



NORD/LB Issuer Guide 2023 – European Supranationals

Markets Strategy & Floor Research

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NORD/LB ISSUER GUIDE 2023 European Supranationals

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Assisted by Benedikt Brockow

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NORD/LB: Markets Strategy & Floor Research NORD/LB: Covered Bond Research NORD/LB: SSA/Public Issuer Research Bloomberg: RESP NRDR <GO>

European Supranationals – an overview

Authors: Dr Norman Rudschuck, CIIA // Jan-Phillipp Hensing

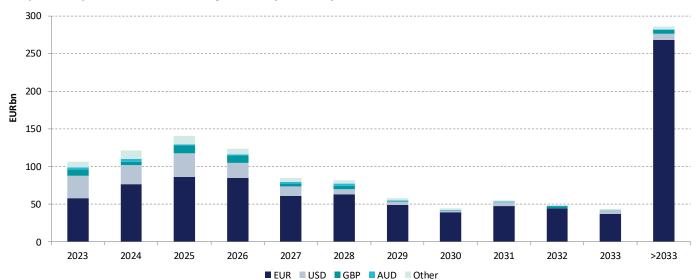
EU clearly dominates EUR-denominated supply from Supranationals

The segment of European supranational entities is the biggest within the global supranational market. With a bond volume outstanding of EUR 1,195.9bn, European supras account for around two-thirds of the supranational market as a whole. These E-supras dominate the supply of EUR denominated bonds in particular. The EUR bond volume outstanding from E-supras totals EUR 916.7bn. The corresponding amount from other supras amounts to just a fraction of this. At the same time, the segment of European supranationals as a sub-market has also seen more changes in recent years than any other. As a result of the sovereign debt crisis in the Eurozone, credit facilities were set up that then developed into the biggest supranational issuers within a short period of time and have been brought to public attention. In this context, the EFSF should be mentioned as well as the subsequently established ESM, which is still active today and now fulfils additional duties following a change of mandate. In view of their major importance, in the following we shall devote separate sections to these issuers, before moving on to look at European multilateral development banks in greater detail. Furthermore, the EU has launched various programmes since October 2020 to mitigate the effects of the COVID-19 pandemic. The EU (Bloomberg ticker: EU) is well on its way to becoming one of the biggest issuers worldwide by 2026. It has already been the biggest issuer of social bonds since 2021 (in excess of EUR 98bn since the start of the pandemic). In addition, the EU plans to issue green bonds worth up to EUR 250bn by 2026 – a further boost for the growth segment of ESG. Owing to this paradigm shift on the part of the EU, we have included an overview of these programmes, which from the perspective of market players dominate the landscape, for the first time in this publication.

Туре	Owner(s)	Guarantee	Risk weight
Credit facility	17 Eurozone member states	Guarantee ceiling of: EUR 724.5bn	0%
Credit facility	19 Eurozone member states*	Callable capital: EUR 624.3bn	0%
Credit facility	27 EU member states	Maintenance obligation	0%
Promotional bank	27 EU member states	Callable capital: EUR 226.6bn	0%
Promotional bank	71 states, EU and EIB	Callable capital: EUR 23.5bn	0%
Promotional bank	Eight Nordic and Baltic countries	Callable capital: EUR 7.5bn	0%
Promotional bank	42 member states of the Council of Europe	Callable capital: EUR 4.9bn	0%
Promotional bank	26 railway companies from 25 European countries	Callable capital: EUR 1.9bn	20%
	Credit facility Credit facility Credit facility Promotional bank Promotional bank Promotional bank Promotional bank Promotional bank	Credit facility17 Eurozone member statesCredit facility19 Eurozone member states*Credit facility27 EU member statesPromotional bank27 EU member statesPromotional bank71 states, EU and EIBPromotional bankEight Nordic and Baltic countriesPromotional bank42 member states of the Council of EuropePromotional bank26 railway companies from	Credit facility17 Eurozone member statesGuarantee ceiling of: EUR 724.5bnCredit facility19 Eurozone member states*Callable capital: EUR 624.3bnCredit facility27 EU member statesMaintenance obligationPromotional bank27 EU member statesCallable capital: EUR 226.6bnPromotional bank71 states, EU and EIBCallable capital: EUR 23.5bnPromotional bankEight Nordic and Baltic countriesCallable capital: EUR 23.5bnPromotional bankEight Nordic and Baltic countriesCallable capital: EUR 7.5bnPromotional bank42 member states of the Council of EuropeCallable capital: EUR 4.9bnPromotional bank26 railway companies fromCallable capital: Callable capital:

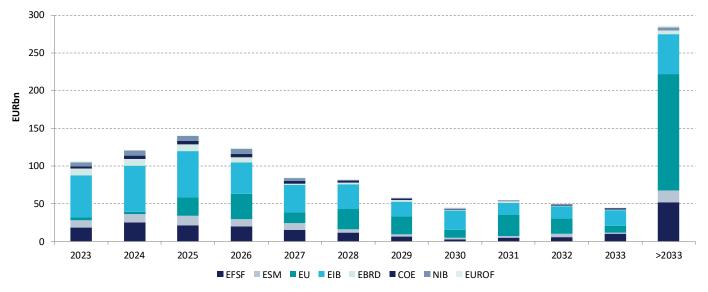
European supranationals - an overview

* Croatia has already been approved as the 20th member state and will officially join in the course of 2023. Source: Issuers, NORD/LB Markets Strategy & Floor Research



Europeans supranationals: maturing bonds by currency

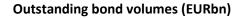
Europeans supranationals: maturing bonds by issuer

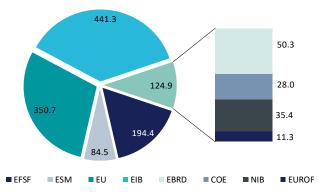


NB: Foreign currencies converted into EUR at rates as at 15 March 2023 Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

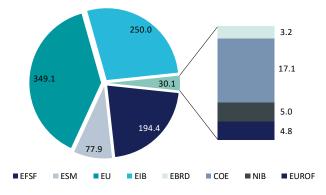
Substantial supply across all maturity ranges

Supply in the supranational market is substantial in almost all maturity ranges. In the period from 2023 to 2028, an annual average volume in excess of EUR 100bn will mature. In the (ultra) long maturity segment, the volume outstanding is also high for numerous bond issues. For a long time, the EIB and EFSF accounted for much of the supply. However, since launching its SURE and NGEU programmes, the EU has evolved into a major player in this segment and looks set to increasingly dominate the sub-market in the coming years.





Outstanding EUR benchmarks (EURbn)



NB: Benchmarks are defined as bonds with a minimum volume of EUR 0.5bn, incl. EIB & EFSF floating rate notes. Foreign currencies are converted into EUR at rates as at 15 March 2023. Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Overview of European supranationals (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
EFSF	EFSF	AA/Aaa/AA	194.4	194.4	20.0	22.5	-2.5	0	0.0
ESM	ESM	AAA/Aaa/AAA	84.5	77.9	8.0	12.7	-4.7	0	0.0
EU	EU	AAA/Aaa/AA+	350.7	350.7	130.0	3.6	126.5	17	134.8
EIB	EIB	AAA/Aaa/AAA	441.3	255.1	45.0	59.5	-14.5	76	70.8
EBRD	EBRD	AAA/Aaa/AAA	50.3	8.6	8.0	10.5	-2.5	48	6.3
NIB	NIB	-/Aaa/AAA	35.4	6.9	8.0	6.8	1.2	14	5.7
CEB	COE	AA+/Aaa/AAA	28.0	17.3	7.0	3.8	3.2	9	6.0
EUROFIMA	EUROF	AA/Aa2/AA	11.3	5.8	1.1	1.5	-0.4	12	4.9
Total			1,195.9	916.7	227.1	120.9	106.3	176	228.5

Foreign currencies converted into EUR at rates as at 15 March 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

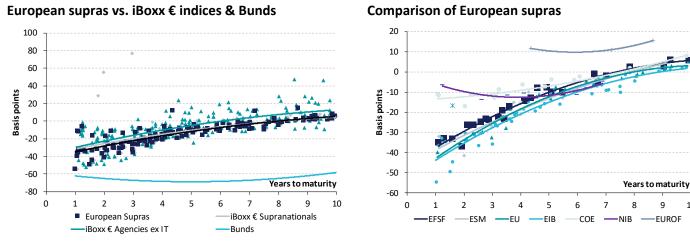
Comment

The European supranational market offers a substantial supply of bonds with different maturities, particularly bonds denominated in EUR. This is largely down to the EFSF and the European Union, as all of their funding is conducted exclusively in the single currency. Yet, the volume of bonds outstanding that are denominated in foreign currencies, expressed as absolute figures, is also very high – especially when compared with other markets. For example, the EIB, EBRD and NIB fund themselves on the basis of many different currencies. In the coming years, fresh supply is set to be dominated by the EU. Up to 2026, an average of EUR 150-200bn is to be raised via the capital market under the NGEU programme. This eclipses other financial institutions, including in terms of the total volume outstanding, by quite some distance. All E-supras also boast excellent ratings and, with the exception of EUROFIMA, all feature a risk weighting of 0%. In addition, the existing volume of ESG bonds outstanding should also be mentioned. A remarkable 176 ESG-related bond issues outstanding worth EUR 228.5bn (converted) are already available in this segment – and the trend points towards further growth here.



