



Covered Bond Special

Covered Bond Directive: Impact on risk weights and LCR levels

NORD/LB Markets Strategy & Floor Research

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Introduction

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LCR Eligibility and risk weights for covered bonds

The project to harmonise the European covered bond market, which has been running for several years, crossed the finish line on 8 July 2022. The package of measures, which essentially consists of a directive (hereinafter: Covered Bond Directive or CBD) and a regulation, does not remain without implications for the topics of risk weighting and LCR eligibility of covered bonds. While the CBD had to be transposed into the respective legislation by the national legislators of the member states, the regulation, which stipulated changes to the Capital Requirements Regulation (CRR, EU 575/2013) in the context of covered bond harmonisation, applied immediately and with effect from 8 July 2022. The aim of this NORD/LB Covered Bond Special is to present the adequate derivation of LCR eligibility and risk weighting on the basis of the new legislative and regulatory framework. In the valuation at programme level, we focus on the composition of the iBoxx EUR Covered. While we can make a relatively clear LCR eligibility assessment for many programmes of European issuers, this is less clear for third countries or for countries that have not yet reported or have not fully reported the implementation of the Covered Bond Directive to the EU. Countries without feedback to the EU include Finland, the Netherlands and Romania. However, unlike Finland and the Netherlands, there is no covered bond EUR benchmark from Romania. Even though the Netherlands and Finland have not yet reported implementation, we assess bonds issued before 08 July 2022 as LCR-eligible. In addition, we expect implementation to take place soon, so that we also assume LCR eligibility for the future. The following countries are currently in the implementation process: Bulgaria, Croatia, Czech Republic, Greece, Lithuania, Malta, Poland, Portugal and Sweden. Here, too, we see LCR eligibility as a given. Overall, we therefore assume that the conditions are met for all EEA benchmark bonds to be considered LCR-eligible, regardless of the issue date, provided that the reporting requirements are met. The same applies depending on the rating assigned to the respective covered bonds for the risk weight. This means that for the derivation of the risk weight, in our opinion, no changes to the respective best possible risk weight have arisen in direct connection with the entry into force of the Covered Bond Directive or Regulation.

Clear rules for the EU, more challenges for third countries

Another challenge is the LCR eligibility of covered bonds from third countries, as these countries do not have to implement the CBD, but the transparency requirement of Art. 14 CBD still applies to the use of their bonds in LCR management. In particular, there are still discrepancies in the LCR valuation of covered bonds from the United Kingdom. While until Brexit a classification as Level 1 was possible at best, the securities could now be classified as Level 2A (risk weighting 20%) at best and as not LCR-eligible at worst, as the country became a third country with Brexit. The LCR regulation requires equivalent supervision and regulatory provisions. The EBA sees a case-by-case examination as necessary.



LCR eligibility of covered bonds from the United Kingdom

The memorandum of understanding previously signed with the UK, which allowed an unchanged legal background despite the lack of fundamentals, resulted in an LCR level of 2A here. However, it is now foreseeable that there will be no agreement or full and final equivalence assessment in the short term. In fact, the U.K. is apparently planning to repeal various laws dating back to its membership in the EU. Although the Covered Bond Act is not at the top of the list for reversal, the CRR is. In our view, the interpretation according to which covered bonds of issuers from the UK continue to be LCR-eligible can certainly be regarded as adequate. However, after detailed consideration and assuming compliance with the reporting requirements under Art. 14 CBD, we believe that in particular the condition of equivalent supervision as described above is subject to a certain residual risk. In our understanding, a classification of supervision in the UK as equivalent is thus subject to uncertainties. Even though the EU list of equivalent countries within the meaning of the CRR does not refer to the LCR, there is a certain deviation in the consideration of third countries. For the purposes of our publication, we also assume the best possible case of LCR eligibility (Level 2A) for the United Kingdom in the tabular overview. Hence, assuming a equivalence regimge for the United Kingdom.

Distinction from our semi-annual LCR studies and implications of the newly introduced European Covered Bonds tabulation.

For several years now we have been publishing our NORD/LB Covered Bond Special: Risk Weights and LCR Levels of Covered Bonds twice a year. This edition differs from the regular publication in that we focus on the resulting changes on the legal and regulatory side. As a result, we summarise our assessments with regard to risk weighting and LCR classification at the level of the issuers represented in the iBoxx EUR Covered. For a presentation at ISIN level, we refer to the issue of our regular publication mentioned above, which will be published in the second half of the year. With regard to the assessment of European covered bonds in terms of risk weighting and LCR eligibility, the new framework on labelling certainly offers significant assistance. If, for example, the name "European covered bond (premium)" is confirmed by the national supervisory authority at programme level, this will result in a possible classification of the corresponding programmes as Level 1 assets in the context of LCR management and a possible risk weight of 10% at best.



Risk weights of covered bonds

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Risk weights as the starting point for risk-weighted assets

The Capital Requirements Regulation (CRR) includes provisions on calculating the capital requirements for credit institutions that follow the credit risk standardised approach (SACR) to determine the risk weightings of covered bonds, among other assets. Establishing the relevant risk weighting is important insofar as, under the SACR, the risk-weighted portion of an asset is obtained from multiplication of the position's value and the risk weighting. The sum of all the portions results in the risk-weighted assets (RWA), which must be backed accordingly by equity capital. In addition to the Covered Bond Directive (CBD) applicable to the issuance of covered bonds from 8 July 2022 onwards, collateralisation by eligible cover assets and appropriately transparent cover pool reporting, rating assessments of a risk position in particular play an important role in determining the risk weighting of a covered bond. The Credit Quality Step system used for this purpose and the other conditions for preferential risk weighting of covered bonds are dealt with below.

Compliance with Article 129 of the CRR required for preferential risk weighting

Covered bonds are generally eligible for preferential treatment in relation to risk weighting under the credit risk standardised approach. The requirements that a bond has to meet in order to comply with this are laid down in Article 129 CRR. The date of issuance is also of crucial importance in this regard. The Covered Bond Directive entered into force on 8 July 2022, together with a revised Article 129 CRR and an amendment to the liquidity requirements for credit institutions (LCR-R). In the past, reference was made here to Article 52(4) of the UCITS Directive, which superficially described a covered bond. Now, however, this article also refers to the Covered Bond Directive or, based on the CBD, Article 129 CRR specifies requirements so that a covered bond can be eligible for preferential risk weighting. As a result, conformity with the covered bond legislation in the particular country will now have to be checked, as the Member States had to transpose the CBD into national law. Nevertheless, slightly different requirements apply to covered bonds issued before 8 July 2022.

Until now, Article 52(4) of the UCITS Directive had been the "anchor" in the risk weighting of covered bonds

The relevant Article (Article 52(4) of the UCITS Directive) defined requirements for covered bonds, even though this definition under the UCITS Directive may not initially have been seen in connection with establishing risk weightings or other regulatory metrics. Instead, Article 52(4) provides that undertakings for collective investment in transferable securities (UCITS) may, under certain conditions, hold a higher proportion of certain bonds. This is still the case. However, the Article also served in many cases as a basis for defining covered bonds. The aforementioned Directive was previously adapted to the future CB Directive in January 2020.



Article 52(4) of the UCITS Directive was adapted to the CBD in 2020

It also followed from the requirements of "old" Article 52(4) of the UCITS Directive, which has referred to the CBD since 7 January 2020, that covered bonds issued outside the European Economic Area (EEA) may under no circumstances be UCITS-compliant. The Covered Bond Directive, or rather the relevant transposition into national law, is now regarded as the reference point.

Article 129 CRR defines the requirements for covered bonds and risk weighting

Together with the Covered Bond Directive a clear definition of the collateral and requirements for covered bonds was also included in Article 129 CRR. In conjunction with Directive 2019/2162, this Article will then be used for determining the risk weighting. Certain requirements of Article 129 do not apply to covered bonds issued up to 31 December 2007 or, as the case may be, up to 7 July 2022. If an issuer's covered bonds (both "old" and "new") are issued from one cover pool, however, the requirements must be met in full, so that this applies automatically to the old bonds as well. The table below shows which assets qualify as eligible collateral. However, covered bonds issued up to 7 July 2022 must also meet the requirements of Art. 129 (1) to (3), i.e. including requirements and limite for creditworthiness and borrowers, as well as LTV limits and regular collateral monitoring. Liens on aircraft and loans to small and medium-sized enterprises (SMEs) are still disregarded, with the result that they are neither eligible as cover assets within the meaning of the CRR, nor do they benefit from preferential risk weighting.

Review of property values as a hurdle for preferential risk weighting

As mentioned above, the revised Article 129 CRR has brought about changes in the monitoring of property values. These reviews must now be conducted at least once a year, regardless of whether the property is residential, commercial or a ship. This is a fundamental point in the grandfathering of "old bonds". When the CRR was introduced in 2013, real estate values were to be monitored annually in the case of commercial properties, and every three years for residential properties. Although issuers do not have to conduct the review each year if the bond was issued before 31 December 2007, the annual review now also applies to bonds placed at a later date. In Germany, the Association of German Pfandbrief Banks (Verband Deutscher Pfandbriefbanken, vdp) maintains a database as an ongoing market monitoring system. The database has been tracking price trends in Germany since 2007 and meets the requirements of Art. 208 CRR. As reported by vdpResearch, 90% of the credit institutions based in Germany use the system for monitoring annual rent and price changes, thus fulfilling the extended requirement of Art. 129(3) CRR. Issuers and covered bond creditors will consequently need to spend more time on additional checks in order to continue to benefit from a lower risk weighting, because not every country can provide access to the type of transaction database mentioned above. Statistical market trends are sufficient to meet the requirement; monitoring at individual asset level is not necessary at this point. In Germany, BaFin (the German financial regulator) has agreed the following: in the event of changes in market values as provided by the vdp, at the level of -10% for commercial and -20% for residential properties within a period of three years, a "warning" will be issued. On this basis, the institutions using this data will examine their portfolio more closely and, if necessary, only then conduct a review at individual loan level. There is only a change to the required cycle of monitoring itself.



Transparency requirement / investor information now regulated through the CBD

Up to 7 July 2022, Art. 129(7) CRR required that investors must be able to present certain portfolio information to the competent authority in order to obtain preferential treatment of covered bonds. This included: value of the cover pool and outstanding covered bonds, geographical distribution and type of cover assets, loan size, interest rate and currency risks, maturity structure of cover assets and covered bonds, and loans ≥90 days past due. However, this passage no longer appears in the current version of Article 129 CRR. Instead, Article 129 CRR now requires compliance with Art. 3 No. 1 CBD. Article 14 CBD includes extensive requirements that issuers must meet with regard to investor information. This information must be made available at least every quarter, whereas previously it was twice a year. In addition to the above-mentioned information, the following must be reported: an ISIN list of all covered bonds (if available), the type of cover assets, the valuation method, extended information on market risk and on credit and liquidity risks, maturity extension triggers, required/actual overcollateralisation (statutory, contractual, voluntary).

Article : Para- graph	Issued up to (paragraphs marked with x do not need to be met in order to qualify for lower risk weighting) Description	Current	Up to 31.12.2007	Up to 7 July 2022
1	To be eligible for the preferential treatment set out in Art. 3(1) No. 1 CBD, covered bonds must meet the requirements set out in Art. 129(3)(3a)(3b) CRR and be collateralised by any of the following assets: Exposures to or guaranteed by: a) Central governments, the ESCB central banks, public sector entities, regional governments or local au-		X	
	thorities in the Union b) Third-country central governments, third-country central banks, multilateral development banks, international organisations (CQS 1), third-country public sector entities, third-country regional governments or third-country local authorities (CQS 1), and exposures within the meaning of this point that qualify with CQS 2, provided that they do not exceed 20% of the nominal amount of outstanding covered bands of the invalid institutions.			
	ered bonds of the issuing institutions c) Credit institutions that qualify for CQS 1 and 2 or CQS 3 under the following conditions: i) short-term deposits (original maturity <100 days), provided they comply with Art. 16 CBD, or ii) derivative contracts as referred to in Art. 11(1) CBD			
	 d) Residential loans: LTV limit 80% (in conjunction with paragraph 1c) e) Residential loans (guaranteed by a protection provider referred to in Art. 201 CRR with min. CQS 2) with max. LTV of 80% for a residential property located in France, provided that the loan-to-income ratio is ≤33% when the loan has been granted (further requirements apply to borrower and collateral) 			
	f) Commercial property loans: LTV limit 60%; LTV limit of 70% if OC (overcollateralisation) is at least 10%, the bondholders' claim meets the legal certainty requirements set out in Chapter 4 CRR, and this claim has priority over all other claims on the collateral			
1-	 g) Loans secured by maritime liens: LTV limit 60%; 60% of the ship's value less any prior maritime liens a) Exposures to credit institutions (Art. 129(1) subparagraph 1 (c) with CQS 1, ≤ 15% of the nominal 		V	
1a	amount of issued covered bonds)		Х	
	b) Exposures to credit institutions with CQS 2, ≤ 10% of the nominal amount of issued covered bonds			
	c) Short-term deposits of credit institutions or derivative contracts with CQS 3 (in accordance with Art. 129(1) subparagraph 1 (c) (i) or (ii) CRR); ≤8% of the nominal amount of the issued covered bonds (additional approval requirements apply in the case of derivative contracts)			
	d) Total exposure to credit institutions with CQS 1, 2 or 3, ≤15% of the nominal amount of the issued covered bonds, and exposure to credit institutions that are assigned to CQS 2 or 3 may not exceed 10% of the nominal amount of the issuing institution's outstanding covered bonds			



Article :	Issued up to (paragraphs marked with x do not need to be met in order to qualify for lower risk weighting)						Current	31.12.2007	2022		
Absatz		Be	zeichnung							33	
1b	Art. 129(1a) CRR applies not eral of an internal covered b			Art. 8 CBD (in	nternally is	sued cove	red bonds	; collat-			
1c	For the purposes of Art. 129 plies over the entire term of		aph 1 (d) CRR	, the LTV cei	ling of 80%	per loan s	shall apply	; it ap-			
1d		the purposes of Art. 129(1) subparagraph 1 (f and g) CRR, the LTV ceiling of 60% or 70% per loan shall sly; it applies over the entire term of the loan									
2	The cases referred to in Art. solely for the protection of c				relate to	collateral v	vhich is in	tended			
3	In the case of collateralisatio quirements for immovable p least annually.			•	•			•		X	
3a	Minimum overcollateralisation Member States may set a low vided that: a) overcollateralisation is base assets, or asset valuation is base b) the ratio does not fall below The assets contributing to the Art. 129(1a) CRR	wer ratio or al sed on a form based on the c bw 2%, based e minimum o	al approach to collateral valu on the nomin vercollateral in vercollateralise.	npetent auth hat takes int le and nal principle sation ratio	co account referred to are not sub	the under o in Art. 15 oject to the	ropriate rallying risk of (6) and (7) and (7)	of the CBD. ecified in		X	X
3b	Exposures referred to in Art. provided the thresholds for a with	, ,	•			•		• • • • • • • • • • • • • • • • • • • •		X	X
4	Covered bonds for which a recorresponds to Art. 136 CRR		CAI is available	e are assigne	ed the follo	wing risk v	veighting,	which			
	Credit quality step (CQS)	1	2	3	4		5	6			
	Risk weighting (RW)	10%	20%	20%	50%	5	0%	100%			_
5	Unrated covered bonds are a sures to the issuing institution	_	weighting ba	ased on the	risk weight	ing of prio	r unsecur	ed expo-			
	If a RW of X% applies to expo	sure to the ir	nstitution,		20%	50%	100%	150%			
									-		

Covered bonds issued before 31 December 2007 are not subject to the requirements of Art. 129(1), (1a),

(3), (3a) and (3b) CRR. The preferential treatment set out in paragraphs 4 and 5 may be applied to them

Covered bonds issued before 8 July 2022 that meet the requirements of this Regulation, in the version ap-

plicable at the time of issue, shall not be subject to the requirements of paragraphs 3a and 3b. The prefer-

10%

20%

50%

100%

ential treatment under paragraphs 4 and 5 may be applied to them until their due date

Source: CRR, NORD/LB Markets Strategy & Floor Research; X = condition is NOT to be fulfilled or that version from the time of issue

then the covered bond is assigned a RW of X%

until their due date.

