's share capital of EUR 135m was raised by the (West) German agricultural and forestry sector between 1949 and 1958. As a result, the promotional bank does not have any owner(s), which is an unusual feature - and not only among European agencies. The Bund has explicitly guaranteed the liabilities of Rentenbank since 01 January 2014. The explicit guarantee supplements the existing institutional liability, which for its part includes an implicit guarantee by the Federal Republic of Germany. The guarantee is of unlimited duration, without restriction and unlimited with regard to amount/term. Moreover, in 2015, the Rentenbank Act expressly ruled out the possibility of bankruptcy for Rentenbank. It is no longer subject to direct supervision by the ECB (amendment to the capital requirements directive), but has been monitored by the Federal Financial Supervisory Authority (BaFin) again since 2020.

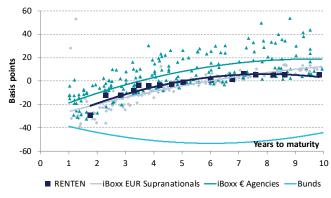
Bonds by currency



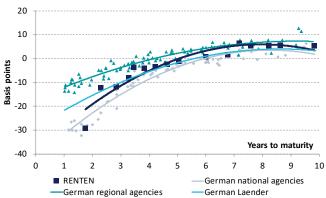
Bond amounts maturing in the next 12 months



RENTEN vs. iBoxx € indices & Bunds



RENTEN vs. German SSAs





Risk weighting according to	Liquidity category according to	Haircut category according to	Leverage ratio/BRRD
CRR/Basel III (standard approach)	Liquidity Coverage Ratio (LCR)	ECB repo rules	
0%	Level 1	П	Relevant; does not apply

Relative value

Attractivenes	Attractiveness vs. Bunds (G-spread; in bp)*			ctiveness vs. Mi SW-spread; in b	-	Index w	eighting
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Agencies
2	46	57	-30	-1	6	1.9%	6.6%

Funding & ESG (EURbn/EUR equivalent)

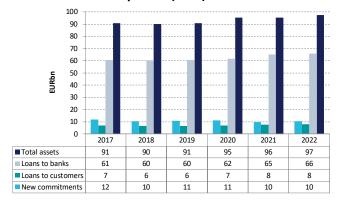
Target 2023	Maturities 2023	Net Supply 2023	Funding instruments	Central bank access	No. of ESG bonds	ESG volume
11.0	9.6	1.4	Benchmarks, ESG bonds, other public bonds, PP, CP	ECB	13	6.2

Outstanding volume (EURbn/EUR equivalent)

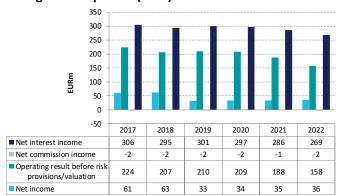
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
78.2	45.2	26	20.1	13	12.9

^{*} Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn.

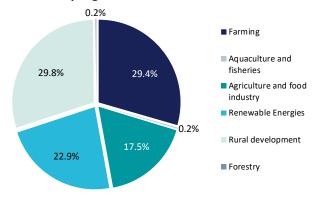
Balance sheet development (HGB)



Earnings development (HGB)



New business programme loans

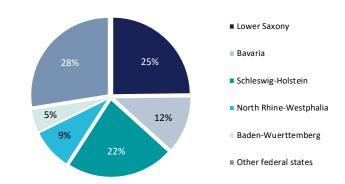


Source: Issuer, NORD/LB Markets Strategy & Floor Research

Strengths/Chances

- + Explicit guarantee
- + High level of liquid assets

Programme loans by German federal states



Weaknesses/Risks

 Concentration risks at financial institutes (mitigated by house bank principle)

^{**} Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies are converted into EUR at rates as at 22 November 2023. On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality. Source: Bloomberg, issuer, NORD/LB Markets Strategy & Floor Research





Homepage

Investor Relations

Owner(s)

100% SoFFin

Guarantor(s) SoFFin

Liability mechanism

Explicit guarantee and loss absorption mechanism

Legal form

Public law institution

Bloomberg ticker

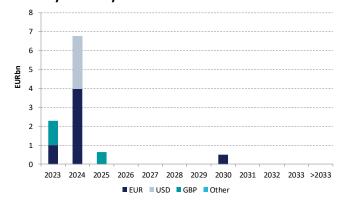
FMSWER

Ratings	Long-term	Outlook
Fitch	-	-
Moody's	Aaa	stab
S&P	AAA	stab

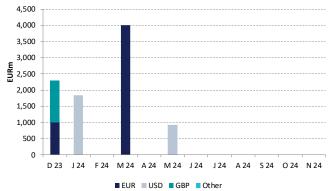
FMS Wertmanagement (FMS-WM)

FMS Wertmanagement (FMS-WM) was formed on 8 July 2010 in order to take over risk positions and non-strategic operations from Hypo Real Estate Group (HRE Group) and wind them up. To this end, assets with a nominal value of EUR 175.7bn were transferred to FMS-WM with effect from 1 October 2010, which had been reduced to EUR 49.6bn by the end of December 2022. The long average maturity of the portfolio components and the principle of winding up the assets in such a way that maximises their value resulted in FMS-WM setting out a time frame of originally ten years for the winding-up process. In fact, the portfolio is now being wound up under the requirement that "value maximisation takes precedence over a fixed winding-up period", in order that the process can be completed without the pressure of a deadline. On 19 December 2014, FMS-WM also took over Depfa for approximately EUR 320m, and was recognised as an equity holding in the balance sheet. FMS-WM took the view that winding down Depfa of its own accord was an expedient option, and underscored the decision made at this time through the sale of Depfa to the Austrian entity BAWAG P.S.K. AG in 2021. At present, the FMS-WM portfolio is divided into the segments of Infrastructure, Public Sector and Structured Products. FMS-WM is owned by German Financial Market Stabilisation Fund (SoFFin), which is managed by the Federal Republic of Germany - Finance Agency. Under Section 8a of the German Financial Market Stabilisation Fund Act (FMStFG), SoFFin has also explicitly guaranteed the liabilities of FMS-WM since 1 January 2014. Since the German government is accountable for the liabilities of SoFFin by virtue of Section 5 of the FMStFG, FMS-WM ultimately benefits from an implicit governmental guarantee. Under Article 7 of the Charter of FMS-WM, SoFFin is furthermore obligated to compensate all losses incurred by FMS-WM until the winding-up of the institution is discontinued. It is also stipulated that SoFFin must pay the amounts required to service the liabilities of FMS-WM within three days. This additionally provides a de facto liquidity guarantee for the winding-up agency.

Bonds by currency



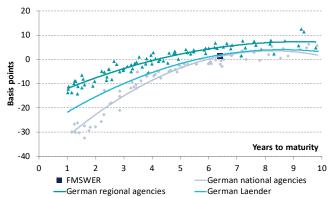
Bond amounts maturing in the next 12 months



FMSWER vs. iBoxx € indices & Bunds



FMSWER vs. German SSAs





Risk weighting according to CRR/Basel III (standard approach)

0%

Liquidity category according to Liquidity Coverage Ratio (LCR)

Level 1

Haircut category according to ECB repo rules

111

Does not apply

Relative value

Attractivenes	tractiveness vs. Bunds (G-spread; in bp)*		Attractiveness vs. Mid-Swap (ASW-spread; in bp)*		Index w	eighting	
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Agencies
50	50	50	1	1	1	0.0%	0.0%

Funding & ESG (EURbn/EUR equivalent)

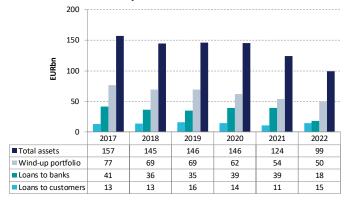
Target 2023	Maturities 2023	Net Supply 2023	Funding instruments	Central bank access	No. of ESG bonds	ESG volume
6.0	6.3	-0.3	Benchmarks, other public bonds, PP, CP	-	0	0.0

Outstanding volume (EURbn/EUR equivalent)

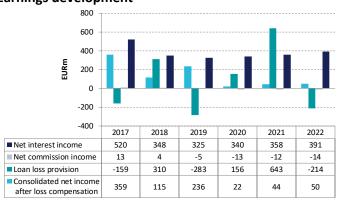
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
10.2	5.5	4	2.8	2	1.9

^{*} Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn.