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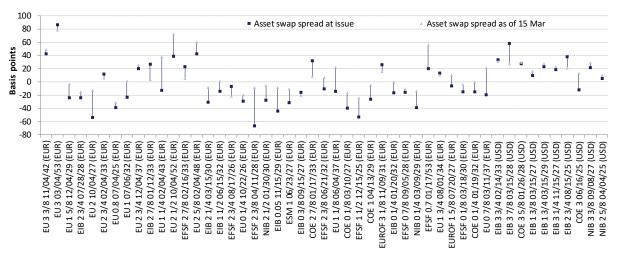
Supranationals A comparison of spreads



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

Supranationals Primary market activities – an overview

Development of benchmark issues 2022/23 (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

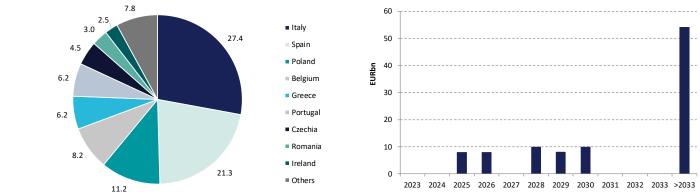
Comment

The segment of E-supras has faced extensive changes in recent decades. Starting with the sovereign debt crisis, which resulted in the creation of credit facilities that developed into major issuers within a very short period of time, the COVID-19 pandemic then led to the European Union becoming a mega issuer. Fresh supply is largely set to be determined by the EU in the period up to 2026. In terms of an annual average, a total of EUR 150-200bn is planned for the NGEU programme alone in the period up to 2026. However, the EIB's funding target of EUR 45-50bn is also an eye-catching figure. The ESM and EFSF credit facilities are planning for funding targets of EUR 8bn and EUR 20bn respectively in 2023.

Supranationals EU: mega issuer spawned by the crisis

SURE: protection for workers and jobs

The European Commission's "Instrument for Temporary Support to mitigate Unemployment Risks in an Emergency" (commonly referred to as SURE), activated in September 2020, offers support to EU member states for dealing with the consequences arising from the pandemic. The focus is mainly on stabilising the labour market. The funds were primarily used to finance short-time work or similar measures, to counteract the threat of job losses and to maintain the normal course of business by implementing healthcare measures in the workplace. Of the EUR 100bn made available for this purpose, a total of EUR 98.4bn had been drawn down in the form of loans with favourable terms by the scheduled end of the programme on 31 December 2022. The EU member states affected had to apply for this financial aid from the European Commission, which then discussed the extent of the expenditure incurred with the respective country and determined the conditions of the loan. The commitments to member states were serviced in tranches. With disbursed loans amounting to EUR 27.4bn, Italy, which was one of the countries hardest hit by COVID-19 in Europe, received the largest share from the SURE programme. Spain, which saw a record number of short-time workers as a result of the pandemic, received EUR 21.3bn, putting it in second place. In order to ensure that the impact on future generations is kept to a minimum, a repayment period of a maximum of 30 years was set from 2028. Accordingly, the obligations on the part of member states will be settled by 2058 at the latest. The repayments of the loans taken out are to be returned to the EU budget. The programme is backed by a system of voluntary guarantees, in which EU member states could participate by providing at least 25% of the maximum programme volume (EUR 100bn). To finance the programme, the European Commission has issued bonds on behalf of the European Union with a maximum term until 2050 (back-to-back lending). In this way, EU member states can benefit from the EU's creditworthiness. For issuances under the SURE programme, the EU set up an ICMA-compliant social bond framework, and all bonds were also issued in the social bond format. Newly issued bonds have an identical status to bonds issued in the past.



Loans disbursed by member state (EURbn)

SURE bond maturities

Source: Bloomberg, European Commission, NORD/LB Markets Strategy & Floor Research

NGEU: facing the future with increased strength

Another measure to support the economy weakened by the pandemic is the NextGenerationEU (NGEU) programme from the EU, which was formally adopted by the European Council in December 2020. The temporary stimulus instrument has a volume of EUR 750bn in 2018 prices, or EUR 806.9bn in current prices. The aim here is to support the economic recovery of EU member states so that they can emerge stronger from the pandemic. It also aims to build a greener, more digital and more resilient future across the EU. The core of NGEU is the Reconstruction and Resilience Facility (RRF), which provides grants and loans for investments and reforms in EU member states. The volume of this programme amounts to EUR 723.8bn and is split into EUR 385.8bn for loans and EUR 338bn for grants (both at current prices). Only the loans are repaid by the member states. To receive support from the RRF, EU member states must submit detailed reconstruction and resilience plans (RRPs), outlining how the funding would be used to achieve climate neutrality and digital transformation goals by 2026. An allocation is then made according to a predetermined distribution key. The remaining EUR 83.1bn from the NGEU funds will be distributed among the ReactEU, Horizon Europe, InvestEU, Rural Development, Just Transition Fund and RescEU programmes. This is intended to promote research, renewable energies and medical equipment, for example. In order to finance the expenditure for the NGEU programme, the European Commission raises funds on the capital market on behalf of the EU for the maximum programme volume of EUR 806.9bn. Although the EU budget must be financed entirely from its own resources according to Art. 311 (2) TFEU, the loans taken out under the NGEU are classified as other revenue by Council Decision (EU, Euratom) 2020/2053 of 14 December 2020 on the European Union's own resources system, which is why it is possible for debt to be incurred in this context as an exception. Financing instruments are medium and long-term bonds, of which at least 30% should be green bonds. Borrowing will take place from mid-2021 to the end of 2026 with an estimated annual issuance volume of EUR 150-200bn. To secure this, the EU will use its own budget as well as its own resources ceiling. The latter was temporarily increased for the NGEU programme up to 2058. Repayment of the issued bonds must therefore take place by this point in time. To support this, contributions based on non-recycled plastic packaging waste, among other things, were added as a new category of own resources.

RRF loans 18.8 Italy 338.0 3.5 RRF grants 5.8 Spain 8.1 France ReactEU 70.3 Poland 50.6 Horizon Europe 11.0 Romania 5.4 83.1 Greece 6.1 InvestFU Germany 12.4 8.1 Rural Portugal 10.9 Development Bulgaria 2.0 Just Transition 13.9 Others 385.8 Funds (JTF) RescEU 14.0 27.2

Green bond-eligible investments (acc. to RRPs; EURbn)

Source: European Commission, NORD/LB Markets Strategy & Floor Research

Distribution of NGEU funding (EURbn)



Supranationals Bailout funds and associated aid programmes – an overview

Crisis in Eurozone states led to establishment of new credit facilities

Facilities to support sovereigns experiencing financial difficulties had existed even before 2010, the year in which Ireland became the first Eurozone state to receive support from the IMF and the European Financial Stabilisation Mechanism (EFSM), an EU credit facility set up for this purpose. In fact, a loan facility (albeit small) had already been set up prior to this. This was the Balance of Payments (BoP) programme with a maximum capacity of EUR 12bn. At present, this programme remains available to support non-Eurozone EU states. In view of negative developments in 2008, the capacity of the BoP was topped up to EUR 25bn, before being upgraded to EUR 50bn in 2009. In 2010, it was followed by the European Financial Stability Facility (EFSF), which was designed as a temporary bailout fund for Eurozone member states. In 2012, the EFSF was replaced by the European Stability Mechanism (ESM) as a permanent firewall for the Eurozone. Although the EFSM and the EFSF are no longer available for any aid programmes, the ESM will be indefinitely available to support Eurozone states. In the following section, we shall take a look at each of the aid programmes agreed in recent years and the involvement of the credit facilities. This will then be followed by more detailed analyses.