6

7



Rating assessments as further decisive factor

Fulfilment of the requirements described above constitutes a necessary condition for a preferential risk weighting of covered bonds. As a further and decisive factor in determining the risk weighting, Article 129 (4) and (5) CRR lay down requirements with regard to rating assessments. While paragraph 4 applies risk weighting in the case of at least one existing rating assessment, paragraph 5 applies risk weighting in the case where a covered bond does not have a rating.

Determining the Credit Quality Step for more than one recognised rating assessment

Rating 2		CQS 1			CQS 2			CQS 3			
Rating 1		AAA	AA+	AA	AA-	A+	Α	A-	BBB+	BBB	BBB-
	AAA										
COC 1	AA+		Credit	Quality		Credit Quality			Credit Quality		
CQS 1	AA	Step 1			Step 2		Step 3				
	AA-					·					
	A+	Crodit Quality			Credit Quality		Credit Quality				
CQS 2	Α	Credit Quality									
	A-		Ste	p 2		Step 2		Step 3			
	BBB+		Quality	colity Crodit Cyclity			lity	Condit Ovality			
CQS 3	BBB			,		Credit Quality		псу	Credit Quality		
	BBB-		Step 3			Step 3		Step 3			

Source: Regulation 2016/1799 and 2021/2005, Regulation 575/2013, NORD/LB Markets Strategy & Floor Research

Deriving the Credit Quality Step of a covered bond

Rating assessments are always taken into account using the Credit Quality Step system, which is laid down in Regulation 2016/1799 and in the 2021/2005 amendment. A total of six different credit rating categories are assigned through ratings issued by recognised External Credit Assessment Institutions (ECAI) (see: Mapping of rating assessments). Since risk positions can in principle have several ECAI ratings, a new mapping is required to determine the Credit Quality Step (CQS) if there is more than one rating available (see table above). Irrespective of the number of eligible ratings, Article 138 CRR is key to determining the Credit Quality Step. If two ratings are available for a risk position, the applicable rating shall be the one resulting in the higher of the two possible risk weightings, if the two ratings differ (see table). A higher risk weighting is equivalent to a lower credit rating. In this respect, we understand an AA-equivalent rating to be lower than an AAAequivalent rating. If more than two ratings are available for a risk position, the two ratings resulting in the lowest risk weighting, i.e. the two highest ratings, are applicable. If these two assessments differ from each other, the Credit Quality Step is determined on the basis of the rating (out of these two ratings) that results in the higher risk weighting. It follows from the requirements of Article 138 CRR that only the two highest ratings, if available, are relevant to determining the Credit Quality Step as defined in the CRR, even if a position has more than two ratings from recognised rating agencies. The resulting simplification of CQS provisions is shown in the table; no distinction is made with regard to the rating grades of individual agencies. Mapping of these equivalence ratings is shown in the Mapping of rating assessments table.



Best rating and fulfilment of all requirements leads to a risk weighting of 10%

To be eligible for preferential treatment of risk weighting, Article 129(1) CRR stipulates that, in addition to cover by eligible assets referred to in the aforementioned Article, the requirements of paragraphs 3 (monitoring of property/ship value), 3a (overcollateralisation) and 3b (substitution cover) must be met. If the requirements are deemed to have been met, the preferential risk weighting is determined on the basis of the corresponding Credit Quality Step of the issue in accordance with Article 129(4) CRR, assuming that at least one ECAI rating assessment is available. Accordingly, covered bonds that qualify for Credit Quality Step 1 can benefit from a preferential risk weighting of 10%. If, on the other hand, the creditworthiness of a covered bond corresponds only to Credit Quality Step 2, the risk weighting increases to 20%. This also applies to bonds that qualify for Credit Quality Step 3. With regard to covered bonds issued between 1 January 2008 and 8 July 2022, the requirements of the CRR in force at the time of issue must be met. They are not subject to the requirements of Art. 129(3a) and (3b) CRR. The assignment system applies uniformly.

Risk weighting of covered bonds according to Article 129(4) CRR: necessary conditions met; ECAI rating

Credit Quality		Covered bond rating		Risk weighting of
Step	Fitch / S&P	Moody's	DBRS	covered bonds; with rating
1	AAA bis AA-	Aaa bis Aa3	AAA bis AA (low)	10%
2	A+ bis A-	A1 bis A3	A (high) bis A (low)	20%
3	BBB+ bis BBB-	Baa1 bis Baa3	BBB (high) bis BBB (low)	20%
4	BB+ bis BB-	Ba1 bis Ba3	BB (high) bis BB (low)	50%
5	B+ bis B-	B1 bis B3	B (high) bis B (low)	50%
6	≤CCC+	≤Caa1	≤CCC (high)	100%

Source: Regulation 2016/1799 and 2021/2005, CRR, NORD/LB Markets Strategy & Floor Research

Unrated bonds can also benefit from preferential risk weighting

If a covered bond meets the requirements of the previous paragraph, but does not have a rating by a recognised ECAI, this does not automatically result in an increased risk weighting for the bond. Instead, the senior unsecured credit rating of the issuer must be taken into account in this case. For this purpose, the corresponding Credit Quality Step of unsecured risk positions is first determined and then the relevant covered bond risk weighting is derived from this step. It follows that, in the event that senior unsecured bonds and covered bonds are assigned to the same Credit Quality Step, there will be no regulatory disadvantage due to the lack of rating assessment.

Risk weighting of covered bonds according to Article 129(5) CRR: necessary conditions met; no ECAI rating

Credit Quality		Senior unsecur	ed rating	Risikogewicht		Risk weighting of covered bonds;
Step	Fitch / S&P	Moody's	DBRS	Senior Unsecured		without rating
1	AAA bis AA-	Aaa bis Aa3	AAA bis AA (low)	20%	\rightarrow	10%
2	A+ bis A-	A1 bis A3	A (high) bis A (low)	50%	\rightarrow	20%
3	BBB+ bis BBB-	Baa1 bis Baa3	BBB (high) bis BBB (low)	50%	\rightarrow	20%
4	BB+ bis BB-	Ba1 bis Ba3	BB (high) bis BB (low)	100%	\rightarrow	50%
5	B+ bis B-	B1 bis B3	B (high) bis B (low)	100%	\rightarrow	50%
6	≤CCC+	≤Caa1	≤CCC (high)	150%	\rightarrow	100%

Source: Regulation 2016/1799 and 2021/2005, CRR, NORD/LB Markets Strategy & Floor Research



Risk weighting of covered bonds according to Articles 120 and 121 CRR: necessary conditions not met

Credit Quality	Co	vered bond or sov	vereign rating	Risk weighting of covered bonds;	Risk weighting of covered bonds;
Step	Fitch / S&P	Moody's	DBRS	with rating, Art. 120	without rating ¹⁾ , Art. 121
1	AAA bis AA-	Aaa bis Aa3	AAA bis AA (low)	20%	20%
2	A+ bis A-	A1 bis A3	A (high) bis A (low)	50%	50%
3	BBB+ bis BBB-	Baa1 bis Baa3	BBB (high) bis BBB (low)	50%	100%
4	BB+ bis BB-	Ba1 bis Ba3	BB (high) bis BB (low)	100%	100%
5	B+ bis B-	B1 bis B3	B (high) bis B (low)	100%	100%
6	≤CCC+	≤Caa1	≤CCC (high)	150%	150%

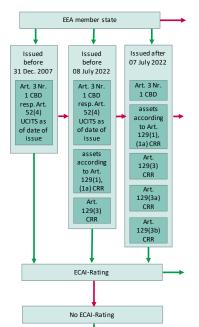
¹⁾ In this case, the risk weighting is assigned on the basis of the credit quality step of the central government in which the institution is domiciled Source: Regulation 2016/1799 and 2021/2005, CRR, NORD/LB Markets Strategy & Floor Research

Non-EEA covered bonds: Failure to meet the necessary conditions leads to a risk weighting of at least 20%

In addition to the possibility that the necessary conditions, that the bond is CBD-compliant according to Art. 3 No. 1 and meets the requirements of Article 129(3), (3a) and (3b) CRR, and that it is collateralised with cover assets according to Art. 129(1) CRR, and a rating by an ECAI is available, or such a rating is not available, there is also a classification system in the event that the covered bond is not CBD-compliant. This is relevant, for example, to issues from outside the EEA. In this case, too, rating assessments play a crucial role and have a significant influence on the risk weighting to be applied. The decisive factor in this respect is no longer Article 129 CRR, but Articles 120 and 121 CRR (exposure to rated or unrated institutions). The risk weighting must be determined on the basis of Article 120 CRR if at least one ECAI assessment is available, while Article 121 CRR deals with positions without an ECAI rating. Article 120 CRR also makes a distinction between positions with a residual maturity of more than three months and those with a shorter maturity. Due to the long-term nature of covered bonds, however, we will only look at determining the risk weighting for maturities of more than three months. Covered bonds that do not meet the requirements of the three necessary conditions have a risk weighting of 20% if they have at least one recognised rating assessment at Credit Quality Step 1. This is also the lowest possible risk weighting for non-EEA covered bonds. If, on the other hand, an ECAI rating assessment is not available for the covered bonds, the relevant risk weighting is determined on the basis of the Credit Quality Step of the central government in which the issuer is domiciled; the risk weighting is higher compared with exposures to central governments in the investment-grade segment.



Determining covered bond risk weights



Risk weighting of covered bonds according to Articles 120 and 121 CRR: necessary conditions <u>not met</u>; <u>with or without</u> ECAI rating

Credit Quality Step	Credit Quality Step	Credit Quality Step	Credit Quality Step
1	AAA- and AA segment	20%	20%
2	A segment	50%	50%
3	BBB segment	50%	100%
4	BB segment	100%	100%
5	B segment	100%	100%
6	≤CCC segment	150%	150%

Risk weighting of covered bonds according to Article 129(4) CRR: necessary conditions <u>met</u>; <u>with ECAI rating</u>

Credit Quality Step	Credit Quality Step	Credit Quality Step
1	AAA and AA segment	10%
2	A segment	20%
3	BBB segment	20%
4	BB segment	50%
5	B segment	50%
6	≤CCC segment	100%

Risk weighting of covered bonds according to Article 129(5) CRR: necessary conditions <u>met</u>; <u>without</u> ECAI rating

Credit Quality Step	Credit Quality Step	Credit Quality Step		Credit Quality Step
1	AAA and AA segment	20%	\rightarrow	10%
2	A segment	50%	\rightarrow	20%
3	BBB segment	50%	\rightarrow	20%
4	BB segment	100%	\rightarrow	50%
5	B segment	100%	\rightarrow	50%
6	≤CCC segment	150%	\rightarrow	100%

Source: Regulation 2016/1799 and 2021/2005, CRR, NORD/LB Markets Strategy & Floor Research

Green arrow: condition met, red arrow: condition not met



Basis of the liquidity coverage ratio

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The LCR as liquidity requirement in a stress scenario

Based on the CRR (Art. 412(1) CRR and cont.), the liquidity coverage ratio (LCR) requires credit institutions to hold high-quality liquid assets (HQLA) to compensate for potential net liquidity outflows within a 30-day stress scenario. The relevant requirements to supplement the CRR are laid down in Delegated Regulation 2015/61 and apply to credit institutions supervised under the CRD (2013/36/EU). The LCR Regulation specifies in particular the eligible assets and the structure of the liquidity buffer. Firstly, a distinction is made between Level 1 and Level 2 assets. Within Level 2, a further distinction is made between Level 2A and Level 2B assets. In addition to the allocation of eligible assets to the aforementioned Level categories, the market values of eligible assets are subject to haircuts in some cases; these are higher for units in undertakings for collective investment (UCI) (see table: Eligible assets, which shows an excerpt of possible assets that could be used).

Calculation of the LCR (Art. 4 LCR-R)

The LCR is calculated using the following formula:

Source: Delegated Regulation 2015/61, NORD/LB Markets Strategy & Floor Research

Disclosure of the LCR

The disclosure shall take into account Article 447 CRR (key metrics) and Articles 433a to 433c CRR (disclosure by "category of institution"), in each case in conjunction with Article 451a CRR (disclosure of liquidity requirements). Article 451a CRR in conjunction with Articles 433a to 433c CRR require large listed institutions to disclose on a quarterly basis, for each quarter of the disclosure period, the average of their LCR, the average or averages of the liquidity coverage ratio, total liquid assets (after applying haircuts), liquidity outflows, inflows and net liquidity outflows, based on the observations of the last twelve months. Large unlisted institutions and small and non-complex listed institutions report semi-annually; all others disclose this information annually.

LCR for different currencies (Art. 415 CRR and Art. 4(5) and 19 LCR-R)

Credit institutions include all items in the calculation, regardless of their denomination. However, calculation of the LCR is mandatory in the reporting currency and in all currencies in which the institution holds more than 5% of its total liabilities or those of the respective liquidity sub-group. In countries where the institution has a significant branch as referred to in Article 51 CRD, a separate LCR must also be calculated in this currency for the relevant liabilities.



Failure to meet the requirements of the LCR (Article 414 CRR, Art. 4 LCR-R)

As a general rule, assets used to calculate the LCR may be sold to cover liquidity outflows. Institutions are allowed to do so even if disposal of the asset during periods of stress leads to an LCR below the required level. If an institution does not meet, or does not expect to meet, the LCR requirements, a plan for the restoration of compliance must be submitted to the competent authority. The competent authorities will then monitor implementation of the plan to restore compliance with requirements.