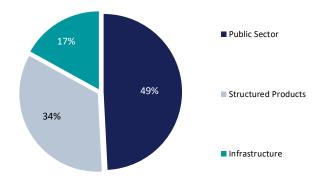
Balance sheet development



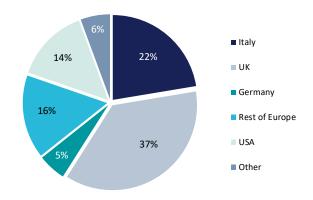
Earnings development



Winding-up portfolio by business segment



Winding-up portfolio by country/region



Source: Issuer, NORD/LB Markets Strategy & Floor Research

Strengths/Chances

- + Explicit guarantee
- + Implicit liquidity guarantee
- + Progress made in winding-up activities

- Dependency on the state to offset losses
- Abundance of long-dated and illiquid assets
- Substantial exposure to the periphery

^{**} Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies are converted into EUR at rates as at 22 November 2023. On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality. Source: Bloomberg, issuer, NORD/LB Markets Strategy & Floor Research





Homepage

Investor Relations

Owner(s)

- ~48.2% federal state of NRW,
- ~25.0% RSGV, ~25.0% SVWL,
- ~0.9% LVR, ~0.9% LWL

Guarantor(s)

Owner and SoFFin

Liability mechanism

Loss absorption mechanism

Legal form

Public law institution

Bloomberg ticker

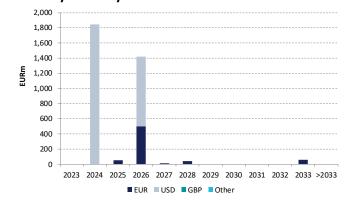
ERSTAA

Ratings	Long-term	Outlook
Fitch	AAA	stab
Moody's	Aa1	stab
S&P	AA	stab

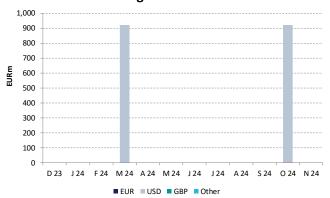
Erste Abwicklungsanstalt (EAA)

Erste Abwicklungsanstalt (EAA) was established on 11 December 2009 under the aegis of the Federal Agency for Financial Market Stabilisation (FMSA). Its mission is to liquidate the assets taken over from WestLB AG while preserving as much value as possible. Initially, EAA took over a portfolio with a nominal volume of EUR 77.5bn, before a second portfolio valued at EUR 124.4bn was transferred to EAA in 2012. The assets of the banking book portfolio were initially liquidated within 13 clusters of different sizes. However, by January 2018, the number of clusters had been reduced to just six. In 2015, the disposal of WestImmo led to major changes in the banking book portfolio, which was reduced by EUR 7.7bn through this measure alone. The largest shareholder of EAA is the federal state of North Rhine-Westphalia (NRW; around 48.2%), followed by the Rhineland Savings Banks and Giro Association (Rheinischer Sparkassen- und Giroverband [RSGV]; approx. 25.0%) and the Savings Banks Association Westphalia-Lippe (Sparkassenverband Westfalen-Lippe [SVWL]; around 25.0%), while the regional authorities (Landschaftsverbände) of Rhineland (LVR) and Westphalia-Lippe (LWL) each hold smaller shares of roughly 0.9%. Under Article 7 of the EAA Charter, the shareholders have a duty to offset losses. This obligation is divided into four levels, with the participation of the German Financial Market Stabilisation Fund (SoFFin) in addition to the participation of shareholders. In the case of RSGV and SVWL, this requirement to offset losses is limited to an overall maximum amount of EUR 4.5bn, which is guaranteed by NRW. This amount is reduced by all payments made by RSGV and SVWL. Moreover, NRW also ensures that LVR and LWL comply with their obligations. Ultimately, therefore, there is primarily a duty on the part of NRW to offset losses. In addition, the liable parties are required, at any time, to provide EAA with the funding needed to service its liabilities. They must do so within seven days, in line with their participation ratio. As such, EEA benefits from a de facto implicit liquidity guarantee.

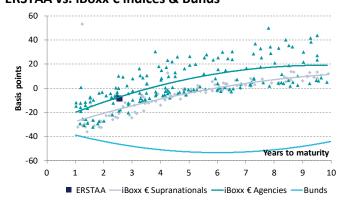
Bonds by currency



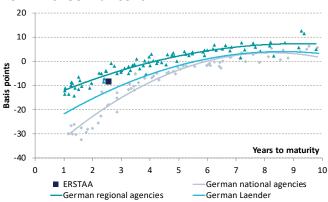
Bond amounts maturing in the next 12 months



ERSTAA vs. iBoxx € indices & Bunds



ERSTAA vs. German SSAs





Risk weighting according to CRR/Basel III (standard approach)

0%

Liquidity category according to Liquidity Coverage Ratio (LCR)

Level 1

Haircut category according to ECB repo rules

111

Does not apply

Relative value

Attractivenes	ttractiveness vs. Bunds (G-spread; in bp)*		Attractiveness vs. Mid-Swap (ASW-spread; in bp)*		Index w	eighting	
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Agencies
35	35	35	-9	-9	-9	0.0%	0.0%

Funding & ESG (EURbn/EUR equivalent)

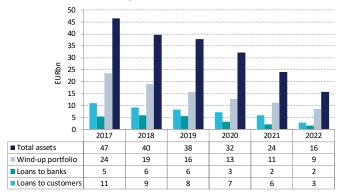
Target 2023	Maturities 2023	Net Supply 2023	Funding instruments	Central bank access	No. of ESG bonds	ESG volume
2.0	4.3	-2.3	Benchmarks, other public bonds, PP, CP	-	0	0.0

Outstanding volume (EURbn/EUR equivalent)

Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
3.4	0.7	1	2.8	2	0.0

^{*} Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn.

Balance sheet development



Earnings development



EAA loss absorption mechanism

RSGV

1st level: commitment up to EUR 850m

SVWL	RSGV	NRW	LVR	LVL	
25.05%	25.05%	48.20%	0.85%	0.85%	
2nd level: commitment up to a further EUR 2.67bn					

LVR

LVL

SoFFin

~25.09%

~18.73% | ~36.15% | ~0.65% | ~0.65% 3rd level: commitment up to a further EUR 6.0bn

NRW

SVWL	RSGV	NRW
~24 99%	~24 99%	~50.02%

4th level: commitment to cover further losses

NRW	NRW / SoFFin as sole debtor
50%	50%

Source: Issuer, NORD/LB Markets Strategy & Floor Research

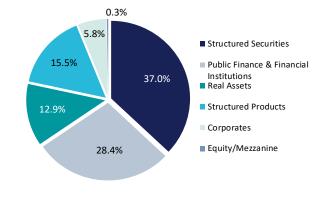
Strengths/Chances

SVWL

~18.73%

- + Strong support from NRW
- + Implicit liquidity guarantee
- + Progress in winding-up asset portfolio

Banking book portfolio by cluster



- No explicit guarantee
- Complex structure of loss absorption mechanism
- High exposure to structured products

^{**} Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies are converted into EUR at rates as at 22 November 2023. On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality. Source: Bloomberg, issuer, NORD/LB Markets Strategy & Floor Research





Homepage

Investor Relations

Owner(s)

100% Federal State of North Rhine-Westphalia

Guarantor(s)

Federal state of North Rhine-Westphalia

Liability mechanism

Explicit guarantee, institutional liability and guarantor liability

Legal form

Public law institution

Bloomberg ticker

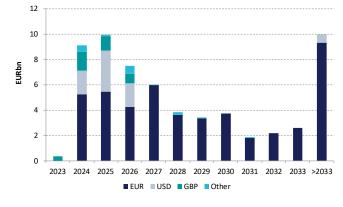
NRWBK

Ratings	Long-term	Outlook
Fitch	AAA	stab
Moody's	Aa1	stab
S&P	AA	stab

NRW.BANK

NRW.BANK, which was created in the wake of the transformation and subsequent break-up of the former Westdeutsche Landesbank (WestLB) in 2002, is the regional promotional bank of North Rhine-Westphalia (NRW), Germany's most heavily populated federal state. Since then, NRW.BANK has been supporting the state of NRW and its municipal authorities in fulfilling their public duties, particularly in relation to structural, economic, social, climate and housing policies. Its promotional banking products are pooled within three segments: Economy (e.g. start-ups and SMEs), Housing (new builds and modernisation projects) and Infrastructure/Municipalities. In each of these three segments, the energy transition and environmental protection are designated as key priorities. Through its focus on sustainability, NRW.BANK has now become an established issuer of Green Bonds, while roughly 25% of the loans granted to the federal state of NRW are in the form of green loans. In addition to providing funding to secure and improve the financial structure of SMEs, NRW.BANK also offers venture capital. As a result, the bank has at its disposal a wide-ranging set of tools for business promotion purposes. In order to mitigate the impacts arising from Russia's war of aggression in Ukraine, new promotional offerings were developed that, for example, aimed to support smaller businesses in their efforts to move away from natural gas and instead rely on renewable energy sources. As measured by total assets, NRW.BANK is the second largest promotional bank in Germany after KfW. The federal state of NRW has been the sole owner of the bank since the summer of 2011. NRW.BANK trades in the legal form of a public law institution (Anstalt öffentlichen Rechts), whereby NRW guarantees NRW.BANK's liabilities through an explicit guarantee defined in Section 4 (3) of the Act on NRW.BANK (NRW.BANK-G). Furthermore, NRW also bears liability through guarantor liability and institutional liability structures. Section 17 (2) expressly protects NRW.BANK from the possibility of bankruptcy. Following an amendment to the Capital Requirements Directive, NRW.BANK is no longer subject to direct supervision by the ECB.

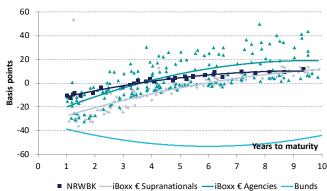
Bonds by currency



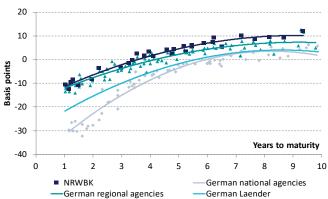
Bond amounts maturing in the next 12 months



NRWBK vs. iBoxx € indices & Bunds



NRWBK vs. German SSAs





Risk weighting according to CRR/Basel III (standard approach)	Liquidity category according to Liquidity Coverage Ratio (LCR)	Haircut category according to ECB repo rules	Leverage ratio/BRRD
0%	Level 1	П	Relevant; does not apply

Relative Value

Attractiveness vs. Bunds (G-spread; in bp)*		Attractiveness vs. Mid-Swap (ASW-spread; in bp)*			Index weighting		
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Agencies
23	51	62	-13	3	12	0.9%	3.2%

Funding & ESG (EURbn/EUR equivalent)

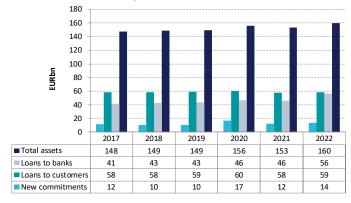
Target 2023	Maturities 2023	Net Supply 2023	Funding instruments	Central bank access	No. of ESG bonds	ESG volume
12.0	10.1	1.9	Benchmarks, ESG bonds, other public bonds, PP, CP	ECB	20	12.2

Outstanding volume (EURbn/EUR equivalent)

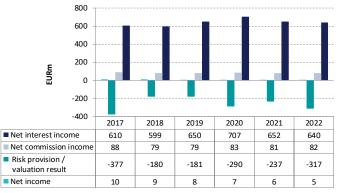
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
60.5	47.5	49	7.6	7	5.3

^{*} Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn.