Credit facilities – an overview

Credit facility	Institution	Member states	Maximum capacity	Time limit
BoP	EU	27 EU member states	EUR 50bn	Unlimited
EFSM	EU	27 EU member states	EUR 60bn	2012
EFSF	EFSF	17 Eurozone member states	EUR 440bn	2013
ESM	ESM	19 Eurozone member states*	EUR 500bn	Unlimited

* Croatia has already been approved as the 20th member state and will officially join in the course of 2023. Source: Issuers, NORD/LB Markets Strategy & Floor Research

Overview of aid programmes (commitments) in EUR

Country		IMF	EFSM/BoP	EFSF	ESM	Other	Total	Beginning (end)
Hungary	Overall	12.5bn	6.5bn	-	-	1.0bn	20.0bn	2008 (2010)
Latvia	Overall	1.7bn	3.1bn	-	-	2.7bn	7.5bn	2008 (2012)
Romania	1st programme	13.0bn	5.0bn	-	-	2.0bn	20.0bn	2009 (2011)
	1st precautionary	3.5bn	1.4bn	-	-	1.2bn	6.1bn	2011 (2013)
	2nd precautionary	2.0bn	2.0bn	-	-	1.0bn	5.0bn	2013 (2015)
Greece	1st programme	30.0bn	-	-	-	77.3bn	107.3bn	2010 (2013)
	2nd programme	19.8bn	-	144.7bn	-	-	164.5bn	2012 (2015)
	Of which bank recap.	-	-	-	-	-	50.0bn	
	3rd programme	-	-	-	86.0bn	-	86.0bn.	2015 (2018)
	Of which bank recap.	-	-	-	25.0bn	-	25.0bn	
Ireland	Overall	22.5bn	22.5bn	17.7bn	-	22.3bn	85.0bn	2010 (2013)
	Of which bank recap.	-	-	-	-	-	35.0bn	
Portugal	Overall	26.0bn	26.0bn	26.0bn	-	-	78.0bn	2011 (2014)
	Of which bank recap.	-	-	-	-	-	12.0bn	
Spain	Overall	-	-	-	100.0bn	-	100.0bn	2012 (2014)
	Of which bank recap.	-	-	-	100.0bn	-	100.0bn	
Cyprus	Overall	1.0bn	-	-	9.0bn	-	10.0bn	2013 (2016)
	Of which bank recap.	-	-	-	-	-	2.5bn	

Source: EU, ESM/EFSF, IMF, NORD/LB Markets Strategy & Floor Research

EFSF v1 and ESFS v2: two very different liability structures

In relation to the guarantee framework it should be noted that the EFSF has two very different liability structures. Up to 13 October 2011, each EFSF shareholder was liable for up to 120% of the share determined by the country's paid-in capital with the ECB (EFSF v1). The last bond subject to the EFSF v1 liability mechanism fell due in May 2021. In the subsequent set-up (EFSF v2), each member guarantees up to 165% of its own share, which is also determined in accordance with the ECB capital key. However, this is adjusted to take account of Greece, Ireland and Portugal's withdrawal from the liability framework. As such, the ceiling amounts to a maximum of EUR 780bn, although the guarantees for EFSF v2 now effectively amount to EUR 724.5bn following the withdrawal of the four countries (Cyprus also withdrew from the liability mechanism in 2013). Although EFSF v1 requires a liquidity reserve to be maintained and/or guarantees from triple-A shareholders, these requirements no longer apply under EFSF v2. Instead, countries subject to EFSF v2 are authorised to issue commercial paper for short-term liquidity management purposes. The EFSF also conducts a liquidity test in the run up to each debt servicing date. If the test reveals a lack of liquidity, callable capital provided by the guarantors can be accessed in an emergency. These tests are carried out ten and three days before a payment becomes due.

EFSF v2.1 since 29 April 2013 and EFSF v2.2 since 28 June 2013

Since Cyprus withdrew from the liability framework, the guarantee structure of EFSF v2.1 applies to bonds issued after 29 April 2013. Furthermore, a change was made to the Deed of Guarantees with effect from 28 June 2013, which gave rise to EFSF v2.2. The restructuring seeks to address the absence of a legal framework for new bonds being issued by the EFSF if, in certain circumstances, the rating of one of its major guarantors is downgraded. Bonds issued prior to 28 June 2013 cannot be topped up via tap deals since this date.

Key differences between EFSF v1 and EFSF v2 EFSF v1 (until 12 October 2011)

Guarantees from each EFSF shareholder up to 120% of the state's own share, as determined in accordance with the ECB capital key

Maintenance of a liquidity reserve and/or guarantees from triple-A shareholders

EFSF v2 (since 13 October 2011)

Guarantees from each member for up to 165% of the state's own share, as determined in accordance with the ECB capital key and taking into account the withdrawal of Greece, Ireland and Portugal from the liability mechanism

Liquidity reserve not necessary, instead a liquidity test is conducted as each debt servicing date approaches

European Financial Stability Facility



General information Homepage **Investor Relations**

Owner(s) 17 Eurozone member states

Guarantor(s) 13 Eurozone member states (EFSF v2.2)

Liability mechanism

Guarantees of up to EUR 724.5bn overall (EFSF v2.2)

Bloomberg ticker

EFSF Ratings Long-term Eitch ۸Λ

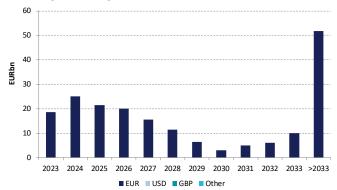
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Moody's	Aaa	stab
S&P	AA	neg

Outlook

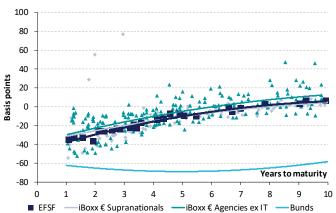
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* Fitch has not assigned a rating outlook

Bonds by currency



EFSF vs. iBoxx € Indices & Bunds



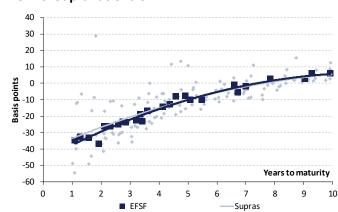
European Financial Stability Facility (EFSF)

The European Financial Stability Facility (EFSF) was formed on 7 June 2010 by the 16 members of the Eurozone at that time. Its mission was to safeguard the monetary union by providing temporary financial assistance to member states whose access to the capital markets had been temporarily disrupted. For this purpose, the EFSF made available a lending facility with a capacity of EUR 440bn. The guarantees provided by the states participating in the EFSF now amount to EUR 724.5bn, in order to ensure overcollateralisation of up to 165%. The guarantee is not joint and several: each member state is liable for its own share including the overcollateralisation. States that received support from the EFSF were no longer liable under the scheme. As such, Greece, Ireland and Portugal do not provide any guarantees for future bonds in the current liability structure. Cyprus is also no longer liable for future bonds since its application for ESM aid in 2013. As a result, there are three different liability mechanism structures for EFSF bonds (EFSF v1 through to EFSF v2.2). However, the respective governments continue to guarantee the EFSF bonds that were issued prior to their withdrawal from the liability framework. A total of EUR 188.4bn was committed to Greece, Ireland and Portugal. In the meantime, a credit line of up to EUR 100bn established for the purposes of refinancing Spanish banks was transferred to the ESM at the end of 2012. Since July 2013, the EFSF has been barred from participating in any further aid programmes. For this reason, the EFSF's current mandate is to handle the disbursement of any remaining loan tranches to the states eligible for such payments and to refinance existing loan commitments until the outstanding liabilities have been settled. Headquartered in Luxembourg, the EFSF, which in contrast to other supranational institutions is subject to national Luxembourg law rather than international law, operates in the form of a Société Anonyme (S.A.).

Bond amounts maturing in the next 12 months 6 5 4 EURbn 3 2 1 0



A 23 S 23 0 23 N 23 D 23 J 24 F 24 M 24



EFSF vs. Supranationals

A 23 M 23

NB: Foreign currencies converted into EUR at rates as at 15 March 2022; 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

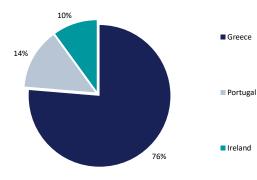
Regulatory details

Regulatory	actuns										
Risk weightin CRR/Basel III (st	ng according to andard approa		category according t Coverage Ratio (LCR		Haircut category according to ECB repo rules Leverage ratio/BRRI			RRD			
(0%		Level 1		Ш			Does not appl	У		
Relative val	ue										
Attractiveness vs. Bunds (G-spread; bp)* Attractivenes (ASW-spre				eness vs. Mi -spread; in l			Inde	x weighting			
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € S	iBoxx € Sub-Sovereigns		Sub-Sovereigns iBoxx € Supranationa		upranationals
26	72	85	-37	-16	6		8.8%		20.6%		
Funding & E	SG (EURbn/EL	JR equivalent)									
Target 2023	Maturitio 2023	es Net Su 202		Funding i	nstruments	Ce	ntral bank access	No. of ESG bonds	ESG volume		
20.0	20.0 22.5		5 В	enchmark is	sues, tap deals		-	0	0.0		
Outstanding	Outstanding volume (EURbn/EUR equivalent)										
Total	of v	which in EUR	No. of EUR benchmarks*	.* of	which in USD		No. of enchmarks**	of which in	other currencies		
194.4		194.4	49		0.0		0		0.0		

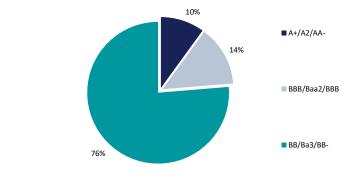
* Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn.

** Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies converted into EUR at rates as at 15 March 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

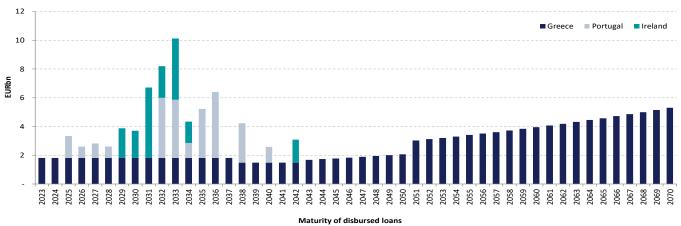
EFSF credit risks by country



Ratings of the loans to eurozone member states



Overview of repayment plan



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

Strengths

- + Overcollateralisation of liabilities through guarantees provided by member states
- + Guarantee from each member state for up to 165% of its own share

- Periphery-related risk (especially Greece)
- Paid-in capital marginal in relation to balance sheet total and stability of the liability framework
- No preferred creditor status

European Stability Mechanism



General information

Homepage Investor Relations

Owner(s) 19 Eurozone member states*

Guarantor(s) 19 Eurozone member states*

Liability mechanism Callable capital: EUR 624.3bn

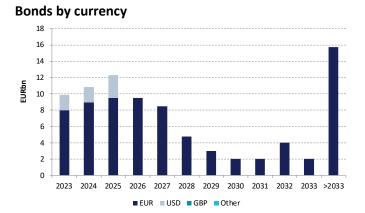
Bloomberg ticker ESM, ESMTB

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

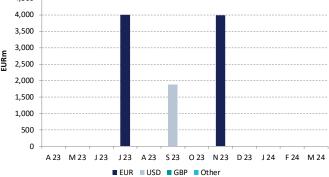
* Croatia set to join as the 20th member in the course of 2023

European Stability Mechanism (ESM)

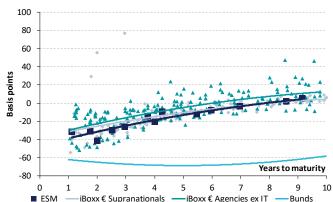
Headquartered in Luxembourg, the European Stability Mechanism (ESM), which first took effect on 8 October 2012, is the permanent bailout fund of the European Monetary Union (EMU). Following a period in which the ESM was at times available in parallel with the EFSF for aid programmes aimed at upholding financial stability across Europe, the ESM has been the sole mechanism for assistance in the Eurozone since July 2013. The maximum effective lending capacity of the ESM amounts to EUR 500bn, with systematic overcollateralisation of 140% in place totalling EUR 704.8bn. The last tranche of paid-in capital was transferred in April 2014, which consequently amounts to EUR 80.5bn. The accession of the two Baltic states Latvia and Lithuania to the Eurozone resulted in a slight increase of the paid-in capital and overcollateralisation of the ESM. The remaining guarantees amounting to EUR 624.3bn are available as callable capital for emergency situations. If a member state requires financial assistance, this does not alter the guarantee structure, as is the case, for example, with the EFSF. As a result, a Eurozone member would remain responsible for liabilities in the amount of its defined share. When loans are granted, the credit facility has preferred creditor status, which is only subordinate to the IMF. The exception to this is the recapitalisation of Spanish financial institutions, in which the ESM is ranked equally with private creditors. This is due to the transfer of commitments of the EFSF to the ESM. In addition, a programme for Cyprus with a volume of up to EUR 9.0bn was also agreed. From July 2015 until August 2018, a third programme for Greece was financed via the ESM, under which up to EUR 86bn was made available. Following the outbreak of the pandemic, member states were able to access a credit facility up to the end of 2022 in order to finance expenditure in the healthcare sector. The ESM was also substantially strengthened by the reform of 30 November 2020, when a range of new instruments and mandates were created. With Croatia now also set to join the euro, the number of shareholders in the ESM will be increased to 20 in the course of 2023.



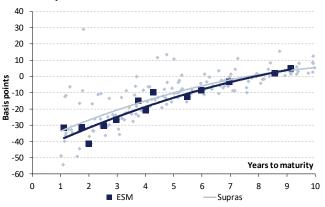
Bond amounts maturing in the next 12 months







ESM vs. Supranationals



NB: Foreign currencies converted into EUR at rates as at 15 March 2023; 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

Regulatory details

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	II	Does not apply
Relative value			

Attractivene	Attractiveness vs. Bunds (G-spread; bp)*			Attractiveness vs. Mid-Swap (ASW-spread; in bp)*		Index	veighting
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Supranationals
29	72	84	-42	-15	5	3.6%	8.5%

Funding & ESG (EURbn/EUR equivalent)

Target	Maturities	Net Supply	Funding instruments	Central bank	No. of	ESG
2023	2023	2023		access	ESG bonds	volume
8.0	12.7	-4.7	Benchmarks, taps, private placements, T-bills	-	0	0.0

Outstanding volume (EURbn/EUR equivalent)

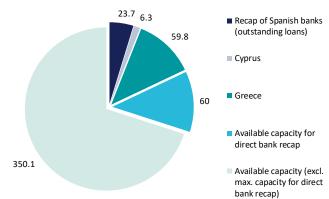
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
84.5	77.9	21	6.5	3	0.0

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

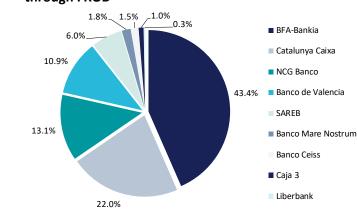
** Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies converted into EUR at rates as at 15 March 2023. On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality.

Source: Bloomberg, issuers, NORD/LB Markets Strategy & Floor Research

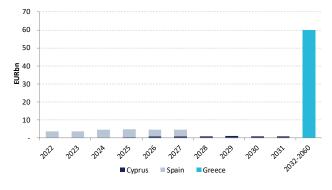
Outstanding loans and capacity of the ESM by country or programme (EURbn)



Composition of commitments to Spain disbursed through FROB



Overview of repayment plan



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

Strengths

- + Overcollateralisation of liabilities through callable capital provided by member states
- + Very high paid-in capital
- + Preferred creditor status (subordinate only to the IMF; exception: Spanish aid programme)

Overview of investment guidelines

	General Eligible Assets List	Enlarged Eligible Assets List
Instruments	 Debt instruments (bonds, l Secured deposits with sele Unsecured deposits with so 	•
lssuer	 Central banks (CB) (Sub-)sovereigns Agencies Supranationals Financial institutions (FI) 	 Central banks (CB) (Sub-)sovereigns Agencies Supranationals Financial institutions (FI)
Ratings	Min. AA- (all except CB and FI); FI: AAA	Min. AA for FI, others except for FI, Eurozone countries and CB: A

- Periphery-related risk (especially Greece)
- Potential deterioration of the credit rating in the event of direct bank recapitalisation



General information

Homepage Investor Relations

Members 27 EU member states

Guarantor(s) 27 EU member states

Liability mechanism Maintenance obligation

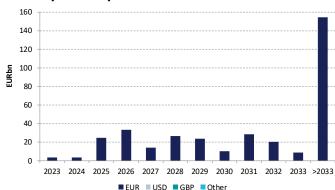
Bloomberg ticker

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

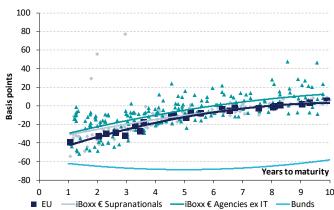
European Union (EU)

The European Union (EU) was created in 1993 from the European Economic Community, which had been established in 1958. It now pursues a range of objectives, extending from development aid and economic promotion activities all the way through to environmental protection. The EU budget, for which in principle borrowing is not possible for deficit financing, forms the basis of the EU's activities. However, there are five funding programmes which are refinanced via the capital market: the European Financial Stabilisation Mechanism (EFSM), Balance of Payments (BoP), Macro-Financial Assistance (MFA), Support to mitigate Unemployment Risks in an Emergency (SURE) and NextGenerationEU (NGEU). Aid totalling EUR 46.8bn was provided to Ireland and Portugal through the EFSM, while Hungary, Latvia and Romania received a total of EUR 14.6bn through the BoP programme. Up to EUR 50bn can be allocated to non-Eurozone EU members via the BoP programme. Generally speaking, loans provided under the MFA scheme feature considerably smaller volumes. These are used to support existing IMF programmes for non-EU states, most recently Ukraine. At a volume of EUR 100bn, the SURE programme helps EU member states combat unemployment in the wake of the pandemic. In this context, the EU budget guarantees bonds issued by the EU. Since the European Council is also explicitly mentioned as a body in Art. 323 of the Treaty on the Functioning of the EU (TFEU), from our perspective this constitutes an implicit obligation on the part of the member states. Based on this, we assume an implicit guarantee in the form of a maintenance obligation on the part of the member states, which, in this case, is comparable to callable capital. In 2020, the NGEU reconstruction fund was also agreed. This economic programme aims to support the economic recovery of EU member states so that they can emerge stronger from the pandemic. With a volume of EUR 750bn (in 2018 prices), the programme will be largely financed through bonds, of which 30% will be green bonds.