Liquidity level (Art. 5 LCR-R)

In order to identify a period of stress, Article 5 of the LCR Regulation defines certain indicators of circumstances in which a credit institution may be considered as being subject to stress:

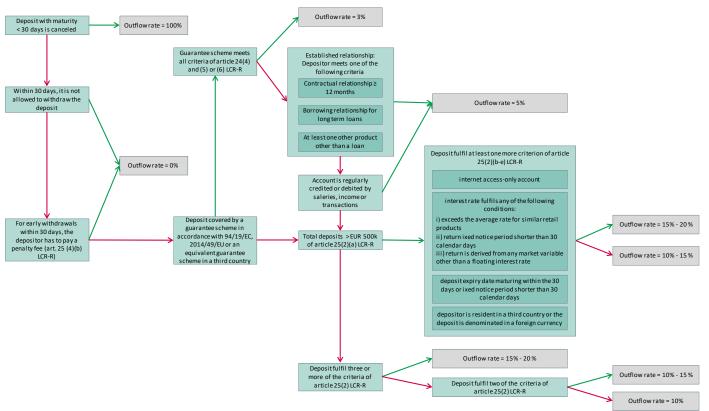
- The run-off of a significant proportion of its retail deposits
- A partial or total loss of unsecured wholesale funding capacity, including wholesale deposits and other sources
- A partial or total loss of secured, short-term funding
- Liquidity outflows as a result of a credit rating downgrade of up to three notches
- Increased market volatility affecting the value of collateral or its quality or creating additional collateral needs
- Unscheduled draws on liquidity and credit facilities
- Potential obligation to buy-back debt or to honour non-contractual obligations

Calculation of net liquidity outflows (Art. 20 LCR-R)

In addition to the classification of assets into liquidity classes, it is important to establish which items are included as cash inflows or outflows in the calculation of net liquidity outflows. Article 20 of the LCR-R basically states that liquidity inflows are deducted from liquidity outflows. The sum shall not be less than zero. The rules for determining liquidity outflows are set out in Articles 22 to 31a of the LCR-R. Liquidity inflows are defined in Articles 32 to 34 LCR-R. The outflow or inflow rates in each case are multiplied by the value of the position, the maximum outflow or inflow amount, or the maturity amount of the next 30 days. The liquidity outflows listed below are not intended to be exhaustive. For example, we have omitted Art. 26 ("Outflows with inter-dependent inflows").



Outflows from retail deposits (Article 24 / 25 LCR-R)



Source: LCR-R, NORD/LB Markets Strategy & Floor Research; Note: higher outflow rates possible on the instruction of the authority, or due to divergent rates in third countries; green = condition met; red = condition not met

Outflows from operational deposits and other liabilities (Article 27 / 28 LCR-R)

Article	Item	Rate
28(2)	Liabilities resulting from the institution's own operating expenses	0%
27(2)	Deposits covered by a deposit guarantee scheme, for clearing, custody, cash management or other comparable services	5%
28(1)	Deposits by clients that are non-financial customers, sovereigns, central banks, multilateral development banks, public sector entities, credit unions authorised by a competent authority, personal investment companies or by clients that are deposit brokers (to the extent they do not fall under Art. 27 LCR-R), which are covered by a deposit guarantee scheme	20%
27(1)(a) and (4)	Deposits held in order to obtain clearing, custody, cash management or other comparable services	25%
27(1)(b)	Deposits held within institutional protection schemes or within a group of cooperative credit institutions	25%
27(1)(c), (4), (6)	Deposits held in the context of another established operational relationship	25%
27(1)(d) and (4)	Deposits held to obtain cash clearing, central institution or guarantee scheme services	25%
28(1)	Deposits by clients that are non-financial customers, sovereigns, central banks, multilateral development banks, public sector entities, credit unions authorised by a competent authority, personal investment companies or by clients that are deposit brokers (unless Art. 27 LCR-R applies)	40%

Source: LCR-R, NORD/LB Markets Strategy & Floor Research; Note: deposits received as collateral are not covered by the provisions of Articles 24, 25, 27, 28 or 31a LCR-R



Outflows from operational deposits and other liabilities (Article 27 / 28 LCR-R)

Article	Item	Rate
27(3)	Deposits from credit institutions placed at the central institution that are considered as liquid assets	100%
27(5)	Deposits arising out of a correspondent banking relationship or from the provision of prime brokerage services	100%
28(5)	Offsetting balances held by law in segregated accounts are treated in accordance with Art. 32 LCR-R	100%
28(6)	Bonds and other debt securities issued by the credit institution (except purely retail transactions, in which case they are treated as deposits)	100%

Source: LCR-R, NORD/LB Markets Strategy & Floor Research; Note: deposits received as collateral are not covered by the provisions of Articles 24, 25, 27, 28 or 31a LCR-R

Outflows arising from liabilities resulting from securities financing transactions and capital market-driven transactions maturing in ≤ 30 days (Article 28 LCR-R)

Article	Collateral	Rate					
28(3) (2nd subpara-	In derogation of Art. 28(3) subparagraph 1, the outflow rate is 0% if the counterparty is the domestic central bank of the credit institution	0%					
graph)							
28(3)(a)	If they are collateralised by assets that would qualify as HQLA 1A (except covered bonds)	0%					
28(3)(b)	If they are collateralised by assets that would qualify as HQLA 1B (covered bonds)	7%					
28(3)(c)	If they are collateralised by assets that would qualify as HQLA 2A	15%					
28(3)(d)	If they are collateralised by assets that would qualify as HQLA 2B as listed in Art. 13(2)(g) i, ii, iv LCR-R	25%					
28(3)	In derogation of Art. 28(3) subparagraph 1, the outflow rate is 25% if the outflow rate would require >25%,	25%					
(3rd	but the counterparty is an eligible counterparty						
subpara-							
graph)							
28(3)(e)	f they are collateralised by assets that would qualify as HQLA 2B covered bonds						
28(3)(f)	If they are collateralised by assets that would qualify as HQLA 2B as listed in Art. 13(2)(g) iii or v LCR-R						
28(3)(g)	If they are collateralised by corporate debt securities, shares or certain non-interest-bearing assets (CQS 5 or better) issued by religiously observant credit institutions that would qualify as HQLA 2B (Art. 12(1)(b)(c)(f) LCR-R)	50%					
28(3)(h)	If they are collateralised by shares or units in a UCI and would be classified as HQLA, same minimum haircut as set out in Article 15(2) and (3) LCR-R	0-55%					
28(3)(i)	If they are collateralised by assets that do not fall under Art. 28(3) a) to h) LCR-R	100%					
28(4)	In the case of collateral swaps and similar transactions, maturity \leq 30 calendar days, an outflow is only recognised for the net value if the borrowed asset would be subject to a lower haircut than the lent asset. If the asset is not liquid, 100% is applicable	Difference arising from the haircuts on borrowed and lent assets					
	By way of derogation, 0% on the borrowed asset if the counterparty is the domestic central bank	0%					
	By way of derogation, the outflow rate is 25% if the outflow rate would require >25%, but the counterparty is an eligible counterparty	25%					
28(7)	In the case of assets borrowed on an unsecured basis (maturity \leq 30 days), unless the credit institution owns the borrowed assets and they are not part of the liquidity buffer	100%					

Source: LCR-R, NORD/LB Markets Strategy & Floor Research; Note: deposits received as collateral are not covered by the provisions of Articles 24, 25, 27, 28 or 31a LCR-R



Additional outflows (Articles 23, 29 and Art. 30 LCR-R)

Article	ltem	Rate					
23	In the context of products or services assessed in accordance with Art. 5 LCR-R, any material reputational damage: a) Other off-balance sheet and contingent funding obligations, including uncommitted funding facilities b) Undrawn loans and advances to wholesale counterparties c) Mortgage loans that have been agreed but not yet drawn down d) Credit cards e) Overdrafts f) Planned outflows related to renewal or extension of existing retail or wholesale loans, or the granting of new retail or wholesale loans g) Planned derivatives payables, other than the contracts and credit derivatives listed in Annex II of Regulation (EU) No. 575/2013 h) h) Trade finance off-balance-sheet related products as referred to in Art. 429 and Annex I of Regula-	Case- specific					
	tion (EU) No. 575/2013 (5% possible if approved by the competent authority)						
29	Outflows within a group or an institutional protection scheme – therefore not described in more detail here						
30(1)	Collateral for derivative interest rate and foreign currency transactions and credit derivatives in the form of HQLA 1B assets as referred to in Article 10(f) LCR-R						
30(1)	Collateral for interest rate and foreign currency transactions and credit derivatives (apart from cash and HQLA 1 assets as referred to in Art. 10 LCR-R)						
30(12)	Prime brokerage services: where a credit institution has financed the assets of one client by matching them with the short sales of another client, the contingent obligation will apply in this case	50%					
30(2)	Collateral or cash outflows due to steps taken by the supervisory authority in the event of deterioration in credit quality	100%					
30(3)	Collateral for adverse market conditions of derivatives transactions (30(3) LCR-R in conjunction with Art. 415 CRR and delegated regulation (EU)2017/208)	100%					
30(4)	Net liquidity outflow within a 30-day period from interest rate and foreign currency transactions	100%					
30(5)	Securities or other assets sold short and to be delivered within 30 days (covered by securities financing transaction)	100% (0%)					
30(6)(a)	Excess collateral that can be called at any time	100%					
30(6)(b)	Collateral that is due to be posted to a counterparty within 30 days	100%					
30(6)(c)	Collateral that would qualify as liquid assets, but which can be substituted by non-liquid assets at any time	100%					
30(8) and (10)	Asset-backed securities, covered bonds and structured financing instruments issued by the institution or an SPV; maturity within 30 calendar days	100%					
30(9) and (10)	Maturing amount of financing facilities (including asset-backed money market instruments, conduits, securities investment vehicles) or the amount of assets that could potentially be returned	100%					

Source: LCR-R, NORD/LB Markets Strategy & Floor Research; Note: deposits received as collateral are not covered by the provisions of Articles 24, 25, 27, 28 or 31a LCR-R



Outflows from credit and liquidity facilities and other outflows (Articles 31 and 31a LCR-R)

Article	Committed undrawn credit lines in respect of:	Factor
31(3)	Retail customers; maximum amount that can be drawn down within 30 days	5%
31(4)	Non-retail, non-financial customers, sovereigns, central banks, multilateral development banks and public sector entities, provided they are <u>not</u> used as a substitute for the customer's normal market access; maximum amount that can be drawn down within 30 days	10%
31(9)	Promotional loans as referred to in Article 31(9) LCR-R may either use a symmetric inflow and outflow procedure (in the case of pass through loans) or treatment by the lender is based on Art. 31(3)(4) LCR-R	0%/ 5%/10%
31(6)	Maximum amount of the undrawn committed liquidity facility that was provided to a securitisation special purpose entity (SSPE) for the purchase of assets from non-financial customers	10%
31(5)	Facilities <u>not</u> for a) retail, b) financial customers, sovereigns, central banks, multilateral development banks and public sector entities, c) financing not as a substitute for the customer's normal market access, when the customer is unable to cover its financing requirements on those markets at that time; maximum amount that can be drawn down within 30 days	30%
31(5)	Personal investment companies; maximum amount that can be drawn down within 30 days	40%
31(8)(a)	Credit institutions, other regulated financial institutions, UCIs and non-open ended investment schemes, insurance undertakings and investment firms; maximum amount that can be drawn down within 30 days	40%
31(7)	Central institutions shall take into account liquidity funding committed to a member credit institution, provided that it qualifies as liquid assets in accordance with Art. 16(2) LCR-R (calculation with committed capital amount)	75%
31(8)(b)	Securitisation special purpose entities other than those referred to in Article 31(6) LCR-R and where there are arrangements under which the credit institution is required to buy or swap assets	100%
31(8)(c)	Financial customers other than those listed in Article 31 (1) to (7), (8a) and (8b) LCR-R	100%
31a(1)	Liabilities becoming due within the next 30 calendar days and not covered by Art. 24 to 31 LCR-R	100%
31a(2)	Net contractual commitments to non-financial customers (all except central banks and financial customers) within the next 30 calendar days, other than commitments referred to in Art. 24 to 31 LCR-R	100%

Source: LCR-R, NORD/LB Markets Strategy & Floor Research; Note: deposits received as collateral are not covered by the provisions of Articles 24, 25, 27, 28 or 31a LCR-R

Other cash outflows

All liquidity outflows not mentioned in Articles 23 - 31 LCR-R that could occur within the next 30 calendar days are weighted at 100%.

Liquidity inflows

The liquidity inflows to be deducted from the liquidity outflows are also calculated by weighting the nominal inflow exposure with an inflow rate. As a general rule, only inflows that are expected within the next 30 days, are contractually agreed and are not considered overdue, and for which the credit institution has no reason to expect non-performance, are taken into account. Assets valued at market value are not included in the LCR calculation, as the market value already prices in future payment flows. Inflows are generally only recognised up to a maximum of 75% of the outflows. However, Article 33 of the LCR Regulation allows various exceptions in this respect.