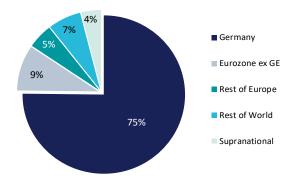
Balance sheet development



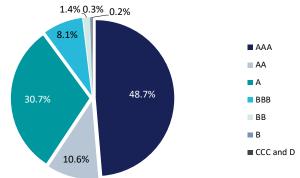
Earnings development



Exposure by region (including derivatives)



Total exposure by rating category



Source: Issuer, NORD/LB Markets Strategy & Floor Research

Strengths/Chances

- + Explicit guarantee
- + Very good capital ratios

- Credit risk from off-balance-sheet CDS (Credit Default Swaps)
- Negative cash flow from operating activities in 2021/22

^{**} Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies are converted into EUR at rates as at 22 November 2023. On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality. Source: Bloomberg, issuer, NORD/LB Markets Strategy & Floor Research





Staatsbank für Baden-Württemberg

General information

Homepage Investor Relations

Owner(s)

100% Federal State of Baden-Wuerttemberg

Guarantor(s)

Federal State of Baden-Wuerttemberg

Liability mechanism

Explicit guarantee, institutional liability and guarantor liability

Legal form

Public law institution

Bloomberg ticker

LBANK

Ratings	Long-term	Outlook
Fitch	AAAu	stab
Moody's	Aaa	stab
S&P	AA+	pos

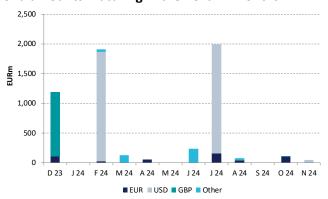
Landeskreditbank Baden-Württemberg – Förderbank (L-Bank)

The roots of Baden-Wuerttemberg's promotional bank, L-Bank, extend all the way back to 1922 (resolution passed). Following the First World War, two credit institutions were formed in view of a general lack of housing: Württembergische Wohnungskreditanstalt (1924) and Badische Landeskreditanstalt für Wohnungsbau (1934). In 1972, these two banks merged into Landeskreditbank Baden-Württemberg. L-Bank's range of activities has expanded greatly since its creation out of its predecessor institutions. In addition to housing development, which was the initial focus of its activities, the business promotion division has since become the bank's most important promotional segment. L-Bank is also involved in financing infrastructure projects. The focus of the promotional programmes is increasingly directed towards aspects such as social justice, sustainability, structural transformation as a result of climate change and digitalisation. As a result, L-Bank's business areas extend from supporting start-ups and conventional financing for SMEs through financing of residential property and municipal investments, to approval of parental and child-raising allowances in Baden-Wuerttemberg. The energy transition is another challenge that L-Bank is seeking to support, for example by establishing funding programmes aimed at improving energy efficiency. The key area of promotion is the economy of Baden-Wuerttemberg, with a particular emphasis on SMEs. L-Bank trades in the legal form of a public law institution (Anstalt öffentlichen Rechts) and is 100% owned by the federal state of Baden-Wuerttemberg, which has guaranteed the liabilities of L-Bank under the provisions of Section 5 of the Act governing L-Bank (Gesetz über die L-Bank) since 1 December 1998. Furthermore, Baden-Wuerttemberg bears liability for L-Bank's exposures through institutional liability and guarantor liability mechanisms. It is subject to supervision by BaFin, the German Federal Financial Supervisory Authority, in cooperation with the German central bank (Deutsche Bundesbank) on the basis of the German Banking Act (KWG; promotional bank exception). This exception also applies to Rentenbank and NRW.BANK, among others.

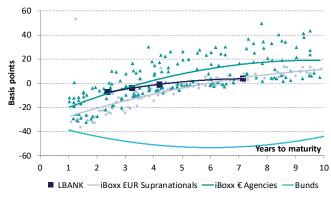
Bonds by currency



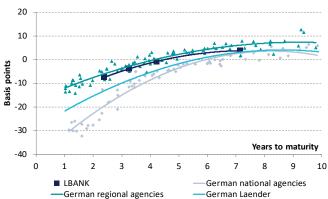
Bond amounts maturing in the next 12 months



LBANK vs. iBoxx € indices & Bunds



LBANK vs. German SSAs





Risk weighting according to CRR/Basel III (standard approach)

0%

Liquidity category according to Liquidity Coverage Ratio (LCR)

Level 1

Haircut category according to ECB repo rules

1 Relevant; does not apply

Relative value

Attractiveness vs. Bunds (G-spread; in bp)*		Attractiveness vs. Mid-Swap (ASW-spread; in bp)*			Index weighting		
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Agencies
34	49	56	0	-1	4	0.3%	0.9%

Funding & ESG (EURbn/EUR equivalent)

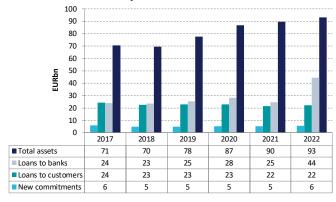
Target 2023	Maturities 2023	Net Supply 2023	Funding instruments	Central bank access	No. of ESG bonds	ESG volume
6.0	5.7	0.3	Benchmarks, other public bonds, PP, CP	ECB	0	0.0

Outstanding volume (EURbn/EUR equivalent)

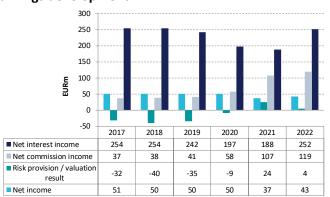
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
25.1	10.3	5	8.8	6	5.9

^{*} Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn.

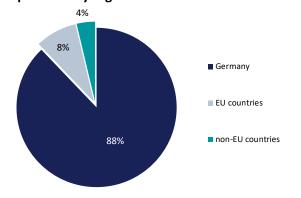
Balance sheet development



Earnings development



Loan portfolio by region

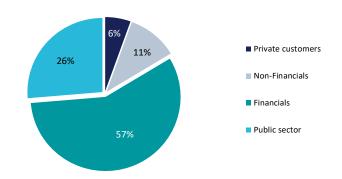


Source: Issuer, NORD/LB Markets Strategy & Floor Research

Strengths/Chances

- + Explicit guarantee
- + High interest and commission surplus

Loan portfolio by sector



- Negative cash flow from operating activities in 2022
- High exposure to finance sector

^{**} Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies are converted into EUR at rates as at 22 November 2023. On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality. Source: Bloomberg, issuer, NORD/LB Markets Strategy & Floor Research





Homepage

Investor Relations

Owner(s)

100% Helaba

(Owners: 8.1% Federal State of Hesse, 4.05% Federal State of Thuringia, 68.85% SGVHT, 19.0% others)

Guarantor(s)

Federal State of Hesse

Liability mechanism

Explicit guarantee and guarantor liability

Legal form

Public law institution

Bloomberg ticker

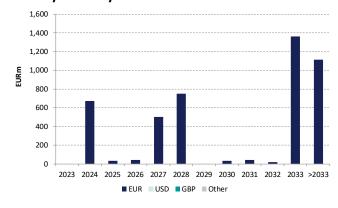
WIBANK

Ratings	Long-term	Outlook		
Fitch	-	-		
Moody's	-	-		
S&P	AA+	stab		

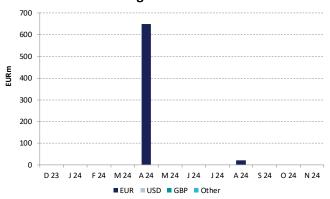
Wirtschafts- und Infrastrukturbank Hessen (WIBank)

Wirtschafts- und Infrastrukturbank Hessen (WIBank) was created in 2009 through the merger of its predecessor institutions, Investitionsbank Hessen (IBH) and LTH-Bank für Infrastruktur (LTH-Bfl). Prior to the merger, the focus of IBH's lending activities was on business promotion, while LTH-BfI concentrated on housing development and the infrastructure sector in particular. In the meantime, WIBank has become one of the largest regional promotional banks in Germany, with total assets of approx. EUR 27.5bn. The business model is derived directly from the predecessor institutions: the explicit public mission is to promote business, infrastructure, social housing and urban development, agriculture as well as education and employment in the federal state of Hesse. Its promotional banking programme is pooled together in four segments: Building & Living (e.g. funding for residential property and urban development), Educating & Employing (e.g. promotion of employment opportunities and inclusion), Founding & Growing (e.g. business and agricultural promotional activities) and Public servicing & Modernising (e.g. social infrastructure and environmental protection. In addition, a voluntary debt reduction initiative in connection with the municipal Kassenkredite in Hesse is implemented via the established "HESSENKASSE" programme. In this context, higher funding requirements on the part of WIBank have been observed since 2018. WIBank's new promotional opportunities for the Hessian economy include energy microloans and the Innovation Loan 2023, while start-ups are also being actively supported. WIBank is part of Landesbank Hessen-Thüringen (Helaba). As such, it is a legally dependent public law institution (Anstalt öffentlichen Rechts) with organisational and financial independence. As the promotional bank of the federal state of Hesse, WIBank has an explicit guarantee from the Land in accordance with Section 6 of the Act governing Wirtschafts- und Infrastrukturbank Hessen (WI-Bank-Gesetz). Furthermore, Hesse bears liability through a guarantor liability mechanism.