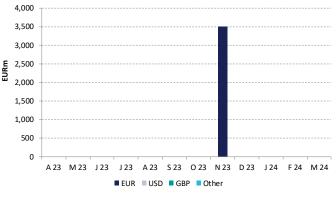
Bonds by currency



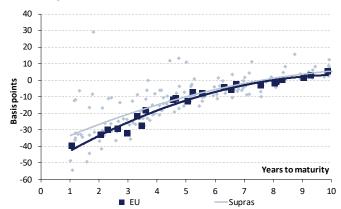
EU vs. iBoxx € Indices & Bunds



Bond amounts maturing in the next 12 months



EU vs. Supranationals



NB: Foreign currencies converted into EUR at rates as at 15 March 2023; 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

Regulatory details

•	ing according to tandard approac		category accordi Coverage Ratio (•	rcut category acco ECB repo rule	•	Leverage ratio/BRRD		RRD	
	0%		Level 1		II			Does not apply		
Relative val	lue									
Attractivene	ess vs. Bunds (G-s	pread; bp)*		ctiveness vs. Mi ASW-spread; in b	•		Inc	lex weighting		
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € S	Sub-Sovereign	s iBoxx€S	upranationals	
24	75	83	-40	-8	5		16.1%	3	37.7%	
unding & I	E SG (EURbn/EUI	R equivalent)								
Target 2023	Maturitie 2023	s Net Su 202		Funding in	nstruments	Ce	ntral bank access	No. of ESG bonds	ESG volume	
130.0	3.6	126.	.5		enchmarks, ESG bonds, vate placements, EU bills		-	17	134.8	
Jutstandin	g volume (EU	Rbn/EUR equival	lent)							
			No. of				No. of			

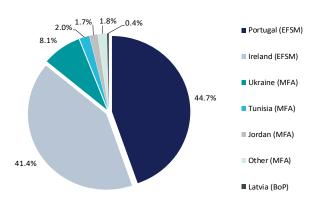
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
350.7	350.7	50	0.0	0	0.0

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

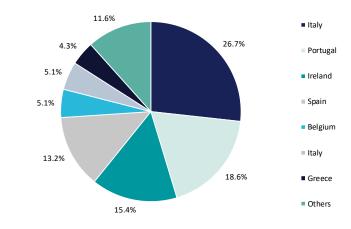
** Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies converted into EUR at rates as at 15 March 2023.

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

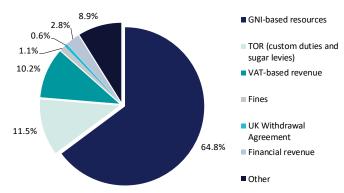
Outstanding EU loans by borrower (excl. SURE and NGEU)



Outstanding EU loans by country



EU budget revenue by source of revenue

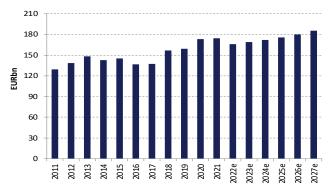


Source: Issuer, NORD/LB Markets Strategy & Floor Research

Strengths

- + Multi-layered guarantee
- + Preferred creditor status
- + Cap on borrowing

Trend in EU expenditure (excl. NGEU)



- High concentration
- Poor quality of the loan portfolio

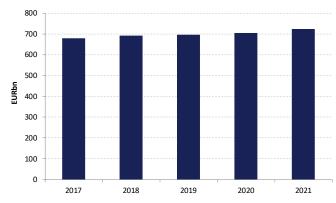


Supranationals European multilateral development banks – an overview

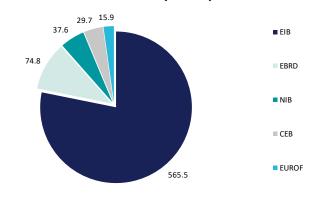
Marginal increase in total assets in 2021

The importance of supranational funding institutes has markedly risen in the wake of a series of financial and economic crises. The relevance of these institutes is reflected in their balance sheet totals. As was previously the case in 2020, another marginal increase in the aggregated balance sheet total was recorded in 2021. With total assets of EUR 565.5bn, the EIB accounts for around 78.2% of the aggregated balance sheet total of European multilateral development banks. On an aggregate basis, total assets grew by around 2.7% in 2021. In this context, the EIB recorded growth of EUR 11.2bn. Alongside the EIB, the EBRD, whose total assets increased by 7.1% in the previous reporting year, also contributed to the slight increase in the aggregate balance sheet total from EUR 704.5bn to EUR 723.5bn.

Balance sheet growth of European multilateral development banks



Comparison of European multilateral development banks – balance sheet totals (EURbn)

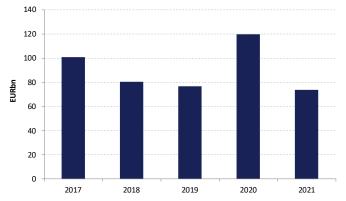


NB: Foreign currencies converted into EUR on basis of average exchange rates. Source: Issuers, NORD/LB Markets Strategy & Floor Research

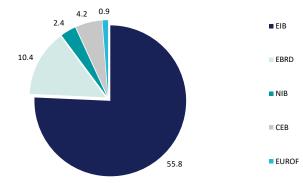
Sharp decline in volume of new commitments

In contrast to the balance sheet totals, there was a reduction in the aggregate total of new commitments in 2021 versus the previous year. Due to the scaling back of the funding programs implemented to mitigate the economic consequences of the pandemic, the cumulative volume fell to EUR 73.7bn, which corresponds to a reduction of 38.5%. This is mainly due to the EIB, whose volume of new commitments declined by EUR 39.6bn to EUR 55.8bn compared with the previous year. However, the EBRD, NIB, CEB and EUROFIMA all also posted sharp declines here. Overall, new commitments are actually as much as 4% down on the level recorded in 2019, which was prior to the onset of the COVID-19 crisis.

New commitment growth of European multilateral development banks



Comparison of European multilateral development banks – new commitments (EURbn)



NB: Foreign currencies converted into EUR on basis of average exchange rates. Source: Issuers, NORD/LB Markets Strategy & Floor Research

	Paid-in capital / total assets	Callable capital / total assets	Subscribed capital / total assets	Equity / total assets	Paid-in capital / subscribed capital
EIB	3.9%	40.1%	44.0%	13.0%	8.9%
EBRD	8.3%	31.5%	39.8%	27.2%	26.4%
NIB	2.3%	20.0%	22.3%	10.6%	10.1%
CEB	2.1%	16.4%	18.4%	10.9%	11.2%
EUROFIMA	3.3%	13.1%	16.3%	9.8%	20.0%

Capital ratios of European multilateral development banks - a comparison

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

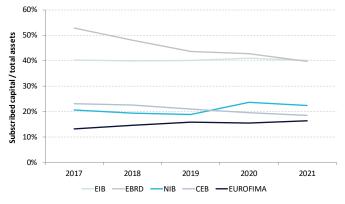
Significant differences in capital ratios

In some cases, the capital ratios of the European multilateral development banks covered in this publication are at very different levels. For instance, the EBRD has a far higher ratio of equity to total assets than is the case for other promotional banks. The situation is similar in terms of the ratio of subscribed capital, which comprises paid-in and callable capital, to total assets: while the EBRD and EIB boast the highest values in this regard, the low figure for EUROFIMA (16.3%) stands out in a negative light. However, the year-on-year trend for this value at EUROFIMA can be highlighted for all the right reasons: following a reduction in total assets in 2021, the ratio of subscribed capital to total assets consequently improved. At the end of 2022, a capital increase was resolved for the CEB, which will have a positive impact on its capital ratios that are currently at comparatively low levels.

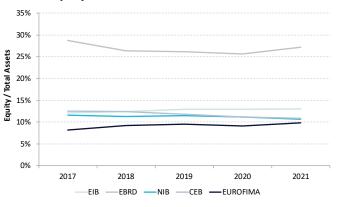
Planned capital increase at CEB

In December 2022, the Board of Directors of the Council of Europe Development Bank (CEB) approved the seventh capital increase in the history of the bank. The subscribed capital of the CEB is expected to increase by up to EUR 4.25bn from EUR 5.48bn to an amount of EUR 9.73bn – if fully subscribed. The paid-in capital of EUR 0.61bn at present would therefore increase by EUR 1.2bn to EUR 1.81bn. The subscription period is open until 31 December 2023.