Overview of inflows (Article 32 LCR-R)

Article	Exposures contractually expected/becoming due within 30 days, and are not overdue:	Factor
32(2)(a)	Monies due from central banks and financial customers	100%
32(2)(b)	Monies due from trade finance transactions referred to in Art. 162(3) subparagraph 2 (b) CRR	100%
32(2)(c)	Monies due from securities	100%
32(2)(d)	Monies due from positions in major indexes of equity instruments, unless also recognised as HQLA	100%
32(3)(a)	Monies due from trade finance transactions or maturing securities (32(3)(a) does not apply to payments from securities financing transactions and capital market-driven transactions)	100%
32(4)	Payments for redemption purposes from non-financial customers (payments due from credit institutions	50%
1st	established/sponsored by a central government or regional authority to provide promotional loans, com-	(Propor-
sen-	mitments from multilateral development banks or public sector entities; taking into account inflows up to	tionate)
tence	the value of outflows)	
32(3)(b)	Monies due from collateralised securities financing transactions and capital market-driven transactions:	
	i) If collateralised by an asset that would qualify as HQLA 1A if re-used (except covered bonds referred to in Art. 10(1)(f) LCR-R)	0%
	ii) If collateralised by an asset that would qualify as HQLA 1B if re-used (covered bond)	7%
	iii) If collateralised by an asset that would qualify as HQLA 2A if re-used	15%
	iv) If collateralised by an asset that would qualify as HQLA 2B RMBS if re-used	25%
	(Art. 13(2)(g)(i), (ii), (iv) LCR-R)	
	v) If collateralised by an asset that would qualify as HQLA 2B covered bonds if re-used (Art. 12(1)e LCR-R)	30%
	vi) If collateralised by an asset that would qualify as HQLA 2B ABS covered by leasing, corporate financing	
	or consumer loans if re-used (Art. 13(2)(g)(iii) or (v) LCR-R)	35%
	vii) If collateralised by an asset that would qualify as HQLA 2B corporate bond, share, unit, non-interest-	
	bearing assets with credit quality step 5 or better, issued by religiously observant credit institutions, if re-used	50%
	viii) If collateralised by an asset that would be classified as a share or unit in a UCI (Art. 15(2)(3) LCR-R) on	
	the same level as HQLA	%
	ix) If collateralised by an asset not covered by items i to viii above	100%
	Use of the collateral to cover a short sale position	0%
32(3)(c)	Monies due from lombard transactions, if collateralised with non-liquid assets	50%
32(3)(d)	Monies due from operating deposits are multiplied by a symmetrical inflow rate, except deposits at the central institution; otherwise the adjacent factor applies	5%
32(3)(e)	Collateral swaps: amount by which the liquidity value of the lent assets exceeds that of the borrowed assets	100%
32(3)(f)	Monies due from reverse repos, securities borrowings, collateral swaps used to cover short positions that can be extended beyond 30 days	0%
32(3)(g)	Undrawn credit or liquidity facilities (including those from central banks, and excluding any within protection schemes and promotional loans)	0%
32(3)(h)	Monies due from securities issued by the credit institution itself or by an SPV with which the credit institution has close links, net basis multiplied by rate for the asset	
22/21/:1	Loans without a due date, provided that the contract allows the credit institution to withdraw or to request	20%
32(3)(i)	payment within 30 days	2070
22/41	Inflows from the release of balances held in segregated accounts for the protection of customer trading	100%
32(4)	assets	
32(5)	Net liquidity inflow from derivative interest rate and foreign currency transactions	100%
32(6)	Monies due from assets that are not reflected in the market value of the asset	

Source: LCR-R, NORD/LB Markets Strategy & Floor Research

^{*} If there are contractual commitments to pay out funding to the customer and if the value of these commitments is more than 50% of the value of the payment, the latter is reduced by the higher value; divergences possible in accordance with Article 32(4) LCR-R

Note: further special regulations with regard to groups and institutional protection schemes in Article 34 LCR-R



Overview of inflows (Article 32 LCR-R)

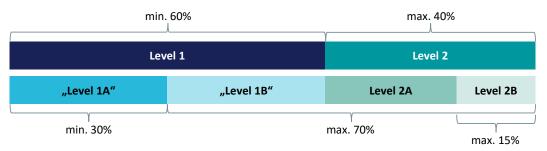
Article	Exposures contractually expected/becoming due within 30 days, and are not overdue:							Exposures contractually expected/becoming due within 30 days, and are not overdue:					
32(7)	Inflows from any new obligations entered into are not taken into account	-											
32(8)	Inflows in the amount of outflows to third countries with transfer restrictions or, if denominated in non-												
	convertible currencies, in the amount of []												

Source: LCR-R, NORD/LB Markets Strategy & Floor Research

Composition of the liquidity buffer by asset level (Art. 17 LCR-R)

Once the net outflow for the next 30 days has been determined using the inflows and outflows as described above, the liquidity buffer must be determined. Different liquidity levels are assigned to assets for calculation of the LCR respectively the liquidity buffer. There are certain minimum or maximum ratios for each of these levels (Article 17 LCR-R), at which the respective liquidity level may/must be included in the liquidity buffer. In order to obtain an additional distinction within Level 1 assets for later comments, a modified level classification is defined at this point. This is nevertheless based on the minimum and maximum ratios normally specified by the CRR.

Structure of the LCR portfolio



Source: Delegated Regulation 2015/61, NORD/LB Markets Strategy & Floor Research

LCR portion of covered bonds limited to 70%

With regard to the composition of the LCR portfolio, the requirements stipulate that at least 60% of the liquidity buffer must consist of Level 1 assets. Conversely, it follows that the proportion of Level 2 assets may not exceed 40%. In addition to this initially rough subdivision of the LCR portfolio, there are further restrictions on both Level 1 and Level 2. For example, at least 30% of the overall portfolio must consist of Level 1 assets, but these may not be Level 1 covered bonds. In market practice, a distinction is sometimes made within Level 1 between Level 1A and Level 1B assets (Level 1 covered bonds, since a haircut is mandatory), even if a linguistic distinction of this type does not exist either under the CRR or the LCR Regulation. Since Level 2B assets may account for not more than 15% of the total liquidity buffer, a distinction is also made within Level 2 with regard to the maximum proportion of the overall LCR portfolio. When using covered bonds in the LCR context, it can therefore be stated that they may total a maximum of 70% of the LCR portfolio. As no more than 40% of the total liquidity buffer may consist of Level 2 assets, 30% of the overall portfolio must comprise Level 1 covered bonds. In addition, a maximum of 15% of the assets may be covered bonds that are Level 2B according to the Regulation.

^{*} If there are contractual commitments to pay out funding to the customer and if the value of these commitments is more than 50% of the value of the payment, the latter is reduced by the higher value; divergences possible in accordance with Article 32(4) LCR-R

Note: further special regulations with regard to groups and institutional protection schemes in Article 34 LCR-R



LCR management: Eligible assets

Authors: Melanie Kiene, CIIA // Dr. Frederik Kunze

	Level 1 assets (in accordance with Article 10 LCR Regulation)	Haircut (for units in UCI:
a)	Coins and banknotes	- (0%)
b)	 Following exposures to central banks: i) Assets representing claims on or guaranteed by the ECB or an EEA member state's central bank ii) Assets representing claims on or guaranteed by central banks of third countries, provided that they are rated as Credit Quality Step 1 by ECAI iii) Reserves held by the credit institution in a central bank referred to in points (i) and (ii) provided that the credit institution is permitted to withdraw such reserves at any time during stress periods and the conditions for such withdrawal have been specified in an agreement between the relevant competent authority and the ECB or the central bank 	- (0%)
c)	Assets representing claims on or guaranteed by the following central or regional governments, local authorities or public sector entities: (i) Central government of an EEA member state (ii) Central government of a third country, provided that it is rated at least Credit Quality Step 1 (iii) Regional governments or local authorities or public sector entities in an EEA member state, provided that they are treated as exposures to the central government of the EEA member state (i.e. risk weighting of 0%) (iv) Regional governments or local authorities in a third country of the type referred to in (ii), provided that they are treated as exposures to the central government of the third country (i.e. same risk weighting as central government [0%]) (v) Public sector entities provided that they are treated as exposures to the central government of an EEA member state or to one of the regional governments or local authorities referred to in (iii) (i.e. same risk weighting of 0%)	- (5%)
d)	 i) Assets representing claims on or guaranteed by the central government or the central bank of a third country, which are not assigned CQS 1 (rating lower than AA-) ii) Reserves held by the credit institution in a central bank pursuant to (i) and meeting certain conditions 	- (5%)
e)	Assets issued by credit institutions which meet at least one of the following requirements: (i) The issuer is a credit institution incorporated or established by the central government of an EEA member state or the regional government or local authority in a member state, the government or local authority is under the legal obligation to protect the economic basis of the credit institution and maintain its financial viability throughout its life-time and any exposure to that regional government or local authority, if applicable, is treated as an exposure to the EEA central government (i.e. RW of 0%) (ii) The credit institution provides promotional loans, within the meaning of Article 10(1)(e)(ii)	- (5%)
f)	Certain covered bonds from the EEA which meet all the following criteria: i) Covered bonds within the meaning of Article 3 No. 1 CBD or they were issued before 8 July 2022 and meet the requirements of Art. 52(4) UCITS Directive at the time of issue, with the result that they may be considered for more favourable treatment as a covered bond until maturity ii) Exposures to institutions in the cover pool meet the requirements of Art. 129(1)(c) & 129(1a) CRR iii) Deleted iv) Issue size of at least EUR 500m or equivalent amount in local currency v) Rating: CQS 1 by ECAI; no rating: 10% risk weight according to Art. 129(5) CRR vi) Overcollateralisation of at least 2%	7% (12%)
	Assets representing claims on or guaranteed by the multilateral development banks and the international	- (5%)

Source: Delegated Regulation 2015/61, NORD/LB Markets Strategy & Floor Research



	Level 2A assets (in accordance with Article 11 LCR Regulation)	Haircut (for units in UCIs)
a)	Assets representing claims on or guaranteed by regional governments, local authorities or public sector entities in an EEA member state, where exposures to them are assigned a risk weighting of 20% pursuant to Art. 115(1)(5) and Art. 116(1)(2)(3) CRR	15% (20%)
b)	Assets representing claims on or guaranteed by the central government, central bank or by a regional government, local authority or public sector entity in a third country , where exposures to them are assigned a risk weighting of 20% pursuant to Art. 114(2) and Art. 115 or Art. 116 CRR	15% (20%)
c)	Certain covered bonds from the <u>EEA</u> which meet the following criteria, among other requirements: i) Covered bonds within the meaning of Article 3 No. 1 of the Covered Bond Directive or they were issued before 8 July 2022 and meet the requirements of Art. 52(4) UCITS Directive in the version applicable at the time of issue, with the result that they may be considered for more favourable treatment as a covered bond until maturity ii) Exposures to institutions in the cover pool meet the requirements set out in Articles 129(1)(c) and 129(1a) CRR iii) Deleted iv) Issue size of at least EUR 250m or equivalent amount in local currency v) Rating: min. CQS 2 by ECAI; no rating: 20% risk weight according to Art. 129(5) CRR vi) Overcollateralisation of at least 7%; min. 2% if CQS 1 rating is applicable, provided all requirements re-	15% (20%)
d)	ferred to in Art. 10 (1) LCR Regulation are met, with the exception of Art. 10(1)(f)(iv) Certain covered bonds issued by credit institutions in third-countries which meet all of the following criteria: i) Issued by a credit institution, or by a wholly owned subsidiary of a credit institution which guarantees	15% (20%)
	the issue, in accordance with the national law of the third country ii) Issuer and bonds are subject to equivalent public supervision for the protection of the bondholders, and the supervisory and regulatory provisions are equivalent to those in the EU	
	iii) Cover pool consists of assets corresponding to one or more of the exposure types referred to in Article 129(1)(b)(d)(f) and (g) CRR. If the pool consists of real estate loans, Article 6(2)(3)(a) and (5) of the CB Directive must be complied with	
	 iv) Exposures to institutions comply with the requirements of Article 129(1)(c) or 129(1)(a) CRR v) Transparency requirement referred to in Art. 14 CB Directive is met vi) Rating: CQS 1 by ECAI; no rating: 10% risk weight according to Art. 129(5) CRR vii) Overcollateralisation of at least 7%; minimum 2% with value of at least EUR 500m or equivalent value in local currency 	
e)	Corporate bonds which meet all of the following requirements: (i) Minimum rating: CQS 1 by ECAI (ii) Issue size of at least EUR 250m or equivalent amount in local currency (iii) Residual term to maturity of the securities at the time of issuance is max. 10 years	15% (20%)

Source: Delegated Regulation 2015/61, NORD/LB Markets Strategy & Floor Research



	Level 2B assets (in accordance with Article 12 LCR Regulation)	Haircut (for units in UCIs)
a)	Exposures in the form of ABS under certain conditions (in accordance with Art. 13 LCR Regulation)	25/35% (30/40%)
b)	Corporate bonds which meet all of the following requirements: (i) Minimum rating: CQS 3 by ECAI (ii) Issue size of at least EUR 250m or equivalent amount in local currency (iii) Residual term to maturity of the securities at the time of issuance is max. 10 years	50% (55%)
c)	Shares or units meeting the conditions of Art. 12(1)(c) of the LCR Regulation i) Component of a major share index ii) Denomination in home currency, otherwise Level 2B asset (limit on amount) iii) They are also considered a reliable source of liquidity in stress periods (requirement: in a 30-day stress period, the market value does not fall by more than 40% or 40 percentage points)	50% (55%)
d)	Restricted-use committed liquidity facilities provided by the ECB, the central bank of an EEA member state or, under certain conditions, a third country, provided the provisions of Art. 14 LCR Regulation are met	0%
e)	Certain covered bonds from the EEA which meet the following criteria, among other requirements: i) Covered bonds within the meaning of Article 3 No. 1 of the Covered Bond Directive or they were issued before 8 July 2022 and meet the requirements of Art. 52(4) UCITS Directive in the version applicable at the time of issue, with the result that they may be considered for more favourable treatment as a covered bond until maturity ii) Deleted iii) Deleted iv) Issue size of at least EUR 250m or equivalent amount in local currency v) Cover assets comply with Article 129(1)(a), (d)(i) and (e) CRR vi) Cover assets are assigned a risk weighting of max. 35% in accordance with Art. 125 CRR vii) Overcollateralisation of at least 10% viii) Monthly disclosure regarding required overcollateralisation of min. 10%	30% (35%)
f)	Exemption for religiously observant credit institutions: certain non-interest-bearing assets representing claims on or guaranteed by central banks, central governments, regional or local authorities or public sector entities, provided at least CQS 5 was assigned by ECAI	50% (55%)
	Level 2B assets (in accordance with Articles 13 to 16 LCR Regulation)	Haircut (for units in UCIs)
	We will not go into detail about the indicated articles. Article 13 Level 2B securitisations (explanatory notes on Art. 12(1)(a) LCR-R) Article 14 Restricted-use committed liquidity facilities (explanatory notes on Art. 12(1)d) LCR-R) Article 15 CIUs Article 16 Deposits and other funding in cooperative networks and institutional protection schemes	0-55% 25%

Source: Delegated Regulation 2015/61, NORD/LB Markets Strategy & Floor Research



Covered bonds within the framework of LCR management

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze

Dynamic criteria for covered bonds under the LCR

While a large proportion of the assets eligible for LCR management are classified statically, covered bonds are subject to dynamic criteria. Over time, the allocation of an issue to a specific Level category may change, which in turn may lead to the need for constant monitoring. In practice, fulfilment of the transparency criteria laid down in Article 14 of the Covered Bond Directive and/or the national legislation based on Art. 14 CBD turns out to be the trouble spot. This is because extensive data must be provided on the issuer side at least every quarter, and the investor must also be able to prove this to the supervisory authority. In addition to reviewing the information provided in cover pool reporting on outstanding covered bonds and their cover pools, the relevant ratings should also be constantly monitored with regard to the dynamic criteria for covered bonds, as rating changes of just one notch may have a direct impact on the LCR classification. In addition to the change in a rating, the addition or discontinuation of a rating assessment can also have an impact on the LCR classification. This is why we use not only the ratings of Moody's, Fitch and S&P but also those of DBRS.