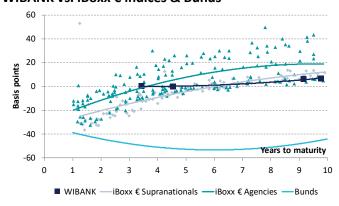
Bonds by currency



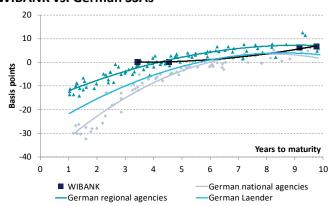
Bond amounts maturing in the next 12 months



WIBANK vs. iBoxx € indices & Bunds



WIBANK vs. German SSAs





Risk weighting according to CRR/Basel III (standard approach) 0%

Liquidity category according to Liquidity Coverage Ratio (LCR)

Level 1

Haircut category according to ECB repo rules

Leverage ratio/BRRD

Applies only at Group level; in our opinion, explicit guarantee prevents use of a bail-in

Relative value

Attractivenes	iveness vs. Runds (G-snread: in hn)*			ctiveness vs. Mi SW-spread; in b	•	Index weighting		
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Agencies	
47	51	54	0	3	7	0.0%	0.0%	

Funding & ESG (EURbn/EUR equivalent)

Target 2023	Maturities 2023	Net Supply 2023	Funding instruments	Central bank access	No. of ESG bonds	ESG volume
2.9	0.0	2.9	Benchmarks, other public bonds, PP	-	0	0.0

Outstanding volume (EURbn/EUR equivalent)

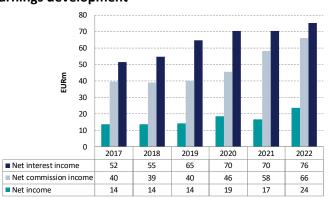
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
4.6	4.6	5	0.0	0	0.0

^{*} Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn.

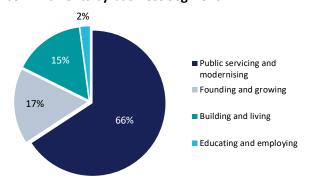
Balance sheet development



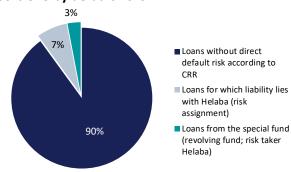
Earnings development



New commitments by business segment



Loan portfolio by default risks



Source: Issuer, NORD/LB Markets Strategy & Floor Research

Strengths/Chances

- + Explicit guarantee
- + Extremely low-risk loan portfolio

- Integration in the Helaba Group
- Low leverage ratio

^{**} Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies are converted into EUR at rates as at 22 November 2023. On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality. Source: Bloomberg, issuer, NORD/LB Markets Strategy & Floor Research





Homepage

Investor Relations

Owner(s)

100% Free State of Bavaria

Guarantor(s)

Free State of Bavaria

Liability mechanism

Explicit guarantee, institutional liability and guarantor liability

Legal form

Public law institution

Bloomberg ticker

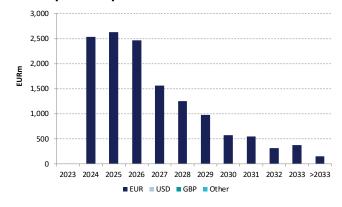
BAYLAN

Ratings	Long-term	Outlook
Fitch	-	-
Moody's	Aaa	stab
S&P	-	-

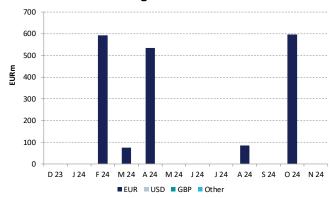
LfA Förderbank Bayern (LfA)

Since being founded in 1951, LfA Förderbank Bayern has played a key role within the Bavarian economy as a regional promotional bank. Initially focusing on funding small businesses in order to cope with the integration of refugees in the wake of the Second World War, the institution increasingly expanded its promotional programmes to cover small and medium-sized enterprises (SMEs). Today, financing is mainly provided in the following areas: start-up, growth, innovation, energy and environment, stabilisation, and infrastructure. With SME lending programmes available since the 1970s and venture capital since the 1990s, LfA has steadily expanded its range of promotional programmes. The tools available to LfA now cover four separate pillars: external financing (e.g. programme and global loans), risk mitigation (e.g. guarantees and liability exemptions), investment capital (e.g. provision of private equity) and consulting (e.g. in connection with promotional activities). LfA focuses on long-term loans, some of which are granted at subsidised interest rates. Moreover, lending activities are also occasionally carried out in close cooperation with KfW. The SME sector is of great significance to the Bavarian economy and represents the most important target group for LfA. During the energy price crisis triggered by the war in Ukraine, LfA supported businesses by granting loans and risk assumptions, among other aspects. In general, financing is arranged and paid out through the respective house bank (house bank principle). In this respect, LfA maintains competitive neutrality with regard to commercial banks. Article 1 of the act governing LfA (Gesetz über die Bayerische Landesanstalt für Aufbaufinanzierung; LfAG) regulates the explicit guarantee provided by the Free State of Bavaria for the liabilities of LfA. The Free State of Bavaria is also liable for the public law institution through guarantor liability and institutional liability structures. The preferential regulatory treatment is based on these guarantee forms.

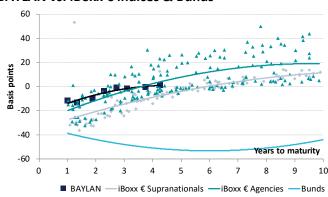
Bonds by currency



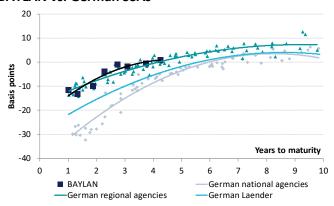
Bond amounts maturing in the next 12 months



BAYLAN vs. iBoxx € indices & Bunds



BAYLAN vs. German SSAs





Risk weighting according to CRR/Basel III (standard approach)

0%

Liquidity category according to Liquidity Coverage Ratio (LCR)

Level 1

Haircut category according to ECB repo rules

1 Relevant; does not apply

Relative value

Attractiveness vs. Bunds (G-spread; in bp)*		Attractiveness vs. Mid-Swap (ASW-spread; in bp)*			Index weighting		
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Agencies
24	42	52	-13	-2	4	0.0%	0.0%

Funding & ESG (EURbn/EUR equivalent)

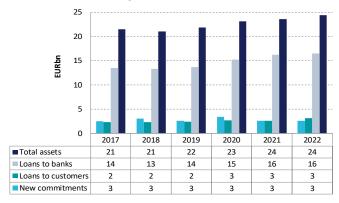
Target 2023	Maturities 2023	Net Supply 2023	Funding instruments	Central bank access	No. of ESG bonds	ESG volume
2.8	1.6	1.2	Benchmarks, other public bonds, PP, CP	ECB	0	0.0

Outstanding volume (EURbn/EUR equivalent)

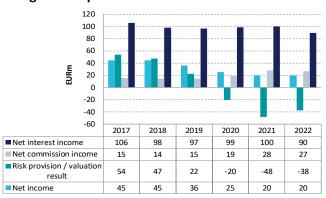
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
13.4	13.4	12	0.0	0	0.0

^{*} Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn.

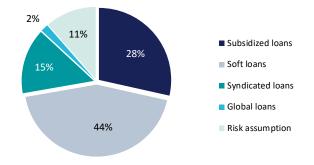
Balance sheet development



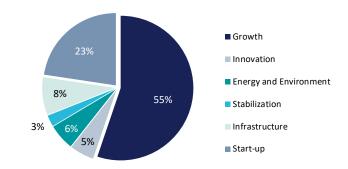
Earnings development



Structure of promotional activities



New commitments by business segment



Source: Issuer, NORD/LB Markets Strategy & Floor Research

Strengths/Chances

- + Explicit guarantee
- + High level of cash and cash equivalents

Weaknesses/Risks

Concentration risk at banks
 (mitigated by house bank principle)

^{**} Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies are converted into EUR at rates as at 22 November 2023. On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality. Source: Bloomberg, issuer, NORD/LB Markets Strategy & Floor Research





Homepage Investor Relations

Owner(s)

100% Federal State of Schleswig-Holstein

Guarantor(s)

Federal State of Schleswig-Holstein

Liability mechanism

Explicit guarantee, institutional liability an guarantor liability

Legal form

Public law institution

Bloomberg ticker

IBBSH

Ratings	Long-term	Outlook
Fitch	AAA	stab
Moody's	-	-
S&P	-	-

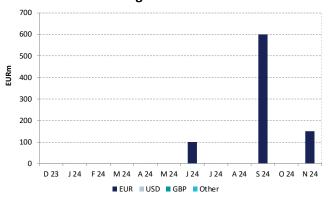
Investitionsbank Schleswig-Holstein (IB.SH)

Investitionsbank Schleswig-Holstein (IB.SH) has been operating independently as a public law institution (Anstalt öffentlichen Rechts) since 1 June 2003. It is the promotional bank of the state of Schleswig-Holstein, having previously operated as part of the former Landesbank Schleswig-Holstein (LB Kiel) after being created from the merger of Wohnungsbaukreditanstalt and Wirtschaftsaufbaukasse. IB.SH operates as a platform for the implementation of economic policy in Schleswig-Holstein. IB.SH divides its business activities into four segments: Economy, Technology and Stabilisation (e.g. free consulting, start-up and succession financing, COVID-19 relief programmes), Real Estate and Housing Promotion (e.g. general and social housing promotion, finance consulting for home ownership measures, urban development projects), Employment, Education and European Affairs (e.g. consulting on obtaining EU financing, support for EU cooperations and interregional programmes in border regions, support for training and further education), as well as Municipalities and Infrastructure (e.g. granting municipal loans, the expansion of the broadband network, grants for infrastructure projects). With a per capita promotional volume of EUR 1,303 in 2020, IB.SH leads the way across Germany. The COVID-19 support programmes, which at just under EUR 1.0bn accounted for nearly one third of the promotional volume in 2020, led to a record value of EUR 3.8bn in the promotional business. Promotional priorities for IB.SH in 2022/23 include securing economic stability in the wake of the COVID-19 pandemic, supporting companies in their efforts to become more future-oriented and sustainable, the creation of affordable housing as well as the expansion of municipal infrastructure. Under Section 4 of the Investment Bank Act (Investitionsbankgesetz, IBG), the federal state explicitly guarantees the liabilities of IB.SH. Section 4 of the IBG also regulates guarantor liability and institutional liability on the part of the federal state of Schleswig-Holstein. IS.BH has defined an annual refinancing requirement of EUR 1.2bn. In this regard, financing is to be raised exclusively in EUR.