Ratio of equity to total assets



Metrics as at 31 December 2021. Source: Issuers, NORD/LB Markets Strategy & Floor Research



General information

Homepage Investor Relations

Owner(s) 27 EU member states

Guarantor(s) 27 EU member states (limited)

Liability mechanism

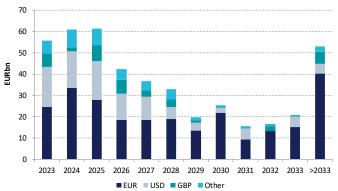
Callable capital: EUR 226.6bn

Bloomberg ticker

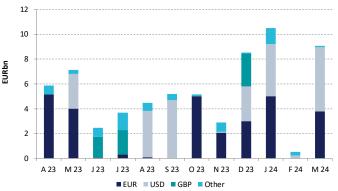
EIB		
Ratings	Long-term	Outlook
Fitch	AAA	stab
Moody's	Aaa	stab
S&P	ΔΔΔ	stab

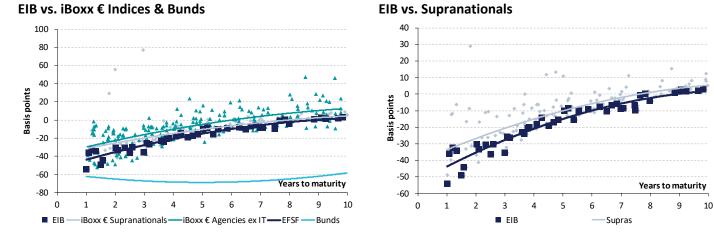
European Investment Bank (EIB)

The European Investment Bank (EIB) was founded in 1958 through the Treaties of Rome as the promotional bank of the EU. The objectives of the EIB are to promote the economic development and integration of Europe in cooperating closely with EU bodies to implement EU policy. For example, the EIB finances small and medium-sized enterprises (SMEs) and projects in the areas of renewable energy, infrastructure, education and innovation. There is no regional limitation on EIB activities, with the promotional bank focusing, for example, on supporting potential candidates for EU accession as well as on development policy. In addition, venture capital, guarantees and microfinancing are also provided via the European Investment Fund (EIF), in which the EIB is a shareholder alongside other banks. Furthermore, since 2013 the EIB has supported infrastructure projects by way of innovative funding contributions in the form of project bonds. The EIB took up the mantle of dealing with the issue of sustainability comparatively early. For example, it issued the world's first green bond (CAB) as far back as 2007. At the EU summit in 2012, the EU member states resolved to implement a capital increase of EUR 10bn, which was then legally finalised on 8 January 2013. Following payments from Poland and Romania in 2020, the paid-in capital now amounts to EUR 22.2bn. Moreover, in the event of potential liquidity problems, a sum of just under EUR 226.6bn is available in the form of callable capital from the EU member states that are simultaneously shareholders in the EIB. As a result of Brexit, the remaining member states in the EIB implemented proportional capital increases in order to fully offset the loss of the United Kingdom's capital share. The liability of the member states is limited to their respective share of the subscribed capital. The rules on callable capital are anchored in the Statute of the EIB, which in turn forms part of the Treaty on the functioning of the EU and the EU Treaty. It is therefore superior to national law. The EIB is headquartered in Luxembourg.



Bond amounts maturing in the next 12 months





NB: Foreign currencies converted into EUR at rates as at 15 March 2023; 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

Bonds by currency

-54

NORD/LB

26.5%

Regulatory details

-0							
	ng according to tandard approach)		category accordin Coverage Ratio (0	rcut category acco ECB repo rule	0	Leverage ratio/BRRD
	0%		Level 1		П		Does not apply
Relative val	ue						
Attractivene	ss vs. Bunds (G-sp	read; bp)*	Attractiveness vs. Mid (ASW-spread; in bp		•	Inc	lex weighting
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereign	iBoxx € Supranationals

-16

27	72	83	
Funding & F	SG (FURbn/FL	IR equivalent)	

		invalency				
Target 2023	Maturities 2023	Net Supply 2023	Funding instruments	Central bank access	No. of ESG bonds	ESG volume
45.0	59.5	-14.5	Benchmarks, other public bonds, ESG bonds, private placements, commercial paper and digital bonds	ECB	76	70.8

3

11.3%

Outstanding volume (EURbn/EUR equivalent)

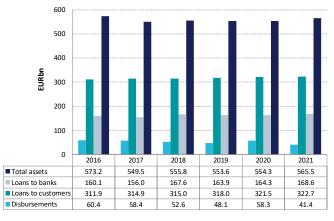
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
441.3	255.1	75	103.6	36	82.6

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

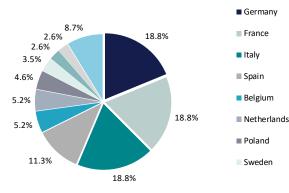
** Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies converted into EUR at rates as at 15 March 2023. On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality.

Source: Bloomberg, issuers, NORD/LB Markets Strategy & Floor Research

Balance sheet development



Shareholders by subscribed capital

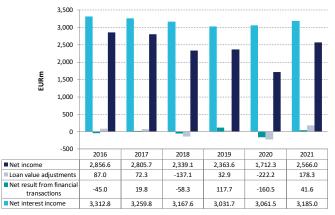


Source: Issuer, NORD/LB Markets Strategy & Floor Research

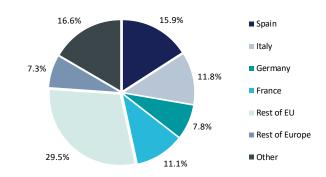
Strengths

- + Very strong mandate
- + Preferred creditor status
- + Access to ECB liquidity

Earnings development



Loan portfolio by country



- Relatively high leverage
- High concentration of lending to Spain and Italy



General information

Homepage Investor Relations

Owner(s) 71 states, EU and EIB

Guarantor(s) 71 states, EU and EIB

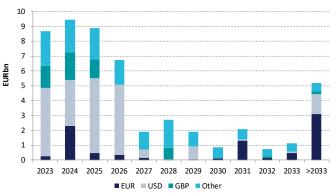
Liability mechanism

Callable capital of EUR 23.5bn

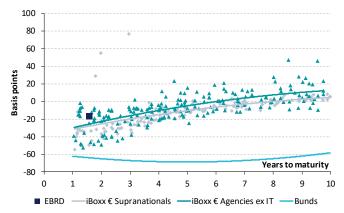
Bloomberg ticker EBRD

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

Bonds by currency



EBRD vs. iBoxx € Indices & Bunds

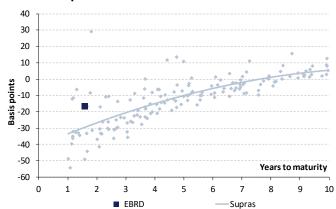


European Bank for Reconstruction and Development (EBRD)

The European Bank for Reconstruction and Development (EBRD) was formed in 1991 to support the transition to open and market-oriented economies in the countries of Central and Eastern Europe after the end of the Cold War. Since then, the EBRD has been involved in various activities including banking sector reforms and numerous privatisation processes, with the regional focus gradually being extended to Central Asia and most recently to the southern and eastern Mediterranean region. The promotional bank is now active in 36 countries overall. The EBRD offers project financing for banks and businesses, while the instruments at the disposal of the EBRD include equity and debt financing as well as guarantees, leasing and trade financing. In general, the promotional bank finances up to 35% of the costs of a project. However, the EBRD does not provide funding to cover budgetary deficits or to finance aid programmes. In addition, soft loans (i.e. interest-free loans or loans featuring an interest rate below the usual market rate) are not offered either. The emphasis continues to be on developing the private sector and promoting the transition to open and democratic market economies, while the promotional bank maintains a particular focus on aspects such as financial stability, strong corporate growth and modern infrastructure. As part of its sustainability initiative, the EBRD has also been issuing green bonds since 2010. The loans awarded include a preferred creditor status in favour of the EBRD. A total of 71 nation states, in addition to the European Union (EU) and European Investment Bank (EIB), are the shareholders of the EBRD. The paid-in capital amounts to EUR 6.2bn, while an additional EUR 23.5bn is available in the form of callable capital. The headquarters of this supranational development bank are located in London.



EBRD vs. Supranationals



NB: Foreign currencies converted into EUR at rates as at 15 March 2023; 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

Regulatory details

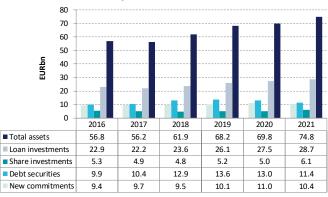
0	ng according to tandard approac		category accordi Coverage Ratio	-	rcut category accor ECB repo rules	•	Leverage ratio/BRRD		RRD	
	0%		Level 1		Ш		Does not apply			
elative val	ue									
Attractivene	ss vs. Bunds (G-s	pread; bp)*		ctiveness vs. Mi ASW-spread; in b			Index	weighting		
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-	Sovereigns	iBoxx € S	upranational	
-24	-24	-24	-17	-17	-17	0.0	0.0%		0.0%	
unding & E	SG (EURbn/EUI	R equivalent)								
Target 2023	Maturitie 2023	s Net Su 202		Funding in	nstruments	Centra acc		No. of SG bonds	ESG volume	
8.0	10.5	-2.5	5	Benchmarks, other public bonds, green bonds, private placements and commercial paper		-		48	6.3	

Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
50.3	8.6	4	20.6	8	21.0

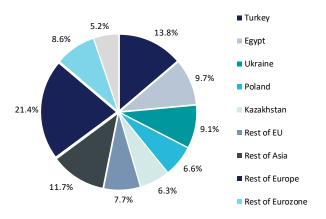
* Residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn.

** Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies converted into EUR at rates as at 15 March 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

Balance sheet development



Credit risk in the banking book by country/region



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

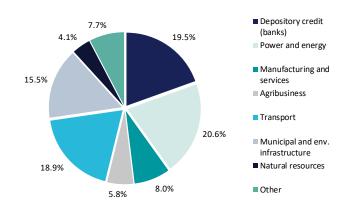
Strengths

- + Very good capitalisation
- + Very high level of liquidity
- + Preferred creditor status

Earnings development



Credit risk in the banking book by sector



- Fair value valuation-induced earnings volatility
- Relatively high-risk portfolio
- Substantial exposure to Ukraine and Turkey



General information

Homepage Investor Relations

Owner(s) Eight Nordic and Baltic states

Guarantor(s) Eight Nordic and Baltic states

Liability mechanism

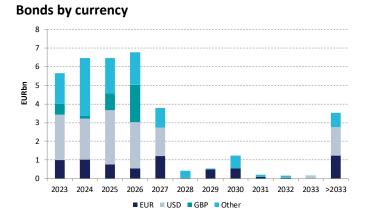
Callable capital of EUR 7.5bn

Bloomberg ticker NIB

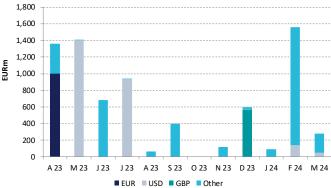
Ratings Fitch	Long-term	Outlook
Moody's	Aaa	stab
S&P	AAA	stab

Nordic Investment Bank (NIB)

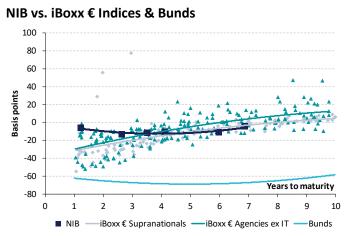
The Nordic Investment Bank (Nordiska Investeringsbanken, NIB) was created in 1975 as a result of a joint initiative between the Scandinavian nations of Denmark, Finland, Iceland, Norway and Sweden. The mission of the NIB is to provide funding with the aim of achieving sustainable growth in the shareholder or member countries of the NIB. Strengthening the competitiveness of the member countries, allied with a commitment towards protecting and improving the environment, is a particular focus of this promotional bank. In specific terms, the NIB funds large-scale energy projects, infrastructure investments (e.g. in the transport sector), major investments on the part of businesses (e.g. to improve manufacturing processes in addition to R&D activities) as well as investments by small and medium-sized enterprises (SMEs) through other financial intermediaries. In addition, it should be noted that the promotional bank is not limited to activities in the countries that are shareholders of the NIB. In 2022, around 73% of the loan portfolio was focused on Sweden, Norway and Finland; in this context, 93% of new business was attributable to the member states of the NIB. As at November 2022, the NIB had issued a total of 30 environmental bonds with an overall volume of EUR 6.8bn. The majority of the gross proceeds from these bond issuances go towards projects in the area of renewable energies. The NIB generally tends to have preferred creditor status within the framework of its loan commitments. In 2005, Estonia, Latvia and Lithuania became shareholders in the NIB. Previously, only the founding member states had held shares in the promotional bank. The shareholdings of authorised capital were calculated on the basis of the countries' respective GDP figures. The paid-in capital totals just under EUR 846m, while an additional EUR 7.5bn in callable capital is available in the event of liquidity problems. The headquarters of the NIB are located in Helsinki.



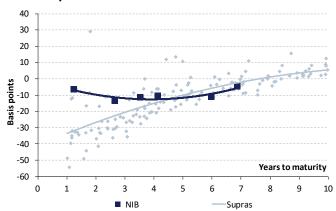
Bond amounts maturing in the next 12 months



NORD/LB



NIB vs. Supranationals



NB: Foreign currencies converted into EUR at rates as at 15 March 2023; 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

Regulatory details

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	II	Does not apply
Relative value			

Attractiveness vs. Bunds (G-spread; bp)*			Attractiveness vs. Mid-Swap (ASW-spread; in bp)* Index weightin		•		veighting
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Supranationals
55	75	79	-14	-11	-5	0.1%	0.3%

Funding & ESG (EURbn/EUR equivalent)

Target	Maturities	Net Supply	Funding instruments	Central bank	No. of	ESG
2023	2023	2023		access	ESG bonds	volume
8.0	6.8	1.2	Benchmarks, other public bonds, green bonds, private placements and commercial paper	-	14	5.7

Outstanding volume (EURbn/EUR equivalent)

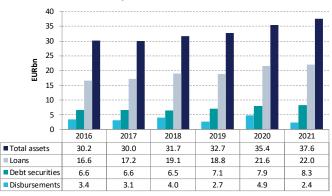
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
35.4	6.9	7	13.2	9	15.2

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

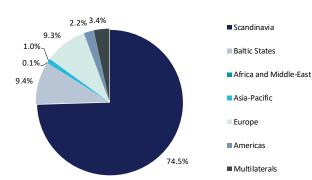
** Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies converted into EUR at rates as at 15 March 2023.

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

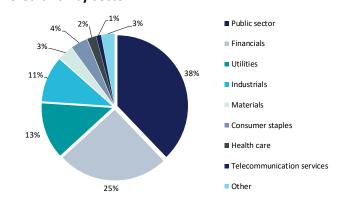
Balance sheet development



Credit risk by region



Credit risk by sector



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

Strengths

- + Very high creditworthiness of the shareholders
- + Robust intrinsic financial strength
- + Strong mandate
- + Preferred creditor status

Weaknesses

- Relatively high leverage
- Strong regional concentration in the loan portfolio

Earnings development

300

250

200

150

100

50 EURm

0 -50

-100

Net interest income

Consolidated net

income

Result from financial

transactions

Impairments

2016

241.8

-19.8

211.8

23.3

2017

238.3

-5.4

211.0

17.6

2018

223.5

6.0

173.0

-23.8

2019

211.7

-0.5

182.5

14.3

2020

205.5

-56.7

164.7

58.8

2021

201.4

-25.9

159.2

-23.7



General information

Homepage Investor Relations

Owner(s)

42 states of the Council of Europe

Guarantor(s)

42 states of the Council of Europe

Liability mechanism

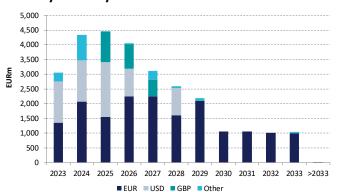
Callable capital of EUR 4.9bn

Bloomberg ticker COE

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

Council of Europe Development Bank (CEB)

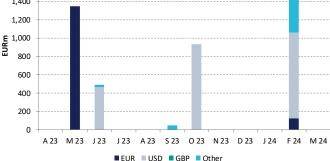
The Council of Europe Development Bank (CEB) was founded in 1956 by eight member states of the Council of Europe, with the primary aim of offering financial support to refugees after the end of the Second World War and promoting their integration. Since then, the range of activities of the CEB has been steadily expanded in order to serve the broader objective of promoting social cohesion and social integration throughout Europe. The CEB is active in various fields, although its strategic framework covering the period from 2023 through to 2027 places a particular focus on social development that provides for the integration of refugees and the reconstruction of the social sectors in Ukraine. Moreover, sustainable and inclusive growth is also to be supported. In this context, the CEB promotes small and medium-sized enterprises (SMEs), vocational training, social housing projects and healthcare activities. In addition, the CEB (still) finances environmental projects, offers aid when natural disasters occur and supports educational reforms. The business model also places an emphasis on financing projects that seek to preserve cultural heritage. The CEB is particularly active in Spain, Poland and Turkey (loan volume in these countries amounts to more than EUR 1.0bn in each case since 2012). Although the CEB reports directly to the Council of Europe, it also maintains partnerships and cooperation agreements with the European Union and institutions of the United Nations. While eight countries were members or shareholders of the CEB in 1956, the group of countries participating in the CEB has increased steadily over the years. In principle, all countries that are members of the Council of Europe are eligible for membership of the CEB. With the inclusion of Andorra in 2020, the number of members now stands at 42 countries. As part of the strategic framework concept, in addition to Ukraine's accession, an increase in subscribed capital of up to EUR 4.25bn is also planned.



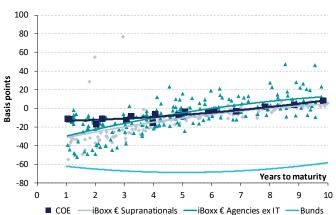
Bonds by currency



Bond amounts maturing in the next 12 months

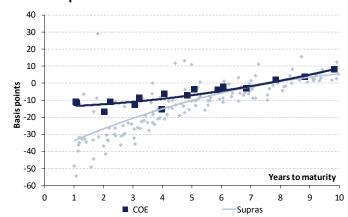


COE vs. iBoxx € Indices & Bunds



COE vs. Supranationals

1,600



NB: Foreign currencies converted into EUR at rates as at 15 March 2023; 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

85

NORD/LB

1.6%

Regulatory details

50

5 5 5 i , ,		iquidity category according to iquidity Coverage Ratio (LCR)		rcut category acco ECB repo rules		Leverage ratio/BRRD		
(0%		Level 1 II			Does not apply		
Relative value	ue							
Attractivenes	ss vs. Bunds (G-spr	ead; bp)*		ctiveness vs. M SW-spread; in	•	Index	Index weighting	
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Supranationals	

-7

-17

Funding & ESG (EURbn/EUR equivalent)

79

0	- (
Target 2023	Maturities 2023	Net Supply 2023	Funding instruments	Central bank access	No. of ESG bonds	ESG volume
7.0	3.8	3.2	Benchmarks, other public bonds, commercial paper and private placements	-	9	6.0

8

0.7%

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
28.0	17.3	17	6.5	6	4.1

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

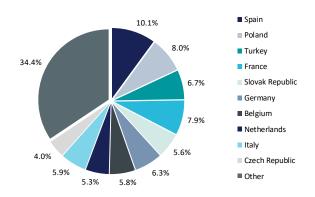
** Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies converted into EUR at rates as at 15 March 2023.