Table summarising the regulatory classification of covered bonds

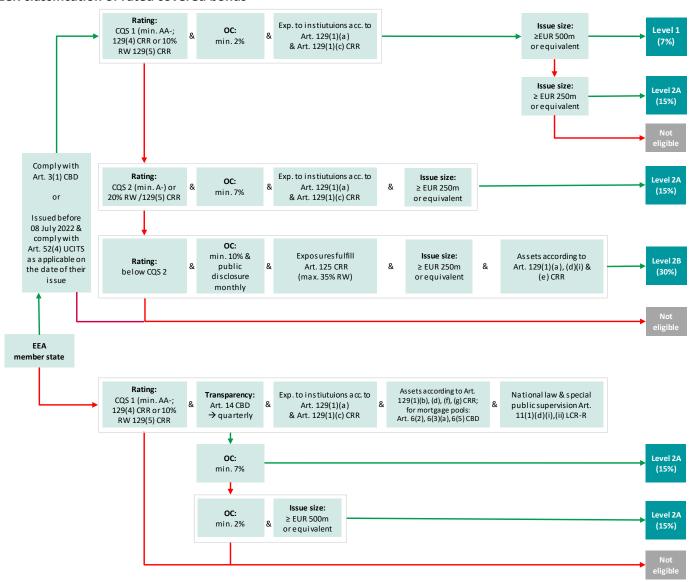
In this study, we analyse the bonds listed in iBoxx EUR Covered and assign them to the LCR category that we believe to be relevant. We also assign them to the resulting haircut. For this purpose, we have reviewed the relevant pool reports to ensure that their content is complete on the basis of the provisions in Article 129 CRR and have summarised the results initially at programme level. In addition to the links to the relevant reports on the issuers' websites, the list also includes the ratings provided by the rating agencies mentioned in the previous section, a statement on the legal framework for the issue, and the overcollateralisation of the relevant programme. While some privileges of covered bonds can be derived from the affiliation of the particular jurisdiction to a community of states, affiliations of this nature also result in obligations for national legislators.

Covered bonds within the framework of CBPP3

For example, issues from the European Economic Area (EEA) benefit from preferential regulatory treatment, while only bonds from the EEA that meet certain requirements are purchased under the CBPP3. At the same time, the member states of the EEA are obliged to implement certain regulatory requirements, for example in relation to harmonisation of the European covered bond market. For this reason, in our biannual LCR study "Risk weights and LCR levels of covered bonds", we indicate in a table in the appendix whether an issue or an issuer belongs to the jurisdiction of the European Central Bank (eurozone), to the European Economic Area and to the G10 countries (relevant, among other things, for repo eligibility in transactions with the ECB).



LCR classification of rated covered bonds



Source: Delegated Regulation 2015/61, NORD/LB Markets Strategy & Floor Research

Numerous criteria for eligible covered bonds

As mentioned above, covered bonds may in principle reach any of the three LCR levels. In every case, there are numerous criteria that an issue must meet in order to achieve the status of an eligible asset. While non-compliance with some criteria automatically results in exclusion from eligible assets, other requirements take the form of scores or tiers. For example, covered bonds whose reporting does not comply with the Covered Bond Directive may under no circumstances be used as LCR assets. With regard to the issue volume or rating assessment, in contrast, the LCR system stipulates requirements in tiered form. This results in numerous paths on the way to the final LCR assessment of an issue. In order to approach this quite complex procedure, we will deal in the following with each of the eligibility criteria, which we have presented graphically in the form of a decision tree.



What does "in compliance with Art. 3 CBD" mean?

In order to be recognised as an LCR-eligible covered bond (apart from the criteria listed above), the LCR Regulation stipulates that the covered bond must either be a bond within the meaning of Art. 3(1) CBD, or the security was issued before 8 July 2022 and meets the requirements of Art. 52(4) UCITS in force at that time. However, reference is also made to the CBD in the UCITS and the CRR. As a result, there are also changes to "old bonds" in order to remain LCR-eligible. This requires a look at the transitional rules of the CBD: Art. 30 CBD reads as follows: "Member States shall ensure that covered bonds issued before 8 July 2022 that comply with the requirements laid down in Article 52(4) of Directive 2009/65/EC, as applicable on the date of their issue, are not subject to the requirements set out in Articles 5 to 12 and Articles 15, 16, 17 and 19 of this Directive, but may continue to be referred to as covered bonds in accordance with this Directive until their maturity."

Digression: EU Covered Bond Directive

Article	Description	Content / Remarks
1	Subject matter of the Directive	 Issuing requirements and structural features of covered bonds Uniform requirements for national supervisory authorities Publication requirements
2	Scope of the Directive	 Covered bonds issued by credit institutions within the geographical territory of the Member States
3	Definitions	 Definitions relevant to the Directive Total of 21 definitions of terms (including covered bond, cover pool, cover assets)
4	Dual recourse	 Dual recourse mechanism (allowing claims against both the covered bond issuer and the cover assets) is a core characteristic of the covered bond Claim against the credit institution; in the event of insolvency of the issuer, a priority claim against the cover pool Claim against the insolvency estate
5	Bankruptcy remoteness of covered bonds	 Ensuring that CB claims are not subject to automatic acceleration in the event of insolvency or resolution Ensuring compliance with payment flows established by contract
6	Eligible assets	 Collateralisation at all times through cover assets of very high quality CRR-compliant cover assets and other defined high-quality cover assets as well as public undertakings (in accordance with 2006/111/EC)
7	Collateral assets located outside the Union	 National legislators' option with regard to including assets that are secured by collateral assets located outside the Union Must be formulated in accordance with Article 6 and legal recourse secured
8	Intragroup pooled covered bond structures	 Possible to use internal CB issues as collateral for external CB issues (investors outside the group) Cover assets are recorded on the balance sheet of the issuer of the external CB
9	Joint funding	 The Directive allows issuers to pool covered assets from different institutions The purpose here is to enable smaller credit institutions to access the market
10	Composition of the cover pool	 Requirement to lay down rules on the composition of cover pools No explicit requirement to achieve homogeneity
11	Derivative contracts in the cover pool	 Derivative contracts may be included in the cover pool for hedging purposes Derivative contracts are segregated in accordance with Article 12
12	Segregation of cover assets in the cover pool	 Specification of requirements relating to the segregation of assets Cover assets must be identifiable Requirements must apply to all assets in the cover pool (including derivatives)
13	Cover pool monitor	 National legislators can enshrine cover pool monitors in law Criteria relating to the cover pool monitor's responsibilities and duties for monitoring the cover pool

Source: Directive 2019/2162, NORD/LB Markets Strategy & Floor Research



Digression: EU Covered Bond Directive - (CONTINUED)

Article	Description Description	Content / Remarks
14	Investor information	 On a quarterly basis: Mandatory transparency of the cover pool, including reporting Among others: publication of an ISIN list for the covered bonds issued under the programme,
15	Coverage requirements	 details in relation to market risk, incl. interest rate-, currency-, credit and liquidity risk Requirements for nominal minimum overcollateralisation (nominal principle) Possible to determine overcollateralisation in divergence from the nominal collateralisation method, as long as the resulting overcollateralisation is at least equal to the nominal coverage
16	Requirement for a cover pool liquidity buffer	 CB issuers must maintain a liquidity buffer in the amount of the net liquidity outflows over the next 180 calendar days Possible for national legislators to avoid an overlap [with the cover pool liquidity buffer] by not implementing the requirements for the time being (dependence on legal provisions of the Union in the context of LCR)
17	Conditions for extendable maturity structures	 National legislators may allow for the issue of CBs with extendable maturity structures Extension subject to objective triggers enshrined in law
18	Covered bond public super- vision	 Detailed requirements for supervision of CBs Monitoring the issue, listing and documentation of CBs Ensuring aspects such as independence, expertise, resources and powers
19	Permission for covered bond programmes	 CB issuers must obtain permission from the competent supervisory authority before issuing covered bonds under a programme Issuer must have adequate organisational structures, processes and methodologies in place to protect covered bond investors
20	Covered bond public super- vision in the event of insol- vency or resolution	 Ensuring that the rights assured to investors are preserved. In addition, it is the national legislator's duty to require the appointment of a special administrator in the event of insolvency
21	Reporting to the competent authorities	 Issuers are required to report on their CB programmes at regular intervals, or upon request Also obliged to report in the event of insolvency or resolution
22	Powers of competent authorities for the purposes of covered bond public supervision	 Supervisory authority to be granted appropriate powers Duty to grant or refuse permission to conduct covered bond business
23	Administrative penalties and other administrative measures	 Establishing appropriate penalties and administrative measures for breaches of CB issuer requirements Proportional to the breach and deterrent effect
24	Publication of administra- tive penalties and other administrative measures	 Publication of penalties on the official websites of the competent national authorities Supervisory authorities must inform EBA
25	Cooperation obligations	 Close cooperation with the national banking supervisory authority Sharing of information with both the EBA and other national supervisory authorities In addition to harmonisation of issuing activities, the Directive also provides for standardisation of the EEA-wide supervision of the covered bond market.
26	Disclosure requirements	 Accessibility of legal texts and regulations Overview of institutions permitted to issue CBs List of issuers that are entitled to use the label 'European Covered Bond' Annual reporting to EBA on covered bonds and on institutions authorised to issue them
27	Labelling	Entitlement to use the label
28	Amendment to Directive 2009/65/EC	Reference to Directive and amendment
29	Amendment to Directive 2014/59/EU	Reference to Directive and amendment

Source: Directive 2019/2162, NORD/LB Markets Strategy & Floor Research



Digression: EU Covered Bond Directive - (CONTINUED)

Article	Description	Content / Remarks
30	Transitional measures	 "Grandfathering" and top-ups of old issues
31	Reviews and reports	 Report on equivalence regime for third countries (EU Commission; coordination with EBA) Report on the level of investor protection (EU Commission; coordination with EBA) Report on risk and benefits of CBs with extendable maturity structures (European Commission; coordination with EBA)
		Report on the introduction of ESNs (EU Commission)
32	Transposition	 Timeframe for transposition into national law and application Report to European Commission
33	Entry into force	 Entry into force on 20th day following that of its publication in the Official Journal of the Euro- pean Union
34	Addressees	Member States

Source: Directive 2019/2162, NORD/LB Markets Strategy & Floor Research

General distinction between EEA and non-EEA covered bonds

The requirements to be met by Level 1, Level 2A and Level 2B assets can be found in <u>Articles 10 to 12 of the LCR Regulation</u>. Since the requirements of the Delegated Regulation are EEA-relevant, a general distinction is also made in the requirements for covered bonds between issues from the EEA and those issued by entities from third countries. For example, EEA bonds can generally be considered both as Level 1 assets and as the two subdivisions of Level 2. Covered bonds from third countries can only be assigned to Level 2A if they are eligible as LCR assets.

Article 129(4) CRR and Article 129(5) CRR

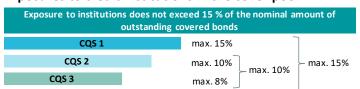
Covered bonds from member states of the EEA must comply with the Covered Bond Directive in order to qualify for treatment under Articles 129(4) or 129(5) CRR, or comply with Art. 129(3), (3a) and (3b) CRR in order to be eligible as an LCR asset (with the date of issue also playing a role in this respect). Alternatively, in cases where bonds were issued before 8 July 2022, these must comply with Art. 52(4) UCITS in the version applicable on the date of issue instead of the CBD. The Covered Bond Directive defines requirements for covered bonds, while Art. 129 CRR additionally limits the type of cover assets, defines certain minimum requirements for overcollateralisation, and so on. In contrast, paragraphs 4 and 5 of Article 129 CRR describe the requirements to be met by covered bonds in order to benefit from a preferential risk weighting. Paragraph 4 deals with bonds that have a rating assessment, while paragraph 5 deals with bonds that do not have a rating. If a covered bond issued in the EEA does not comply with Covered Bond Directive Art. 3 No. 1, and does not meet the requirements of the Directive nor those of Article 129(4) or Article 129(5) of the CRR, it cannot be used as HQLA in the context of LCR management.



Article 129(1)(c) CRR in conjunction with Article 129(1a) CRR

Article 129(1)(c) in conjunction with Article 129(1a) CRR is part of the requirements for eligible cover assets. Specifically, this concerns substitute cover assets in the form of exposures to credit institutions, which are generally limited to 15% of the outstanding covered bond volume. Exposures to institutions that qualify for Credit Quality Step 1 (CQS 1) or 2 are generally permitted. Exposures to institutions that qualify for CQS3 may only include up to a maximum of 8% of the nominal amount of outstanding covered bonds, subject to the following conditions: i) original maturity not exceeding 100 days, provided that the deposits meet the requirements of the CBD, ii) derivative contracts that comply with Art. 11(1) of the CBD (minimum requirements for derivatives in the cover pool). These articles must be complied with by Level 1 covered bonds and by Level 2A covered bonds, irrespective of whether the covered bond is issued in the EEA or a third country.

Exposures to credit institutions in the cover pool



Source: Delegated Regulation 575/2013, NORD/LB Markets Strategy & Floor Research

Article 14 CBD: transparency requirements for covered bond programmes

As covered bonds within the meaning of Art. 3 No. 1 of the Covered Bond Directive, the securities must consequently meet the transparency requirements set out in Art. 14 CBD. For recognition as LCR Level 2A, however, this also applies to covered bonds from third countries; for this purpose, Art. 14 CBD was explicitly included as a requirement in Article 11(1d)(v) of LCR Regulation 2015/61. As a result, it applies equally to all levels, so that corresponding covered bonds can be used as HQLA in the context of LCR management. In order to benefit from preferential regulatory treatment, a covered bond investor must be able to demonstrate to the relevant supervisory authority that it has a minimum level of information regarding its investment. Accordingly, the following information must be provided at least on a quarterly basis:

- i) Value of the cover pool and outstanding covered bonds
- ii) A list of ISINs for all issues made under this programme to which an ISIN was assigned
- iii) Geographical distribution and type of cover assets, loan size and valuation method
- iv) Information on market risk, including interest rate and currency risk, as well as credit and liquidity risks
- v) Maturity structure of the cover assets and the covered bonds, which may include an overview of the triggers for maturity extension
- vi) Level of required and available cover, and the level of statutory, contractual and voluntary overcollateralisation
- vii) Percentage of loans considered to be in default as defined in Article 178 CRR (NPL), and in any case of loans more than 90 days past due.

For issues prior to July 08, 2022, Art. 52(4) UCITS applies at the time of issue, whereby the LCR-R requires the transparency requirement from Art. 14 CBD, so that this must also be fulfilled for "old bonds", which also comes from Art. 30 CBD. In addition, covered bonds of level 2B are subject to a monthly transparency requirement for overcollateralization.



Credit Quality Steps as a vehicle for assessing creditworthiness

Rating assessments play a particularly important role in determining the LCR level of covered bonds. Credit assessments are taken into account with the help of the Credit Quality Step system, which is defined in Regulation 2016/1799. A total of six different credit rating categories are assigned through ratings issued by recognised External Credit Assessment Institutions (ECAI) (see: Mapping of rating assessments).