Bonds by currency



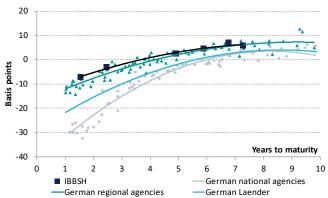
Bond amounts maturing in the next 12 months



IBBSH vs. iBoxx € indices & Bunds



IBBSH vs. German SSAs





Risk weighting according to CRR/Basel III (standard approach)

0%

Liquidity category according to Liquidity Coverage Ratio (LCR)

Level 1

Haircut category according to ECB repo rules

IV

Relevant; does not apply

Relative value

Attractiveness vs. Bunds (G-spread; in bp)*			Attractiveness vs. Mid-Swap (ASW-spread; in bp)*			Index weighting		
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Agencies	
29	52	55	-7	4	7	0.8%	0.0%	

Funding & ESG (EURbn/EUR equivalent)

Target 2023	Maturities 2023	Net Supply 2023	Funding instruments	Central bank access	No. of ESG bonds	ESG volume
1.3	0.4	1.0	Benchmarks, other public bonds, PP	ECB	0	0.0

Outstanding volume (EURbn/EUR equivalent)

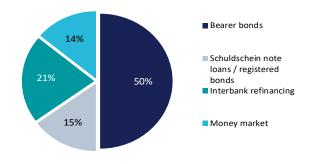
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
6.1	6.1	8	0.0	0	0.0

^{*} Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn.

Balance sheet development



Funding structure

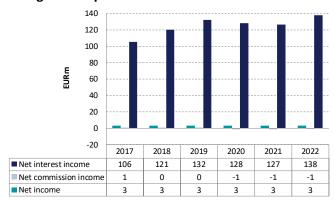


Source: Issuer, NORD/LB Markets Strategy & Floor Research

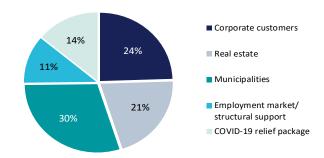
Strengths/Chances

- + Explicit guarantee
- + Low portfolio risk

Earnings development



New commitments by business segment



- Comparatively high cost-income ratio
- Negative commission income, leading to dependency on net interest income

^{**} Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies are converted into EUR at rates as at 22 November 2023. On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality. Source: Bloomberg, issuer, NORD/LB Markets Strategy & Floor Research





Homepage

Investor Relations

Owner(s)

100% BayernLB Holding AG (Owners: 75.0% Free State of Bavaria, 25.0% savings banks association of Bavaria)

Guarantor(s)

Free State of Bavaria

Liability mechanism

Explicit guarantee and guarantor liability

Legal form

Public law institution

Bloomberg ticker

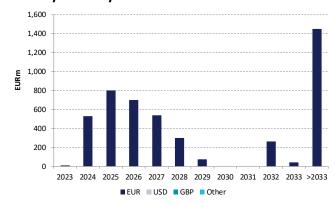
BYLABO

Ratings	Long-term	Outlook
Fitch	-	-
Moody's	Aaa	stab
S&P	-	-

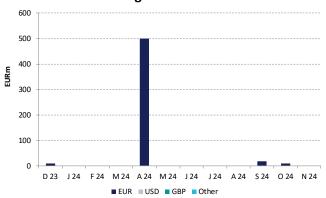
Bayerische Landesbodenkreditanstalt (BayernLabo)

The roots of Bayerische Landesbodenkreditanstalt (BayernLabo) go back to the year 1884. That was the year in which Bayerische Landeskulturrentenanstalt, the predecessor institution of BayernLabo, was established by King Ludwig II. Bayerische Landeskulturrentenanstalt, which traded under the name BayernLabo from 1949 onwards, merged with Bayerische Gemeindebank Girozentrale in 1972 to become Bayerische Landesbank Girozentrale (BayernLB). Since this merger, BayernLabo has been a legally dependent institution of BayernLB. In parallel with these developments, the bank's range of activities was also expanded steadily. Capital was initially raised to realise cultivation-related projects such as hydraulic engineering and reclamation of barren land, among other aspects. This was gradually supplemented by social housing construction and urban development projects. The support programmes range from the housing sector, to the structural development of cities and municipalities, to housing policy-related measures for developing structurally weak areas in Bavaria. Moreover, BayernLabo's remit also includes lending to the Free State of Bavaria. As part of these activities, BayernLabo issued its first social bond of EUR 500m in 2017, with a second social bond of EUR 500m then following in 2021. The social bonds served exclusively to (re)finance interest subsidy, modernisation and housing promotion programmes. Following the reunification of Germany, BayernLabo temporarily took on the task of promoting housing and urban development in the neighbouring federal state of Thuringia. However, this area of responsibility has gradually been transferred to Thüringer Aufbaubank. BayernLabo operates in the form of a public law institution (Anstalt öffentlichen Rechts) within BayernLB. The ownership structure of BayernLabo is described in the "General information" section on this page. Article 22 of the Bayerisches Landesbank Act (BayLaBG) enshrines in law the explicit guarantee for BayernLabo liabilities that exceed liable equity. Furthermore, the Free State of Bavaria bears liability through a guarantor liability mechanism.

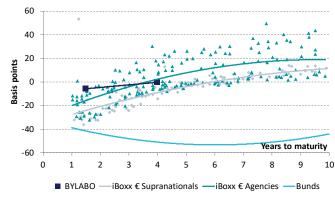
Bonds by currency



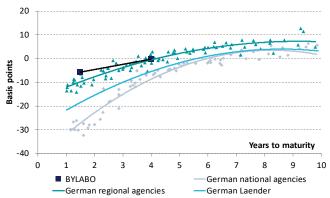
Bond amounts maturing in the next 12 months



BYLABO vs. iBoxx € indices & Bunds



BYLABO vs. German SSAs





Risk weighting according to	Liquidity category according to	Haircut category according to
CRR/Basel III (standard approach)	Liquidity Coverage Ratio (LCR)	ECB repo rules
0%	Level 1	

Leverage ratio/BRRD

Applies only at Group level; in our opinion, explicit guarantee prevents use of a bail-in

Relative value

Attractiveness vs. Bunds (G-spread; in bp)*			Attractiveness vs. Mid-Swap (ASW-spread; in bp)*			Index weighting	
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Agencies
31	47	63	-6	-1	19	0.0%	0.0%

Funding & ESG (EURbn/EUR equivalent)

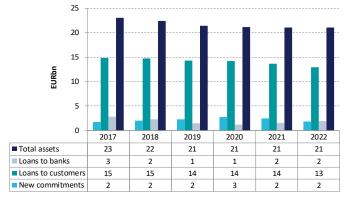
Target 2023	Maturities 2023	Net Supply 2023	Funding instruments	Central bank access	No. of ESG bonds	ESG volume
2.8	0.7	2.1	Benchmarks, ESG bonds, other public bonds, PP	-	2	1.0

Outstanding volume (EURbn/EUR equivalent)

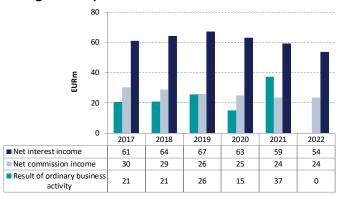
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
4.7	4.7	6	0.0	0	0.0

^{*} Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn.