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

Balance sheet development



Loan portfolio by borrower origin

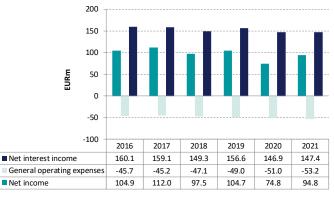


Source: Issuer, NORD/LB Markets Strategy & Floor Research

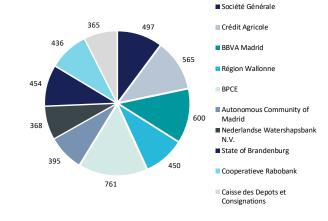
Strengths

- + Preferred creditor status
- + Robust intrinsic financial strength
- + Low loan default risk

Earnings development



Top 10 borrowers (EURm)



- Low proportion of shareholder states with AAA/ Aaa credit ratings
- High level of periphery exposure (in particular Turkey)



General information

Homepage Investor Relations

Owner(s)

26 railway companies from 25 European countries

Guarantor(s) 26 railway companies from 25 European countries

Liability mechanism

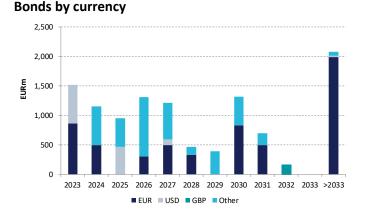
Callable capital of EUR 1.915bn

Bloomberg ticker EUROF

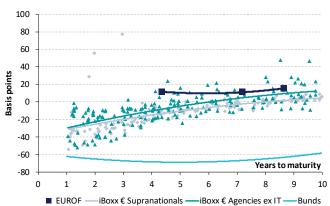
Ratings	Long-term	Outlook
Fitch	AA	stab
Moody's	Aa2	stab
S&P	AA	neg

European Company for the Financing of Railroad Rolling Stock (EUROFIMA)

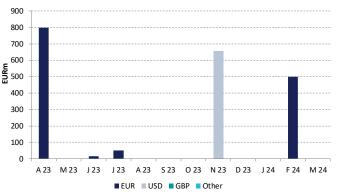
Created in 1956 as part of a treaty between 14 European countries (which has since increased to 25 countries), the purpose of the European Company for the Financing of Railroad Rolling Stock (EUROFIMA) is to promote the development of rail transport in Europe. Originally established for a limited period of 50 years, an extension of this time limit until 2056 was agreed on 1 February 1984. To promote rail transport, EUROFIMA finances railway rolling stock such as rail vehicles by providing rail companies with debt or equity capital to update and/or modernise their rail vehicle fleet. The quality of EUROFIMA's loan portfolio is very high. The institution either holds the financed assets until the loans extended are repaid, or direct or indirect guarantees are used. Never has a railway company which obtained funding from EUROFIMA been in a position where it is unable to pay back the loans received. In addition, explicit guarantees are given by the countries of origin for the companies which receive financing or are shareholders of EUROFIMA in respect of the liabilities arising from their participation in EUROFIMA. The railway companies of the European countries that signed the treaty establishing EUROFIMA, in addition to those who became shareholders in the wake of the eastward expansion between 1991 and 2006, have a stake in the institution's paidin capital amounting to EUR 479m. In addition, callable capital in the amount of EUR 1.915bn is available from the shareholders in the event of any liquidity problems. Deutsche Bahn (22.6%) and the French rail network operator Société nationale des chemins de fer français (SNCF; 22.6%) are the largest shareholders in EUROFIMA. If a participating railway company is privatised, the guarantees by the countries of origin continue to apply, which ultimately means that privatisation does not represent a credit risk. The headquarters of EUROFIMA are located in Basel, Switzerland.



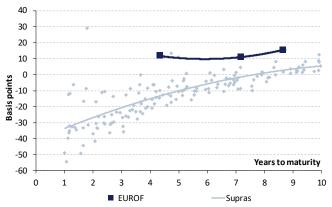
EUROF vs. iBoxx € Indices & Bunds



Bond amounts maturing in the next 12 months







NB: Foreign currencies converted into EUR at rates as at 15 March 2023; 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

Regulatory details

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
20%	-	-	Does not apply
Relative value			

Attractiveness vs. Bunds (G-spread; bp)*		Attractiveness vs. Mid-Swap (ASW-spread; in bp)*			Index weighting		
Minimum	Median	Maximum	Minimum	Median	Maximum	iBoxx € Sub-Sovereigns	iBoxx € Supranationals
92	97	99	11	12	16	0.1%	0.2%

Funding & ESG (EURbn/EUR equivalent)

Target	Maturities	Net Supply	Funding instruments	Central bank	No. of	ESG
2023	2023	2023		access	ESG bonds	volume
1.1	1.5	-0.4	Public bonds, private placements, ESG bonds, commercial paper	-	12	4.9

Outstanding volume (EURbn/EUR equivalent)

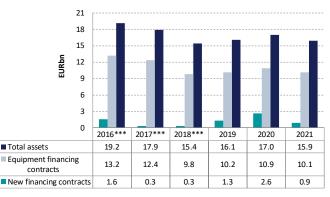
Total	of which in EUR	No. of EUR benchmarks**	of which in USD	No. of USD benchmarks**	of which in other currencies
11.3	5.8	6	1.2	0	4.2

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

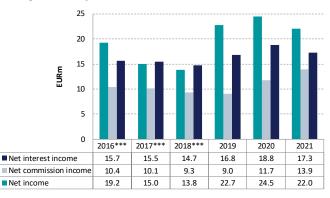
** Bonds with a minimum volume of EUR 0.5bn or USD 1.0bn. Foreign currencies converted into EUR at rates as at 15 March 2023.

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

Balance sheet development

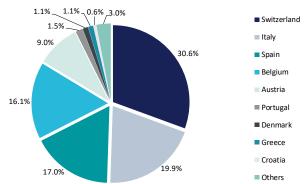


Earnings development



*** Accounting in CHF up to and including 2018. The values have been converted into EUR on the basis of the corresponding annual average exchange rates.

Loan portfolio by country

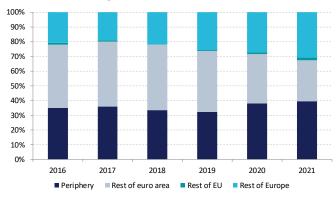


Source: Issuer, NORD/LB Markets Strategy & Floor Research

Strengths

- + High collateralisation of the loan portfolio
- + Preferred creditor status

Trend in credit exposure



- Lower utilisation on the part of the members
- No risk weighting of 0% possible
- Periphery exposure

Appendix Publication overview

Issuer Guides:

German Agencies 2022

Dutch Agencies 2022

Austrian Agencies 2022

Skandinavian Agencies (Nordics) 2022

Spanish Agencies 2022

French Agencies (tba)

<u> Issuer Guide – German Laender 2022</u>

Issuer Guide Covered Bonds 2022

SSA/Public Issuers:

Public Issuer Special – City of Amsterdam

Beyond Bundeslaender: Greater Paris (IDF/VDP)

Beyond Bundeslaender: Belgium

Spotlight on Spanish regions

Fixed Income Specials:

ESG-Update 2022

ECB interest rate decision: Backbone in times of turmoil?!

ECB interest rate decision: Roadmap to QT

ECB: The Wishing-Table, the Gold-Ass, and the Cudgel in the Sack

ECB interest rate decision: delivered as expected?

ECB acts as the 'House of Hikes' – or: Winter is coming!

Appendix Contacts at NORD/LB

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		0
Institutional Sales	+49 511 9818-9440	Covereds/SS/
Sales Sparkassen & Regionalbanken	+49 511 9818-9400	Financials
Sales MM/FX	+49 511 9818-9460	Government
Sales Europe	+352 452211-515	Länder/Regio
		Frequent Issu

Trading	
Covereds/SSA	+49 511 9818-8040
Financials	+49 511 9818-9490
Governments	+49 511 9818-9660
Länder/Regionen	+49 511 9818-9550
Frequent Issuers	+49 511 9818-9640

Origination & Syndicate		Sales Wholesale Customers
Origination FI	+49 511 9818-6600	Firmenkunden
Origination Corporates	+49 511 361-2911	Asset Finance

Collat. Management/Repos	+49 511 9818-9200
Liquidity Management	+49 511 9818-9620
	+49 511 9818-9650

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Öffentliche Kunden	<u>rm-oek@nordlb.de</u>

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NORD/LB

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