The Credit Quality Step system is based on Art. 138 CRR

While categories 1 to 3 are assigned to the investment grade segment, categories 4 to 6 are used for non-investment grade credit ratings. In principle, risk positions may have more than one ECAI rating. This means that if more than one rating is used to determine the Credit Quality Step, further mapping actions are necessary (depending on the context, we therefore present the table below with corresponding text passages once again). Irrespective of the number of available ratings, Article 138 CRR is key to determining the Credit Quality Step. If two ECAI ratings are available for a risk position, the applicable rating shall be the one resulting in the higher of the two possible risk weightings, if the two ratings differ. A higher risk weighting is equivalent to a lower credit rating. In this respect, we understand an AA-equivalent rating to be lower than an AAA-equivalent rating. If more than two ratings are available for a risk position, the two ratings resulting in the lowest risk weighting, i.e. the two highest ratings, are applicable. If these two assessments differ from each other, the Credit Quality Step is determined on the basis of the rating (out of these two ratings) that results in the higher risk weighting. It follows from the requirements of Article 138 CRR that only the two highest ratings, if available, are relevant to determining the Credit Quality Step, even if a position has more than two recognised ratings. The resulting simplification of CQS provisions is shown in the following table; no distinction is made with regard to the rating grades of individual agencies. Mapping of these equivalence ratings is shown in the Mapping of rating assessments table.

Determining the Credit Quality Step for more than one recognised rating assessment

betermining the create quanty step for more than one recognised ruting assessment													
Rating 2			CQS 1			CQS 2			CQS 3				
Rating 1	Rating 1		AA+	AA	AA-	A+	Α	A-	BBB+	BBB	BBB-		
	AAA												
COC 1	AA+		Credit	Quality		Credit Quality Step 2			Credit Quality Step 3				
CQS 1	AA		Ste	p 1									
	AA-												
	A+	Credit Quality				Credit Quality			Credit Quality				
CQS 2	Α			,		,			,				
	A-		Ste	p 2		Step 2			Step 3				
	BBB+		Crodit	Quality		Cr	odit Ous	ality	Cro	odit Oua	lity		
CQS 3	BBB		Credit Quality			·				•	Credit Quality		
	BBB-	Step 3			Step 3			Step 3					

Source: Regulation 2016/1799 and 2021/2005, Regulation 575/2013 (Art. 138), NORD/LB Markets Strategy & Floor Research



LCR-eligible covered bonds and credit rating assessments

As regards ratings, covered bonds also have to fulfil certain requirements in order to be deemed LCR-eligible. Only level 2B covered bonds are not subject to any requirements in terms of credit ratings. For the remaining levels, a distinction can firstly be made between covered bonds with or without a corresponding ECAI rating. Especially when combined with the issuance volume requirements for LCR-eligible covered bonds, it can be said that unrated covered bonds in the publicly placed benchmark/sub-benchmark bond segment are comparatively rare. However, the LCR Directive does provide an option for acquiring status as an LCR asset in these cases. Given the limited prevalence of such securities, we shall look at the system for unrated papers in the next but one paragraph, merely for the sake of completeness, and then, for reasons of market practice, concentrate solely on rated covered bonds.

Rating requirements for covered bonds with ECAI rating

With regard to the rating requirements for covered bonds, a fundamental distinction must first be made between issues from third countries and those from the EEA. While covered bonds issued by a third country issuer must comply with Credit Quality Step 1 in order to be classified as an eligible asset for the purposes of LCR management, EEA bonds are not subject to a mandatory requirement of this type. Instead, in the case of issues from the EEA, creditworthiness is taken into account as a criterion in three tiers. In order to be classified as a Level 1 asset, bonds must meet the requirements of CQS 1. Nevertheless, being included as a CQS 1 asset does not automatically lead to classification as a Level 1 asset, as the issue must also have a volume of at least EUR 500m and feature overcollateralisation of 2%. If, on the other hand, it is a sub-benchmark issue (EUR 250m ≤ bond < EUR 500m), a CQS 1 assessment only results in Level 2A classification. The same applies to CQS 2 sub-benchmarks that are overcollateralised by a minimum of 7% instead of 2%. Covered bonds with a rating below Credit Quality Step 2 or without a rating can at best only be assigned to Level 2B.

Rating requirements for covered bonds without an ECAI rating

Covered bonds without an ECAI rating can also be classified as LCR level under certain conditions. In the event that an issue does not have an ECAI rating, the <u>LCR Regulation</u> always refers to Article 129(5) CRR, which is used to <u>determine the risk weightings of unrated covered bonds</u>. In our opinion, however, in the case of determining the LCR level, Article 129(5) CRR must be considered separately from the other requirements of Article 129 CRR, since this Article is also decisive for covered bonds from third countries. Risk weights continue to be determined based on Article 129 CRR as a whole. If an EEA issue does not have a rating, but meets the other requirements, the bond can still be classified as Level 1 if it is assigned a risk weighting of 10% according to the provisions of Article 129(5) CRR. A preferential risk weighting of 10% therefore acts as a substitute for a CQS 1 ECAI rating.



Rating requirements for third-country covered bonds without an ECAI rating

The same applies to issues from third countries, as these must also comply with CQS 1 if a rating is available. In contrast to EEA bonds, however, they can only reach Level 2A. If a rating of at least CQS 2 is required, however, an unrated covered bond must be assigned a risk weight of 20% as laid down in Article 129(5) CRR.

Issue volume: different treatment of EEA and non-EEA bonds

Certain requirements must also be met with regard to the issue volume of a bond, but these also have different implications. For example, in order to be Level 1 eligible, the issue size of EEA bonds must be at least EUR 500m or its equivalent in the local currency. In order to remain eligible as a Level 2 (2A or 2B) asset, the volume must be at least EUR 250m or equivalent. Conversely, bonds issued by issuers domiciled outside the EEA are not subject to any special issue volume requirements. In the case of issues with an equivalent volume of at least EUR 500m, however, they benefit from preferential treatment with regard to the required overcollateralisation (2% overcollateralisation instead of 7%). While EEA bonds must therefore have a minimum volume of EUR 250m in order to be recognised as an LCR asset, this requirement does not apply to covered bonds from third countries. In general, all requirements relating to the issue volume refer to a figure that is equivalent to the required EUR volume.

Overcollateralisation: three different minimum levels of overcollateralisation

As the core characteristic of a covered bond, great importance is attached to the level of overcollateralisation, also in relation to its eligibility as an LCR asset. The LCR Regulation distinguishes between the three overcollateralisation levels: i) 2%, ii) 7% and iii) 10%. A minimum overcollateralisation of 2% is required in cases where the issue volume of EEA and non-EEA CQS 1 bonds is at least EUR 500m. In addition, CQS 2 sub-benchmarks from the EEA are also LCR-eligible, starting from an overcollateralisation rate of 2%. However, if the volume required for non-EEA bonds is less than EUR 500m, overcollateralisation of 7% is required. The same applies to EEA bonds of CQS 2 level that are assigned to the sub-benchmark format. Since Level 2B covered bonds, as mentioned above, do not necessarily need to have a rating assessment, these assets are subject to increased requirements. In addition to quarterly reporting (now required in all level classes), they must also have overcollateralisation of at least 10%. Furthermore, compliance with the overcollateralisation requirement must be disclosed by the issuer on a monthly basis.

Special requirements for third-country issues

As is the case with Level 2B covered bonds, non-EEA bonds must meet additional requirements to be recognised as an LCR asset. Article 11 of the LCR Regulation stipulates that bonds from outside the EEA must be issued in accordance with the national legislation of the third country. The issuer must also be a credit institution or a wholly owned subsidiary of a credit institution which guarantees the issue. Furthermore, the bond must have a dual recourse, i.e. it must enable investors to have recourse to the cover pool in addition to the receivables from the credit institution in the event of the issuer's insolvency. In addition, the issuer and the covered bonds must be subject to separate supervision; these arrangements must be at least equivalent to those applied in the EEA.



Special requirements for third-country issues

Like Level 1 and 2A EEA bonds, third-country issues must meet the requirements of Article 129(1)(c) and 129 (1a) CRR, but at the same time, like Level 1 covered bonds, may also benefit from the exemptions in Article 129(1a). In addition, cover assets for bonds not issued in the EEA are limited to those referred to in Article 129(1)(b), (d), (f) and (g) CRR. Overall, in addition to the assets referred to in Article 129(1)(c) and (1a), the eligible cover assets of issues from third countries include residential property (section d), commercial immovable property (section f) and loans secured by maritime liens on ships (section g). Collateralisation by public-sector collateral is also possible and follows the requirements specified in Article 129(1)(b). Accordingly, exposures to central governments and central banks from third countries, multilateral development banks and international organisations that qualify for Credit Quality Step 1 are eligible, as well as risk positions guaranteed by these institutions. In addition, exposures to public sector entities as well as regional or local authorities are also eligible if they meet further requirements. If, on the other hand, risk positions that qualify as Credit Quality Step 2 are involved, the share of these assets is limited to 20% of the cover pool. Where cover assets are loans secured by immovable property, the requirements of Articles 208 and 229(1) CRR must also be met.

Additional requirements for Level 2B covered bonds

Although Level 2B covered bonds are regarded as HQLA, they differ from Level 1 and 2A assets in terms of quality and/or liquidity. This is why the regulator has formulated additional requirements in this regard. As a result, the cover assets in question are limited to those referred to in Article 129(1)(a), (d)(i) and (e) CRR. Article 129(1)(a) CRR includes exposures to the public sector within Member States, consisting of (i) central governments; (ii) ESCB central banks (European System of Central Banks); (iii) public sector entities; or (iv) regional governments or local authorities. Furthermore, these assets are eligible as cover assets for Level 2B covered bonds that are guaranteed by one of the aforementioned institutions. For covered bonds backed by residential property loans, Article 129(1)(d) and (e) is also relevant as it lays down the requirements for this form of cover asset. EEA covered bonds with a rating lower than CQS 2 (or without a rating) may additionally only have cover assets that allow a risk weighting of 35% or lower. Article 125 CRR allows a 35% risk weighting for exposures that are fully collateralised by residential property which is or shall be occupied or let by the owner.



Mapping of rating assessments

		Long-ter	m ratings		Credit Quality Step	Credit Quality Step	Credit Quality Step
	Fitch	S&P	Moody's	DBRS	in accordance with CRR ¹	in accordance with ECB ²	in accordance with Solvency II ³
	AAA	AAA	Aaa	AAA			CQS 0
	AA+	AA+	Aa1	AA (high)	CQS 1	CQS 1	
	AA	AA	Aa2	AA	CQ3 I	CQ3 I	CQS 1
	AA-	AA-	Aa3	AA (low)			
Investment	A+	A+	A1	A (high)			
grade	Α	Α	A2	Α	CQS 2	CQS 2	CQS 2
	A-	A-	A3	A (low)			
	BBB+	BBB+	Baa1	BBB (high)			
	BBB	BBB	Baa2	BBB	CQS 3	CQS 3	CQS 3
	BBB-	BBB-	Baa3	BBB (low)			
	BB+	BB+	Ba1	BB (high)		CQS 4	
	ВВ	ВВ	Ba2	BB	CQS 4	CQS 5	CQS 4
	BB-	BB-	Ba3	BB (low)			
	B+	B+	B1	B (high)			
	В	В	B2	В	CQS 5		CQS 5
	B-	B-	В3	B (low)			
Non-	CCC+	CCC+	Caa1	CCC (high)			
investment	CCC	CCC	Caa2	CCC			
grade	CCC-	CCC-	Caa3	CCC (low)			
grade				CC (high)			
	СС	CC	Ca	CC	CQS 6		CQS 6
				CC (low)			
				C (high)			
	С	С	С	C			
	/-			C (low)			
	RD/D	SD/D		D			

Ratingergänzungen

*	Review with direction uncertain	e	Expected rating
*+	Review for possible upgrade	WD	Withdrawn
*_	Review for possible downgrade	WR	Withdrawn
u	Unsolicited	NR	Not rated
(P)	Provisional / Preliminary		

¹ Article 136 Regulation (EU) No. 575/2013 (CRR), Regulation (EU) 2016/1799

Source: rating agencies, ECB, EU, NORD/LB Markets Strategy & Floor Research

² ECB Guideline (EU) 2015/510, Eurosystem Credit Assessment Framework

³ Article 109a Directive 2009/138/EC (Solvency II), Directive (EU) 2016/1800



Regulatory classification: Issuers (iBoxx EUR Covered)