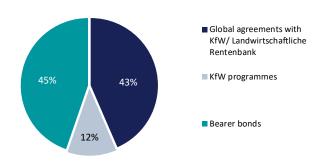
Balance sheet development



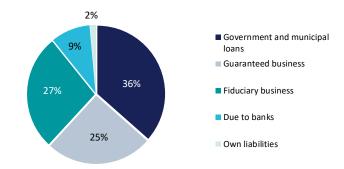
Earnings development



Funding breakdown



Loan portfolio by sector



Source: Issuer, NORD/LB Markets Strategy & Floor Research

Strengths/Chances

- + Explicit guarantee
- + Low portfolio risk

- Integration in the BayernLB Group
- Comparatively high cost-income ratio

^{**} Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies are converted into EUR at rates as at 22 November 2023. On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality. Source: Bloomberg, issuer, NORD/LB Markets Strategy & Floor Research





Investor Relations

Owner(s)

100% Federal State of Berlin

Guarantor(s)

Federal State of Berlin

Liability mechanism

Explicit guarantee and institutional liability

Legal form

Public law institution

Bloomberg ticker

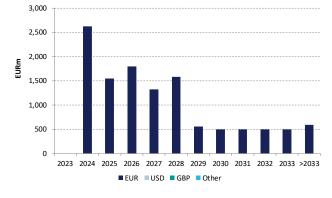
IBB

Ratings	Long-term	Outlook
Fitch	AAA	stab
Moody's	-	-
S&P	-	-

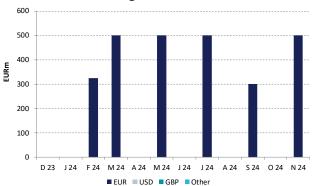
Investitionsbank Berlin (IBB)

Investitions bank Investitions bank Berlin (IBB) functions as the promotional bank for the city state of Berlin: having been formed following the conversion of Wohnungsfürsorgegesellschaft Berlin, which was founded back in 1924, IBB's primary task is to promote the economy in addition to real estate and urban development in the federal capital of Germany. The company's history extends back to overcoming the housing shortages in the 1920s all the way through to measures designed to compensate for structural deficits following the reunification of Germany and business promotion activities in the 21st century. For an interim period, IBB was integrated in Landesbank Berlin (1993). Since 2004, when IBB was de-merged, however, the promotional bank has again been acting independently. In May 2021, the state parliament of Berlin (Berliner Abgeordnetenhaus) voted in favour of restructuring measures, whereby the newly founded IBB Unternehmensverwaltung AöR, which is directly owned by the city state of Berlin, will assume responsibility for IBB and all subsidiaries (IBB Group). This move aims to improve transparency at the bank and generate efficiency gains in terms of cost structures. Support for SMEs that are of key significance to the Berlin economy now extends across a range of programmes targeting various phases, including start-ups (e.g. Berlin Start - loans for start-ups), growth (e.g. the "Berlin Kapital" funding platform) and stabilisation (e.g. BERLIN liquidity aid). IBB Ventures is part of the IBB Group. Its remit is to invest in start-ups operating across a range of sectors (e.g. industrial engineering) and therefore represents an important tool for the implementation of economic policies in Berlin. As implied by its long history, IBB continues to offer funding for housing construction, modernisation and maintenance projects. Financing under the individual programmes is, in part, arranged and paid out through the house bank (house bank principle). In this respect, IBB maintains competitive neutrality with regard to commercial banks. Under Article 2, Section 4 of the Investitionsbank Act (IBBG), the city state of Berlin explicitly guarantees the liabilities of IBB, with the federal capital also bearing institutional liability vis-à-vis IBB. In addition to maintaining its own ESG portfolio, IBB actively invests in both social and green bonds.

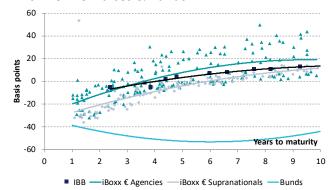
Bonds by currency



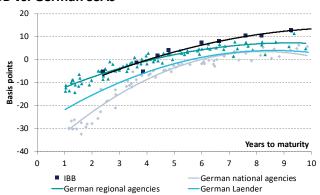
Bond amounts maturing in the next 12 months



IBB vs. iBoxx € indices & Bunds



IBB vs. German SSAs





Risk weighting according to Liquidity category according to Haircut category according to Leverage ratio/BRRD CRR/Basel III (standard approach) **Liquidity Coverage Ratio (LCR) ECB** repo rules 0% Level 1 Relevant; does not apply

Relative value

Attractiveness vs. Bunds (G-spread; in bp)*		Attractiveness vs. Mid-Swap (ASW-spread; in bp)*			Index weighting		
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Agencies
37	56	63	-5	7	14	0.0%	0.0%

Funding & ESG (EURbn/EUR equivalent)

Target 2023	Maturities 2023	Net Supply 2023	Funding instruments	Central bank access	No. of ESG bonds	ESG volume
2.8	1.7	1.1	Benchmarks, ESG bonds, other public bonds, PP	ECB	0	0.0

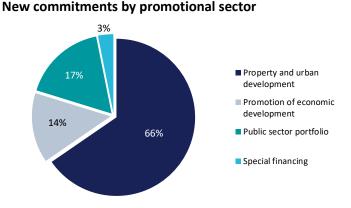
Outstanding volume (EURbn/EUR equivalent)

Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
12.0	12.0	21	0.0	0	0.0

^{*} Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn.

Balance sheet development



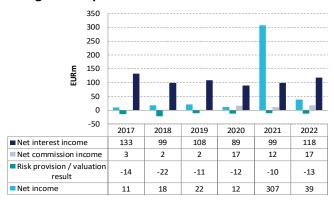


Source: Issuer, NORD/LB Markets Strategy & Floor Research

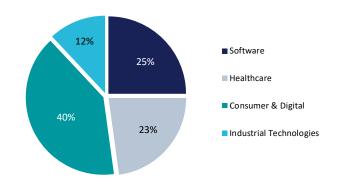
Strengths/Chances

- + Explicit guarantee
- + Positive trend in net interest income since 2020

Earnings development



Investment portfolio by sector



- Comparatively high cost-income ratio
- High exposure to the real estate and urban development sector

^{**} Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies are converted into EUR at rates as at 22 November 2023. On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality. Source: Bloomberg, issuer, NORD/LB Markets Strategy & Floor Research







Homepage

Investor Relations

Owner(s)

50% Federal State of Brandenburg 50% NRW.BANK

Guarantor(s)

Federal State of Brandenburg

Liability mechanism

Explicit guarantee, institutional liability and guarantor liability

Legal form

Public law institution

Bloomberg ticker

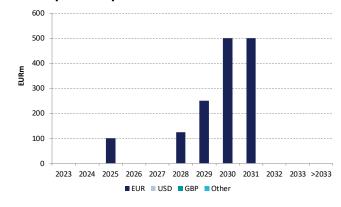
ILBB

Ratings	Long-term	Outlook
Fitch	AAA	stab
Moody's	-	-
S&P	-	-

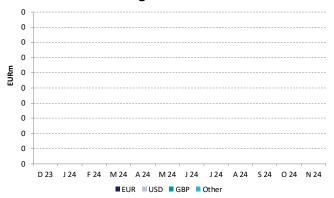
Investitionsbank des Landes Brandenburg (ILB)

Investitionsbank des Landes Brandenburg (ILB) was founded on 31 March 1992, before officially commencing its activities on 01 July 1992. ILB is the central promotional institute of the federal state of Brandenburg. It supports both Brandenburg and other public bodies in fulfilling their tasks. ILB manages the funds of the residential housing assets pertaining to the state as well as funds for the commercial economy and in the media sector on a trustee basis. The ILB Act in Brandenburg provides the bank with a reliable basis for its business activities, with ILB able to make use of state liability guarantees in conformity with European Union requirements. The promotional fields of ILB comprise Business (e.g. promotion of commercial enterprises and innovative SMEs), Labour (e.g. Consultancy services and promotion of training), Infrastructure (e.g. promotional activities linked to digitalisation and structural development) and Housing (e.g. promotion of rental properties and home ownership). ILB's business activities therefore cover traditional low-interest promotional loans and the provision of venture and equity capital in addition to guarantees and indemnifications, all the way through to consulting services. In 2014, the ILB Act was revised to highlight the close ties between ILB and Brandenburg: Section 2 (6) sets out an explicit guarantee on the part of the state for ILB liabilities. Moreover, institutional liability is defined in Section 1 (2), with guarantor liability on the part of shareholders vis-à-vis ILB laid down in Section 2 (3). Therefore, ILB bonds can also be classified as Level 1 assets from an LCR point of view. Together with Hamburgische Investitions- und Förderbank (IFBHH) and Investitions- und Strukturbank Rheinland-Pfalz (ISB), ILB issued a cross-Laender social bond on the capital market for the first time in 2022 (ticker: LFIESG). This was the second sustainability bond placed by ILB, which participated in the issuance with a volume of EUR 150m.

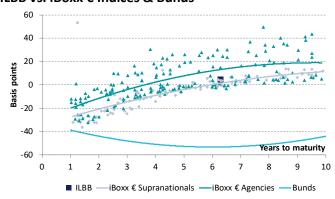
Bonds by currency



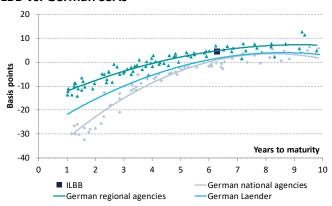
Bond amounts maturing in the next 12 months



ILBB vs. iBoxx € Indices & Bunds



ILBB vs. German SSAs





Risk weighting according to CRR/Basel III (standard approach)

0%

Liquidity Category according to Liquidity Coverage Ratio (LCR)

Level 1

Haircut category according to ECB repo rules

IV

Relevant; does not apply

Relative value

Attractiveness vs. Bunds (G-spread; in bp)*		Attractiveness vs. Mid-Swap (ASW-spread; in bp)*			Index weighting		
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Agencies
53	56	60	4	6	7	0.0%	0.0%

Funding & ESG (EURbn/EUR equivalent)

Target 2023	Maturities 2023	Net Supply 2023	Funding instruments	Central bank access	No. of ESG bonds	ESG volume
1.5	0.0	1.5	Benchmarks, ESG bonds, other public bonds, PP	ECB	1	0.1

Outstanding volume (EURbn/EUR equivalent)

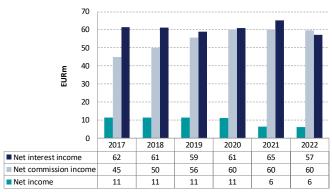
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
1.5	1.5	2	0.0	0	0.0

^{*} Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn.

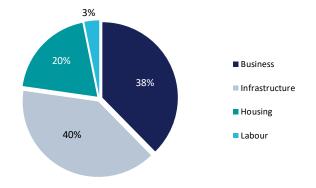
Balance sheet development



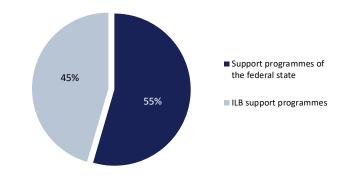
Earnings development



Commitment volume by business area



Breakdown of the promotional programmes



Source: Issuer, NORD/LB Markets Strategy & Floor Research

Strengths/Chances

- + Explicit guarantee
- + Balanced net interest- and commission income

- Rising cost-income ratio
- High level of exposure linked to the construction sector

^{**} Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies are converted into EUR at rates as at 22 November 2023. On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality. Source: Bloomberg, issuer, NORD/LB Markets Strategy & Floor Research





Homepage

Investor Relations

Owner(s)

100% Free State of Saxony

Guarantor(s)

Free State of Saxony

Liability mechanism

Explicit guarantee, guarantor liability and institutional liability

Legal form

Public law institution

Bloomberg ticker

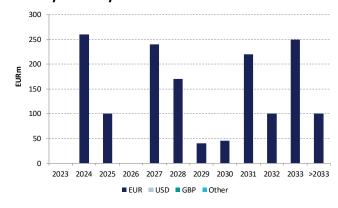
SABFOE (formerly SAUFBA)

Ratings	Long-term	Outlook		
Fitch	-	-		
Moody's	-	-		
S&P	AAA	stab		

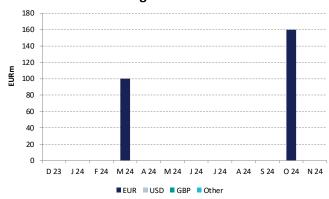
Sächsische Aufbaubank (SAB)

Sächsische Aufbaubank was established in 1991, initially as a business unit of L-Bank. In 1996, SAB started to operate under its own name as a GmbH (limited liability company). Since 2003, it has been a wholly-owned subsidiary of the Free State of Saxony, operating in the form of a public law institution (Anstalt öffentlichen Rechts). As a conventional promotional bank, its mission is to provide low-cost financing to improve the economic, social and ecological standing of Saxony. To this end, SAB works together with a number of public partners at a municipal, regional, national and European level, in addition to holding stakes in other promotional banks, such as Bürgschaftsbank Sachsen (BBS), for example. Its support role focuses chiefly on the following four client groups: private individuals, corporates, public recipients and associations. These groups are offered promotional loans, subsidies and guarantees, subdivided by SAB into five different promotional areas, which include Housing Construction (e.g. promotion of social housing projects), Infrastructure and Municipalities (e.g. urban development projects), Economy (e.g. SME promotion), Training and Social Affairs (e.g. support for the arts and cultural endeavours, science and research) in addition to Environment and Agriculture (e.g. protection of the environment, nature and the landscape). During the COVID-19 pandemic, SAB also launched aid programmes that still accounted for roughly 25% of the promotional volume in 2022 (EUR 0.6bn). Through an explicit guarantee provided by the sole shareholder, the Free State of Saxony, SAB enjoys the full financial support of the state in the event of a payment default, which also includes a direct claim by creditors against the guarantor. This allows a risk weighting of 0% under CRR/Basel III and classification as Level 1 assets under the LCR. As of today, SAB has not issued any benchmark bonds. In 2021, the refinancing volume amounted to EUR 480m, of which EUR 280m was raised via the capital markets (with the remainder attributable to global and programme loans of promotional banks).

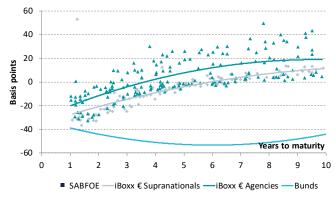
Bonds by currency



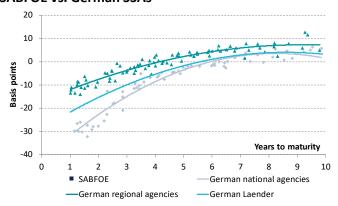
Bond amounts maturing in the next 12 months



SABFOE vs. iBoxx € Indices & Bunds



SABFOE vs. German SSAs





Risk weighting according to CRR/Basel III (standard approach)

0%

Liquidity category according to Liquidity Coverage Ratio (LCR)

Level 1

Haircut category according to ECB repo rules

IV

Relevant; does not apply

Relative value

Attractiveness vs. Bunds (G-spread; in bp)*		Attractiveness vs. Mid-Swap (ASW-spread; in bp)*			Index weighting		
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Agencies
-	-	-	-	-	-	0.0%	0.0%

Funding & ESG (EURbn/EUR equivalent)

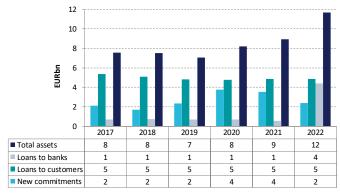
Target 2023	Maturities 2023	Net Supply 2023	Funding instruments	Central bank access	No. of ESG bonds	ESG volume
0.8	0.0	0.8	Other public bonds, PP	ECB	0	0.0

Outstanding volume (EURbn/EUR equivalent)

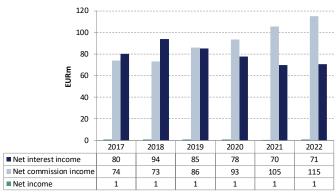
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
1.5	1.5	0	0.0	0	0.0

^{*} Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn.

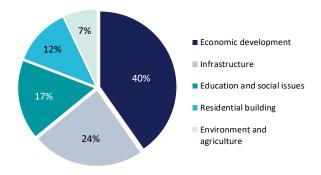
Balance sheet development



Earnings development



New commitments by business segment

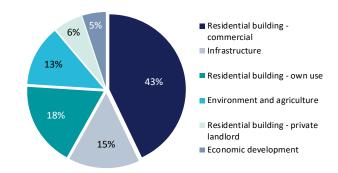


Source: Issuer, NORD/LB Markets Strategy & Floor Research

Strengths/Chances

- + Explicit guarantee
- + Strong capitalisation

Loan portfolio by credit segment



- High exposure to the real estate sector
- Declining gross interest margin

^{**} Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies are converted into EUR at rates as at 22 November 2023. On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality. Source: Bloomberg, issuer, NORD/LB Markets Strategy & Floor Research





ZUKUNFT. FÖRDERN. WERTE SCHAFFEN.

General information

<u>Homepage</u> <u>Investor Relations</u>

Owner(s)

100% Federal State of Rhineland-Palatinate

Guarantor(s)

Federal State of Rhineland-Palatinate

Liability mechanism

Explicit guarantee, institutional liability and guarantor liability

Legal form

Public law institution

Bloomberg ticker

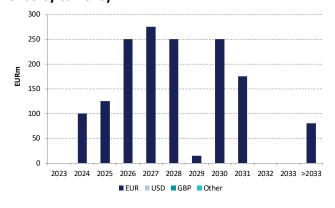
ISBRLP

Ratings	Long-term	Outlook
Fitch	AAA	stab
Moody's	-	-
S&P	-	-

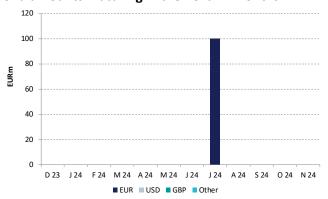
Investitions- und Strukturbank Rheinland-Pfalz (ISB)

Founded in 1993, Investitions- und Strukturbank Rheinland-Pfalz (ISB) is the central promotional bank of the federal state of Rhineland-Palatinate. In this role, ISB offers funding programmes to private individuals, regional businesses and municipalities, with the aim of supporting commercial and residential projects. Following the merger with Landestreuhandbank Rheinland-Pfalz (LTH), the legal form of ISB was changed from GmbH (limited liability company) to a public law institution (Anstalt öffentlichen Rechts) on 1 January 2012. In the context of its remit to carry out tasks on behalf of Rhineland-Palatinate, ISB splits its business activities into the areas of Business Development, Housing Development, Infrastructure and Business relocation/establishment. In terms of Business Development, ISB supplements its strategic funding products (e.g. low-interest loans, grants) with consulting services. In the Housing Development division, ISB supports a range of programmes through low-interest loans and interest subsidies, e.g. for modernisation projects and to preserve or create housing. Sustainability is also an important aspect of the ISB's promotional activities. For example, RLP efficiency loans are solely designed to support investments and operating resources with a positive environmental impact. In the area of infrastructure, ISB supports the digital transformation, for example through the DigitalPakt Schule (Digital Schools Pact) scheme. The ISB Act, adopted in 2011, forms the basis of ISB's operating activities. The liability mechanisms described in Section 10 stipulate, on the one hand, that Rhineland-Palatinate is the guarantor of ISB (Section 10 (1)) and, on the other, serve to ensure that the bank fulfils the tasks incumbent upon it (Section 10 (2)). Moreover, Section 10 (3) details both guarantor liability and an explicit guarantee for ISB on the part of Rhineland-Palatinate. Together with Hamburgische Investitions- und Förderbank (IFBHH) and Investitionsbank des Landes Brandenburg (ILB), ISB issued the first cross-Laender social bond on the capital market in 2022. This featured a volume of EUR 500m and was issued with the aim of increasing investments in social housing projects (ticker: LFIESG).