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze

Country	Cover Pool	Rating (Fitch/Moody's/S&P/DBRS)	ос	Law	CBD	RW	LCR level / Haircut as of 30 June 22
Australia							
AUST & NZ BANKING GROUP	Mortgages	AAA / Aaa / - / -	82.0%	\checkmark	×	20%	Level 2A / 15%
BANK OF QUEENSLAND LTD	Mortgages	AAA / Aaa / - / -	111.5%	\checkmark	×	20%	Level 2A / 15%
COMMONWEALTH BANK AUST	Mortgages	AAA / Aaa / - / -	13.7%	\checkmark	×	20%	Level 2A / 15%
NATIONAL AUSTRALIA BANK	Mortgages	AAA / Aaa / - / -	27.6%	\checkmark	×	20%	Level 2A / 15%
WESTPAC BANKING CORP	Mortgages	AAA / Aaa / - / -	22.1%	\checkmark	×	20%	Level 2A / 15%
Austria							
	Public Loans	- / Aaa / - / -	10.7%	✓	√	10%	Level 1 / 7%
BAWAG P.S.K.	Mortgages	- / Aaa / - / -	20.3%	\checkmark	✓	10%	Level 1 / 7%
ERSTE GROUP BANK AG	Mortgages	- / Aaa / - / -	37.5%	\checkmark	\checkmark	10%	Level 1 / 7%
11/20 1/05 1 2 1/05 1 1/15 1 1 0	Public Loans	- / Aa1 / - / -	34.6%	\checkmark	✓	10%	Level 1 / 7%
HYPO NOE LB NOE WIEN AG	Mortgages	-/Aa1/-/-	14.5%	\checkmark	✓	10%	Level 1 / 7%
HYPO TIROL BANK AG	Mortgages	-/Aa1/-/-	27.3%	\checkmark	\checkmark	10%	Level 1 / 7%
HYPO VORARLBERG BANK AG	Mortgages	- / Aaa / - / -	31.7%	\checkmark	\checkmark	10%	Level 1 / 7%
RAIFFEISEN BANK INTL	<u>Mortgages</u>	-/Aa1/-/-	21.5%	\checkmark	\checkmark	10%	Level 1 / 7%
DAIFFFICEN I D NIEDFROECT	<u>Mortgages</u>	- / Aaa / - / -	50.6%	\checkmark	\checkmark	10%	Level 1 / 7%
RAIFFEISEN LB NIEDEROEST	Public Loans	- / Aaa / - / -	34.9%	\checkmark	\checkmark	10%	Level 1 / 7%
RLB OBEROESTERREICH	Mortgages (Pool A)	- / Aaa / - / -	76.6%	\checkmark	\checkmark	10%	Level 1 / 7%
RAIFFEISEN LB STEIERMARK	Mortgages	- / Aaa / - / -	922.0%	\checkmark	\checkmark	10%	Level 1 / 7%
RAIFFEISEN LB VORARLBERG	<u>Mortgages</u>	- / Aaa / - / -	16.0%	\checkmark	\checkmark	10%	Level 1 / 7%
UNICREDIT BK AUSTRIA AG	Mortgages	- / Aaa / - / -	95.9%	\checkmark	\checkmark	10%	Level 1 / 7%
VOLKSBANK WIEN AG	Mortgages	- / Aaa / - / -	22.1%	\checkmark	\checkmark	10%	Level 1 / 7%
Belgium							
ARGENTA SPAARBANK	Mortgages	-/-/AAA/-	23.7%	\checkmark	\checkmark	10%	Level 1 / 7%
DELEUIC DANIK CA ANY	<u>Mortgages</u>	AAA / - / AAA / -	121.6%	\checkmark	\checkmark	10%	Level 1 / 7%
BELFIUS BANK SA/NV	Public Loans	- / Aaa / AAA / -	39.4%	\checkmark	\checkmark	10%	Level 1 / 7%
BNP PARIBAS FORTIS SA	<u>Mortgages</u>	- / Aaa / AAA / AAA	30.8%	\checkmark	\checkmark	10%	Level 1 / 7%
ING BELGIUM SA	Mortgages	AAA / Aaa / - / AAA	35.2%	\checkmark	\checkmark	10%	Level 1 / 7%
KBC BANK NV	<u>Mortgages</u>	AAA / Aaa / - / AAA	55,5%	\checkmark	✓	10%	Level 1 / 7%
Canada							
BANK OF MONTREAL	<u>Mortgages</u>	AAA / Aaa / - / -	42.1%	\checkmark	×	20%	Level 2A / 15%
BANK OF NOVA SCOTIA	Mortgages	AAA / Aaa / - / -	34.4%	\checkmark	×	20%	Level 2A / 15%
CANADIAN IMPERIAL BANK	Mortgages	AAA / Aaa / - / AAA	23.3%	\checkmark	×	20%	Level 2A / 15%
FED CAISSES DESJARDINS	Mortgages	AAA / Aaa / - / AAA	23.4%	\checkmark	×	20%	Level 2A / 15%
HSBC BANK CANADA	Mortgages	AAA / Aaa / - / AAA	62.1%	\checkmark	×	20%	Level 2A / 15%
NATIONAL BANK OF CANADA	Mortgages	AAA / Aaa / - / AAA	43.3%	\checkmark	×	20%	Level 2A / 15%
ROYAL BANK OF CANADA	Mortgages	AAA / Aaa / - / -	124.5%	\checkmark	×	20%	Level 2A / 15%
TORONTO-DOMINION BANK	Mortgages	- / Aaa / - / -	90.1%	\checkmark	×	20%	Level 2A / 15%
Czechia							
KOMERCNI BANKA AS	<u>Mortgages</u>	AAA / - / - / -	20.0%	\checkmark	→	10%	Level 1 / 7%



Country	Cover Pool	Rating (Fitch/Moody's/S&P/DBRS)	ос	Law	CBD	RW	LCR level / Haircut as of 30 June 22
Denmark							
DANMARKS SKIBSKREDIT AS	Mortgages (Capital Centre A)	-/-/A/-	21.4%	\checkmark	\checkmark	20%	Level 2A / 15%
DANSKE BANK A/S	Mortgages (Pool C)	AAA / - / AAA / -	21.8%	√	√	10%	Level 1 / 7%
JYSKE REALKREDIT A/S	Mortgages (Pool E)	- / - / AAA / -	6.4%	\checkmark	√	10%	Level 1 / 7%
Estonia							
LUMINOR BANK	<u>Mortgages</u>	-/Aa1/-/-	105.6%	\checkmark	\checkmark	10%	Level 1 / 7%
Finland							
AKTIA BANK	Mortgages (Pool 2)	- / Aaa / - / -	40.5%	\checkmark	×	10%	Level 1 / 7%
DANSKE MORTGAGE BANK PLC	<u>Mortgages</u>	- / Aaa / - / -	22.6%	\checkmark	×	10%	Level 1 / 7%
NORDEA KIINNITSLOUTTO	<u>Mortgages</u>	- / Aaa / - / -	16.2%	\checkmark	×	10%	Level 1 / 7%
OP MORTGAGE BANK	<u>Mortgages</u>	- / Aaa / AAA / -	16.9%	\checkmark	×	10%	Level 1 / 7%
SP KIINNITYSLUOTTOPANKKI	<u>Mortgages</u>	-/-/AAA/-	22.8%	\checkmark	×	10%	Level 1 / 7%
France							
ARKEA PUBLIC SECTOR SCF	Public Loans	- / Aaa / - / -	25.0%	✓	✓	10%	Level 1 / 7%
AXA BANK EUROPE SCF	Mortgages	- / Aaa / - / AAA	22.4%	\checkmark	✓	10%	Level 1 / 7%
CAISSE REFINANCE L'HABIT	Mortgages	AAA / Aaa / - / AAA	43.7%	\checkmark	✓	10%	Level 1 / 7%
CAISSE FRANCAISE DE FIN	Public Loans	- / Aaa / AA+ / AAA	16.2%	\checkmark	✓	10%	Level 1 / 7%
CIE FINANCEMENT FONCIER	Mortgages	- / Aaa / AAA / -	112.2%	\checkmark	✓	10%	Level 1 / 7%
CREDIT AGRICOLE PUBLIC S	Public Loans	- / Aaa / AAA / -	31.0%	\checkmark	✓	10%	Level 1 / 7%
MMB SCF	Mortgages	- / - / AAA / -	35.9%	\checkmark	✓	10%	Level 1 / 7%
ARKEA HOME LOANS	<u>Mortgages</u>	AAA / Aaa / - / -	24.3%	\checkmark	✓	10%	Level 1 / 7%
AXA HOME LOAN SFH	<u>Mortgages</u>	AAA / - / AAA / -	15.0%	\checkmark	\checkmark	10%	Level 1 / 7%
BNP PARIBAS HOMELOAN SFH	<u>Mortgages</u>	AAA / - / AAA / -	16.2%	\checkmark	\checkmark	10%	Level 1 / 7%
BPCE SFH - SOCIETE DE FI	<u>Mortgages</u>	- / Aaa / AAA / -	112.8%	\checkmark	\checkmark	10%	Level 1 / 7%
CREDIT AGRICOLE HOME LOA	<u>Mortgages</u>	AAA / Aaa / AAA / -	46.6%	\checkmark	\checkmark	10%	Level 1 / 7%
CRED MUTUEL HOME LOAN SF	<u>Mortgages</u>	AAA / Aaa / AAA / -	46.6%	\checkmark	\checkmark	10%	Level 1 / 7%
HSBC SFH FRANCE	<u>Mortgages</u>	- / Aaa / AAA / -	14.3%	\checkmark	\checkmark	10%	Level 1 / 7%
LA BANQUE POST HOME LOAN	<u>Mortgages</u>	-/-/AAA/-	33.2%	\checkmark	\checkmark	10%	Level 1 / 7%
SOCIETE GENERALE SFH	<u>Mortgages</u>	AAA / Aaa / - / -	14.0%	\checkmark	\checkmark	10%	Level 1 / 7%
Germany							
DEUTSCHE BANK AG	Mortgages (CPT)	-/Aa1/-/-	67.7%	×	×	20%	not eligible
AAREAL BANK AG	<u>Mortgages</u>	- / Aaa / - / -	16.3%	\checkmark	\checkmark	10%	Level 1 / 7%
BAUSPAR.SCHWAEBISCH HALL	<u>Mortgages</u>	- / Aaa / - / -	22.4%	\checkmark	\checkmark	10%	Level 1 / 7%
BAYERISCHE LANDESBANK	<u>Mortgages</u>	- / Aaa / - / -	59.4%	\checkmark	\checkmark	10%	Level 1 / 7%
BERLIN HYP AG	<u>Mortgages</u>	- / Aaa / - / -	7.6%	\checkmark	\checkmark	10%	Level 1 / 7%
COMMERZBANK AG	<u>Mortgages</u>	- / Aaa / - / -	40.4%	\checkmark	\checkmark	10%	Level 1 / 7%
DEUT APOTHEKE AERZTEBANK	<u>Mortgages</u>	-/-/AAA/-	9.7%	\checkmark	\checkmark	10%	Level 1 / 7%
DEUTSCHE BANK AG	<u>Mortgages</u>	- / Aaa / - / -	18.8%	\checkmark	\checkmark	10%	Level 1 / 7%
NORDDEUTSCHE LANDESBANK	<u>Mortgages</u>	-/Aa1/-/-	27.0%	\checkmark	\checkmark	10%	Level 1 / 7%
DEUTSCHE KREDITBANK AG	<u>Mortgages</u>	- / Aaa / - / -	19.5%	\checkmark	\checkmark	10%	Level 1 / 7%
DEUT PFANDBRIEFBANK AG	<u>Mortgages</u>	-/Aa1/-/-	16.1%	\checkmark	\checkmark	10%	Level 1 / 7%
DZ HYP AG	<u>Mortgages</u>	- / Aaa / AAA / -	15.6%	\checkmark	\checkmark	10%	Level 1 / 7%
HAMBURG COMMERCIAL BANK	<u>Mortgages</u>	-/Aa1/-/-	37.1%	\checkmark	\checkmark	10%	Level 1 / 7%
HAMBURGER SPARKASSE	<u>Mortgages</u>	- / Aaa / - / -	19.9%	\checkmark	\checkmark	10%	Level 1 / 7%
ING-DIBA AG	<u>Mortgages</u>	- / Aaa / - / -	61.0%	\checkmark	\checkmark	10%	Level 1 / 7%
LB BADEN-WUERTTEMBERG	<u>Mortgages</u>	- / Aaa / - / -	39.9%	\checkmark	\checkmark	10%	Level 1 / 7%
LANDBK HESSEN-THUERINGEN	<u>Mortgages</u>	- / Aaa / - / -	97.8%	\checkmark	\checkmark	10%	Level 1 / 7%
MUENCHENER HYPOTHEKENBNK	<u>Mortgages</u>	- / Aaa / - / -	4.9%	\checkmark	\checkmark	10%	Level 1 / 7%
SANTANDER CONSUMER BANK	<u>Mortgages</u>	AAA / Aaa / - / -	13.4%	\checkmark	\checkmark	10%	Level 1 / 7%
SPARKASSE KOELNBONN	<u>Mortgages</u>	- / Aaa / - / -	368.4%	\checkmark	\checkmark	10%	Level 1 / 7%
Carran Indiana and in NORD	(10 to 1 to 2) to 0 51 0	1 6 11					