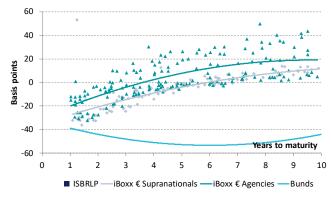
Bonds by currency



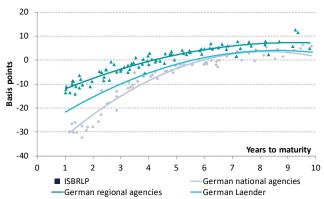
Bond amounts maturing in the next 12 months



ISBRLP vs. iBoxx € Indices & Bunds



ISBRLP vs. German SSAs





Risk weighting according to CRR/Basel III (standard approach)

0%

Liquidity Category according to Liquidity Coverage Ratio (LCR)

Level 1

Haircut category according to ECB repo rules

IV

Relevant; does not apply

Relative value

Attractivenes	s vs. Bunds (G-s	spread; in bp)*		ctiveness vs. Mi SW-spread; in b	•	Index w	Index weighting	
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Agencies	
-	-	-	_	-	-	0.0%	0.0%	

Funding & ESG (EURbn/EUR equivalent)

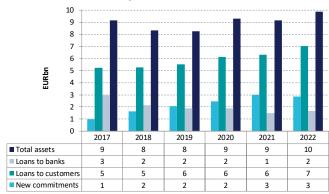
Target 2023	Maturities 2023	Net Supply 2023	Funding instruments	Central bank access	No. of ESG bonds	ESG volume
0.5	0.0	0.5	ESG bonds, other public bonds, PP	-	0	0.0

Outstanding volume (EURbn/EUR equivalent)

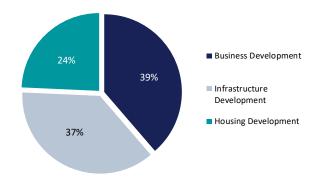
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
1.5	1.5	0	0.0	0	0.0

^{*} Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn.

Balance sheet development



Commitment volume by business area



Source: Issuer, NORD/LB Markets Strategy & Floor Research

Strengths/Chances

- + Explicit guarantee
- + Rising net interest income and commission income

Earnings development



Trend in capital situation



- Comparatively high cost-income ratio
- High level of exposure linked to the construction sector

^{**} Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies are converted into EUR at rates as at 22 November 2023. On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality. Source: Bloomberg, issuer, NORD/LB Markets Strategy & Floor Research





Homepage

Investor Relations

Owner(s)

100% Free and Hanseatic City of Hamburg

Guarantor(s)

Free and Hanseatic City of Hamburg

Liability mechanism

Explicit guarantee, institutional liability, guarantor liability and loss absorption mechanism

Legal form

Public law institution

Bloomberg ticker

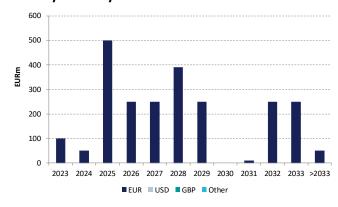
IFBHH

Ratings	Long-term	Outlook
Fitch	AAA	stab
Moody's	-	-
S&P	-	-

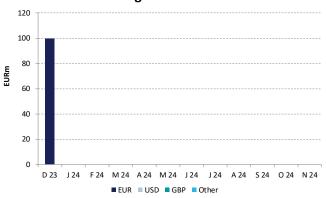
Hamburgische Investitions- und Förderbank (IFBHH)

The predecessor of Hamburgische Investitions- und Förderbank (IFBHH) was Hamburgische Wohnungsbaukreditanstalt, founded in 1953, which initially focused on urban development and the housing promotion sector in Hamburg. After the bank's remit was expanded, its name was changed to Hamburgische Investitions- und Förderbank from 1 August 2013. IFBHH is the central promotional institution for the City of Hamburg, which it supports in implementing policies aimed at promoting housing and urban development projects, in addition to those with an emphasis on the economy, innovation and the environment. The promotional fields of IFBHH cover housing (e.g. new builds, purchasing and refurbishment of existing residential and rental properties), the environment (environmental protection, sustainability and energy efficiency), innovation (innovative start-ups, R&D projects) and the economy (conventional promotion of SMEs). The business model of IFBHH therefore covers traditional promotional loans, as well as equity financing and free consulting services. In order to manage the impacts arising from the COVID-19 crisis, IFBHH had disbursed aid totalling EUR 3.5bn by the end of 2022. IFBHH is wholly owned by the Free and Hanseatic City of Hamburg (FHH). IFBHH's transformation and its legal framework are based on the "Act on the transition of the Hamburgische Wohnungsbaukreditanstalt to the Hamburgische Investitions- und Förderbank". This highlights the close ties between the IFBHH and the Hanseatic City: under Article 1, Section 3 (2), the Free and Hanseatic City of Hamburg guarantees the liabilities of IFBHH by way of an explicit guarantee. In addition, Section 1 defines institutional liability (Anstaltslast), Section 3 (1) guarantor liability (Gewährträgerhaftung) and Section 16 a loss absorption mechanism (Verlustausgleichspflicht) on the part of the City of Hamburg vis-à-vis IFBHH. Together with Investitionsbank des Landes Brandenburg (ILB) and Investitions- und Strukturbank Rheinland-Pfalz (ISB), IFBHH issued a joint cross-Laender social bond with a volume of EUR 500m on the market for the first time in 2022 (ticker: LFIESG).

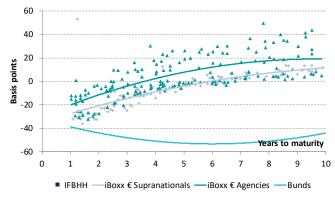
Bonds by currency



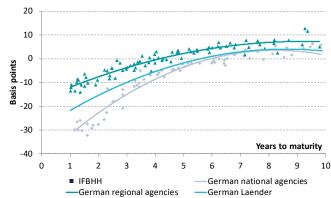
Bond amounts maturing in the next 12 months



IFBHH vs. iBoxx € indices & Bunds



IFBHH vs. German SSAs





Risk weighting according to CRR/Basel III (standard approach)

0%

Liquidity category according to Liquidity Coverage Ratio (LCR)

Level 1

Haircut category according to ECB repo rules

IV

Relevant; does not apply

Relative value

Attractivenes	s vs. Bunds (G-s	spread; in bp)*		ctiveness vs. Mi SW-spread; in b	•	Index weighting	
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Agencies
-	-	-	-	-	-	0.0%	0.0%

Funding & ESG (EURbn/EUR equivalent)

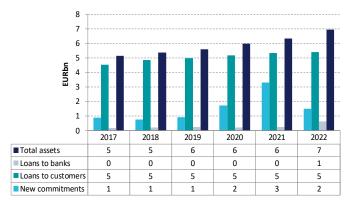
Target 2023	Maturities 2023	Net Supply 2023	Funding instruments	Central bank access	No. of ESG bonds	ESG volume
0.6	0.1	0.5	ESG bonds, other public bonds, PP	ECB	2	0.4

Outstanding volume (EURbn/EUR equivalent)

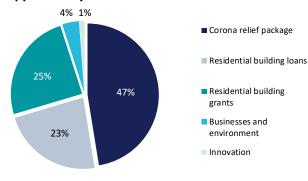
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
2.4	2.4	0	0.0	0	0.0

^{*} Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn.

Balance sheet development



Total approvals by business area

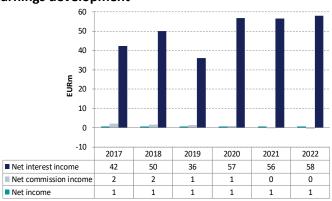


Source: Issuer, NORD/LB Markets Strategy & Floor Research

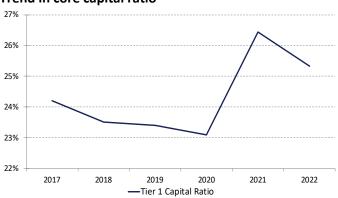
Strengths/Chances

- + Explicit guarantee
- + Loss absorption mechanism

Earnings development



Trend in core capital ratio



- High exposure to the real estate sector
- High cost-income ratio

^{**} Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies are converted into EUR at rates as at 22 November 2023. On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality. Source: Bloomberg, issuer, NORD/LB Markets Strategy & Floor Research



Appendix Publication overview

Covered Bonds:

Issuer Guide Covered Bonds 2023

Covered Bond Laws

Covered Bond Directive: Impact on risk weights and LCR levels

Risk weights and LCR levels of covered bonds (updated semi-annually)

<u>Transparency requirements §28 PfandBG Q3/2023</u> (quarterly update)

Covered bonds as eligible collateral for central banks

SSA/Public Issuers:

Issuer Guide - German Laender 2023

<u>Issuer Guide – European Supranationals 2023</u>

<u>Issuer Guide – French Agencies 2023</u>

<u>Issuer Guide – Dutch Agencies 2023</u>

Beyond Bundeslaender: Belgium

Beyond Bundeslaender: Greater Paris (IDF/VDP)

Beyond Bundeslaender: Spanish regions

Fixed Income Specials:

ESG-Update 2023

ECB: Now is not the time for forward guidance!

ECB preview: Wait and see without calling it a pause

ECB: This rate terminates here - 99.9% sure



Appendix Contacts at NORD/LB

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Institutional Sales	+49 511 9818-9440	Covereds/SSA	+49 511 9818-8040
Sales Sparkassen & Regionalbanken	+49 511 9818-9400	Financials	+49 511 9818-9490
Sales MM/FX	+49 511 9818-9460	Governments	+49 511 9818-9660
Fixed Income Relationship Management Europe	+352 452211-515	Länder/Regionen	+49 511 9818-9550
		Frequent Issuers	+49 511 9818-9640
Origination & Syndicate		Sales Wholesale Customers	
Origination & Syndicate Origination FI	+49 511 9818-6600	Sales Wholesale Customers Firmenkunden	+49 511 361-4003
	+49 511 9818-6600 +49 511 361-2911		+49 511 361-4003 +49 511 361-8150
Origination FI		Firmenkunden	
Origination FI		Firmenkunden	
Origination FI Origination Corporates		Firmenkunden Asset Finance	



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