Note	Country	Cover Pool	Rating (Fitch/Moody's/S&P/DBRS)	ос	Law	CBD	RW	LCR level / Haircut as of 30 June 22
DIVIDEDTIT BANK AG	Germany							
Mutraces								•
BAYER,SCHE LANDESBANK Public Loans -/- Aaa /- / Aa 59.4% V 10% Level 1/7% DEUTSCHE KREDITBANK AG Public Loans -/- Aaa /- 20.4% V 10% Level 1/7% DEUTSCHE KREDITBANK AG Public Loans -/- Aaa /- 12.3% V 10% Level 1/7% DE UTP FANDERIFEBANK AG Public Loans -/- Aaa /- 10.6% V 10% Level 1/7% DE HYP AG Public Loans -/- Aaa /- 19.2% V 10% Level 1/7% LANDER HISSEN THUERINGEN Public Loans -/- Aaa /- 19.2% V 10% Level 1/7% LANDER HISSEN THUERINGEN Public Loans -/- Aaa /- 18.6% V 10% Level 1/7% LANDER HISSEN THUERINGEN Public Loans -/- Aaa /- 18.6% V 10% Level 1/7% LANDER HISSEN THUERINGEN Public Loans -/- Aaa /- Aaa /- 18.6% V 10% Level 1/7% Lavel 1								· · · · · · · · · · · · · · · · · · ·
DEUTSCHE KREDITBANK AG								· ·
DEUT PEANDBRIEFABAKAG Public Loans								· ·
Description Public Loans								· ·
LANDEM HESSEN-THUERINGEN Public Loans AA/ Aaa / -/ 19.2%								
NABOR HESSENTHUERINGEN Public Loans AAA / AA3 / -/- 18.6%								· ·
NORDDELITSCHE LANDESBANK Public Loans -/-Aal/-/- 18.6%								
Iceland Mortgages -/- A -								•
Ireland Irel		<u>Public Loans</u>	- / Aa1 / - / -	18.6%	√	√	10%	Level 1 / 7%
		Mortgogos	/ / / /	22.00/	-/	./	200/	Lovel 24 / 159/
BANK OF IRELAND MTGE BNK		<u>Mortgages</u>	-/-/A/-	23.0%	•	•	20%	Level 2A / 15%
BANCA CARIGE SPA		Mortgages	- / Aaa / - / AA	158.9%	√	√	10%	Level 1 / 7%
BANCA CARIGE SPA			7					
BANCA MONTE DEI PASCHI S Mortgages (OBG 1)	•	Mortgages	- / Aa3 / - / -	52.2%	√	✓	10%	Level 1 / 7%
Mortgages Mortgages -/ Aa3 / -/					√	✓		· ·
BANCO BPM SPA	2, 6, 6				√	✓		•
BANCO DESIO DELLA BRIANZ Mortgages	BANCO BPM SPA				√	✓		· ·
BPER BANCA Mortgages	BANCO DESIO DELLA BRIANZ				√	√		· ·
CREDIT AGRICOLE ITALIA						√		· ·
CREDITO EMILIANO SPA					√	✓		· ·
ICCREA BANCA SPA Mortgages					✓	✓		· ·
INTESA SANPAOLO SPA Mortgages -/ Aa3 / -/ 30.8% V 10% Level 1 / 7% MEDIOBANCA DI CRED FIN Mortgages AA / - / -/ 42.2% V 10% Level 1 / 7% UNICREDIT SPA Mortgages (OBG 1) AA / Aa3 / AA -/ 85.9% V V 10% Level 1 / 7% V INTESTITE SPA Mortgages (OBG 2) -/ Aa3 / -/ 39.5% V V 10% Level 1 / 7% V INTESTITE SPA Mortgages (OBG 2) -/ Aa3 / -/ 36.2% X X 20% Not eligible SUMITOMO MITSUI BANKING Mortgages (RMBS) -/ Aaa / -/ 45.9% X X 20% Not eligible V V V V V V V V V					√	√		· ·
MEDIOBANCA DI CRED FIN Mortgages (OBG 1) Mortgages (OBG 2) AA / - / - / - / 39.5% V 10% Level 1 / 7% Mortgages (OBG 2) AA / Aa3 / AA- / 39.5% V 10% Level 1 / 7% Mortgages (OBG 2) AA / Aa3 / A- / 39.5% V V 10% Level 1 / 7% Level 2 / 15% Level 2					√	√		· ·
UNICREDIT SPA Mortgages (OBG 2) AA / Aa3 / AA-/- 39.5%								· ·
Nortgages (DBG 2)					√	√		· ·
SUMITOMO MITSUI BANKING Mortgages (RMBS) -/Aaa/-/- 36.2% x x 20% not eligible SUMITOMO MITSUI TR BK LT Mortgages (RMBS) -/Aaa/-/- 45.9% x x 20% not eligible KOREA HANA BANK Mortgages AAA/-/AAA/- 380.8% Y x 20% Level 2A / 15% KOOKMIN Mortgages (2018 issue) -/Aa1/-/- 110.6% Y x 20% Level 2A / 15% Mortgages (2018 issue) -/-AAA/- 110.6% Y x 20% Level 2A / 15% KOREA HOUSING FINANCE CO Mortgages (2020/01 issue) -/-/AAA/- 115.9% Y x 20% Level 2A / 15% KOREA HOUSING FINANCE CO Mortgages (2021/02 issue) -/-/AAA/- 112.8% Y x 20% Level 2A / 15% Mortgages (2021/01 issue) -/-/AAA/- 112.8% Y x 20% Level 2A / 15% Mortgages (2021/02 issue) -/-/AAA/AAA 169.3% Y x 20% Lev	UNICREDIT SPA							
Mortgages (RMBS) -/ Aaa / -/ 45.9% x x 20% not eligible	Japan							
HANA BANK Mortgages AAA / - / AAA / - 380.8%	SUMITOMO MITSUI BANKING	Mortgages (RMBS)	- / Aaa / - / -	36.2%	×	×	20%	not eligible
HANA BANK Mortgages AAA / - / AAA / - 380.8% V	SUMITOMO MITSUI TR BK LT	Mortgages (RMBS)	- / Aaa / - / -	45.9%	×	×	20%	not eligible
KOOKMIN Mortgages AAA / - / AAA / - 175.3% × 20% Level 2A / 15% Mortgages (2018 issue) -/ AA1 / -/ 110.6% × × 20% Level 2A / 15% Mortgages (2019 issue) -/ - / AAA / - 110.6% × × 20% Level 2A / 15% KOREA HOUSING FINANCE CO (Data as of March 2022) Mortgages (2020/02 issue) -/ - / AAA / - 115.9% × × 20% Level 2A / 15% Mortgages (2020/02 issue) -/ - / AAA / - 115.9% × × 20% Level 2A / 15% Mortgages (2020/02 issue) -/ - / AAA / - 128.8% × × 20% Level 2A / 15% Mortgages (2021/01 issue) -/ - / AAA / AAA 162.0% × × 20% Level 2A / 15% Luxembourg Mortgages (2022/01 issue) -/ - / AAA / AAA 169.3% × × 20% Level 2A / 15% Netherlands Public Loans - / Aa2 / -/ - 22.3% × × 20% Level 1 / 7% ACHMEA BANK NV Mortgages (CPT)	Korea							
Mortgages (2018 issue)	HANA BANK	Mortgages	AAA / - / AAA / -	380.8%	\checkmark	×	20%	Level 2A / 15%
Mortgages (2018 issue)	KOOKMIN	Mortgages	AAA / - / AAA / -	175.3%	\checkmark	×	20%	Level 2A / 15%
KOREA HOUSING FINANCE CO (Data as of March 2022) Mortgages (2020/02 issue)				110.6%	\checkmark	×	20%	Level 2A / 15%
KOREA HOUSING FINANCE CO (Data as of March 2022) Mortgages (2020/02 issue) Mortgages (2021/01 issue) -/-/ AAA / AAA 128.8%		Mortgages (2019 issue)	-/-/AAA/-	106.9%	\checkmark	×	20%	Level 2A / 15%
Mortgages (2021/01 issue)		Mortgages (2020/01 issue)	-/-/AAA/-	115.9%	\checkmark	×	20%	Level 2A / 15%
Mortgages (2021/01 issue)		Mortgages (2020/02 issue)	-/-/AAA/-	128.8%	\checkmark	×	20%	Level 2A / 15%
Mortgages (2022/01 issue) -/-/AAA / AAA 346.8% ✓ × 20% Level 2A / 15% Luxembourg NORDLB LX COV BOND BK Public Loans -/Aa2/-/- 22.3% ✓ ✓ 20% Level 1 / 7% Netherlands ABN AMRO BANK NV Mortgages AAA / Aaa / -/- 25.4% ✓ × 10% Level 1 / 7% ACHMEA BANK NV Mortgages (CPT) AAA / Aaa / -/- 26.1% ✓ × 10% Level 1 / 7% ACHMEA BANK NV Mortgages (Soft) -/-/AAA/- 28.6% ✓ × 10% Level 1 / 7%	(Data as of March 2022)	Mortgages (2021/01 issue)	- / - / AAA / AAA	162.0%	\checkmark	×	20%	Level 2A / 15%
Luxembourg Public Loans -/-/AAA/AAA 346.8% ✓ × 20% Level 2A / 15% NORDLB LX COV BOND BK Public Loans -/Aa2/-/- 22.3% ✓ ✓ 20% Level 1/7% Netherlands ABN AMRO BANK NV Mortgages AAA / Aaa / -/- 25.4% ✓ × 10% Level 1/7% ACHMEA BANK NV Mortgages (CPT) AAA / Aaa / -/- 26.1% ✓ × 10% Level 1/7% ACHMEA BANK NV Mortgages (Soft) -/-/AAA/- 28.6% ✓ × 10% Level 1/7%		Mortgages (2021/02 issue)	- / - / AAA / AAA	169.3%	✓	×	20%	Level 2A / 15%
NORDLB LX COV BOND BK Public Loans - / Aa2 / - / - 22.3% ✓ 20% Level 1 / 7% Netherlands ABN AMRO BANK NV Mortgages AAA / Aaa / - / - 25.4% ✓ × 10% Level 1 / 7% ACHMEA BANK NV Mortgages (CPT) AAA / Aaa / - / - 26.1% ✓ × 10% Level 1 / 7% ACHMEA BANK NV Mortgages (Soft) - / - / AAA / - 28.6% ✓ × 10% Level 1 / 7%			- / - / AAA / AAA	346.8%	\checkmark	×	20%	Level 2A / 15%
Netherlands ABN AMRO BANK NV Mortgages AAA / Aaa / - / - 25.4% ✓ ✗ 10% Level 1 / 7% ACHMEA BANK NV Mortgages (CPT) AAA / Aaa / - / - 26.1% ✓ ✗ 10% Level 1 / 7% ACHMEA BANK NV Mortgages (Soft) - / - / AAA / - 28.6% ✓ ✗ 10% Level 1 / 7%	Luxembourg							
ABN AMRO BANK NV	NORDLB LX COV BOND BK	<u>Public Loans</u>	- / Aa2 / - / -	22.3%	\checkmark	✓	20%	Level 1 / 7%
ACHMEA BANK NV Mortgages (CPT) AAA / Aaa / - / - 26.1% ✓ × 10% Level 1 / 7% ACHMEA BANK NV Mortgages (Soft) - / - / AAA / - 28.6% ✓ × 10% Level 1 / 7%	Netherlands							
ACHMEA BANK NV <u>Mortgages (Soft)</u> -/-/ AAA /- 28.6% ✓ × 10% Level 1 / 7%	ABN AMRO BANK NV	<u>Mortgages</u>	AAA / Aaa / - / -	25.4%	\checkmark	×	10%	Level 1 / 7%
	ACHMEA BANK NV	Mortgages (CPT)	AAA / Aaa / - / -	26.1%	\checkmark	×	10%	Level 1 / 7%
AEGON BANK <u>Mortgages (CPT)</u> -/-/ AAA/- 19.4% ✓ x 10% Level 1 / 7%	ACHMEA BANK NV	Mortgages (Soft)	-/-/AAA/-	28.6%	\checkmark	×	10%	Level 1 / 7%
	AEGON BANK	Mortgages (CPT)	-/-/AAA/-	19.4%	\checkmark	×	10%	Level 1 / 7%



Country	Cover Pool	Rating (Fitch/Moody's/S&P/DBRS)	ос	Law	CBD	RW	LCR level / Haircut as of 30 June 22
Netherlands							
AEGON BANK	Mortgages (Soft)	-/-/AAA/-	14.6%	\checkmark	×	10%	Level 1 / 7%
COOPERATIEVE RABOBANK UA	<u>Mortgages</u>	- / Aaa / - / -	12.1%	\checkmark	×	10%	Level 1 / 7%
DE VOLKSBANK NV	<u>Mortgages</u>	AAA / Aaa / - / -	21.2%	√	×	10%	Level 1 / 7%
ING BANK NV	<u>Mortgages</u>	AAA / Aaa / AAA / -	20.6%	√	×	10%	Level 1 / 7%
	Mortgages (CPT)	-/-/AAA/-	13.1%	√	×	10%	Level 1 / 7%
NN BANK NV NETHERLANDS	Mortgages (Soft)	- / - / AAA / -	9.7%	√	×	10%	Level 1 / 7%
NIBC BANK NV	Mortgages (CPT)	AAA / - / AAA / -	21.9%	√	×	10%	Level 1 / 7%
	Mortgages (Soft)	-/-/AAA/-	37.1%	√	×	10%	Level 1 / 7%
F VAN LANSCHOT BANKIERS	Mortgages (CPT)	AAA / - / AAA / -	33.4%	√	×	10%	Level 1 / 7%
New Zealand							
ANZ NEW ZEALAND INTL/LDN	<u>Mortgages</u>	AAA / Aaa / - / -	178.4%	\checkmark	×	20%	Level 2A / 15%
ASB FINANCE LTD LONDON	<u>Mortgages</u>	AAA / Aaa / - / -	38.3%	\checkmark	×	20%	Level 2A / 15%
BANK OF NEW ZEALAND	<u>Mortgages</u>	AAA / Aaa / - / -	25.8%	\checkmark	×	20%	Level 2A / 15%
WESTPAC SEC NZ/LONDON	<u>Mortgages</u>	AAA / Aaa / - / -	126.5%	\checkmark	×	20%	Level 2A / 15%
Norway							
DNB BOLIGKREDITT AS	<u>Mortgages</u>	- / Aaa / AAA / -	82.7%	\checkmark	\checkmark	10%	Level 1 / 7%
EIKA BOLIGKREDITT AS	<u>Mortgages</u>	- / Aaa / - / -	10.3%	\checkmark	\checkmark	10%	Level 1 / 7%
SPAREBANK 1 BOLIGKREDITT	<u>Mortgages</u>	- / Aaa / - / -	4.9%	\checkmark	\checkmark	10%	Level 1 / 7%
SPAREBANKEN SOR BOLIGKRE	<u>Mortgages</u>	- / Aaa / - / -	11.7%	\checkmark	\checkmark	10%	Level 1 / 7%
SPAREBANKEN VEST BOLIGKR	<u>Mortgages</u>	- / Aaa / - / -	30.3%	\checkmark	\checkmark	10%	Level 1 / 7%
SR-BOLIGKREDITT AS	<u>Mortgages</u>	-/-/AA/AAA	12.9%	\checkmark	\checkmark	10%	Level 1 / 7%
DNB BOLIGKREDITT AS	<u>Mortgages</u>	- / Aaa / AAA / -	82.7%	\checkmark	\checkmark	10%	Level 1 / 7%
Poland							
PKO BANK HIPOTECZNY	<u>Mortgages</u>	-/Aa1/-/-	103.9%	\checkmark	→	10%	Level 1 / 7%
Portugal							
BANCO BPI SA	Mortgages	- / Aa2 / - / -	19.0%	√	→	10%	Level 1 / 7%
BANCO SANTANDER TOTTA SA	<u>Mortgages</u>	A+ / Aa2 / - / -	13.5%	√	→	20%	Level 2A / 15%
CAIXA ECO MONTEPIO GERAL	Mortgages	AA- / Aa3 / - / -	5.3%	√	→	10%	Level 1 / 7%
Singapore							,
DBS BANK LTD	Mortgages	AAA / Aaa / - / -	133.4%	√	×	20%	Level 2A / 15%
OVERSEA-CHINESE BANKING	<u>Mortgages</u> <u>Mortgages</u>	AAA / Aaa / - / -	242.2%	√	×	20%	Level 2A / 15%
UNITED OVERSEAS BANK LTD	Mortgages	- / Aaa / AAA / AAA	85.4%	√ ·	×	20%	Level 2A / 15%
Slovakia	<u>ivioregages</u>	/ / taa / / to t / / to t	03.170			2070	200012717 1370
	Markense	/^/ /^^^	06 50/		√	100/	1 1 1 / 70/
PRIMA BANKA SLOVENSKO AS	<u>Mortgages</u>	- / Aaa / - / AAA	86.5%	√	∨	10%	Level 1 / 7%
SLOVENSKA SPORITELNA AS VSEOBECNA UVEROVA BANKA	<u>Mortgages</u>	- / Aaa / - / AAA - / Aa1 / - / -	130.9% 17.2%	√	√	10% 10%	Level 1 / 7% Level 1 / 7%
	<u>Mortgages</u>	- / Ad1 / - / -	17.2%	•	•	10%	Level 1 / 7%
Spain							
ABANCA CORP BANCARIA SA	<u>Mortgages</u>	-/Aa1/AA+/AAA	438.8%	√	√	10%	Level 1 / 7%
BANCO DE SABADELL SA	<u>Mortgages</u>	-/Aa1/AA+/-	83.4%	√	√	10% 10%	Level 1 / 7%
BANCO DE SABADELL SA BANCO SANTANDER SA	<u>Mortgages</u> <u>Mortgages</u>	- / Aa1 / - / - AAu / Aa1 / - / -	190.0% 59.3%	√	√	10%	Level 1 / 7% Level 1 / 7%
BANKINTER SA	Mortgages	-/Aa1/AA+/-	73.5%	✓	✓	10%	Level 1 / 7%
CAIXABANK SA	<u>Mortgages</u>	-/Aa1/AA+/-	90.0%	√	✓	10%	Level 1 / 7%
CAJA RURAL DE NAVARRA	Mortgages	- / Aa1 / - / -	119.1%	√	√	10%	Level 1 / 7%
DEUTSCHE BK SA ESPANOLA	Mortgages	- / Aa1 / - / -	132.0%	✓	\checkmark	10%	Level 1 / 7%
EUROCAJA RURAL SCC	Mortgages	- / Aa1 / - / -	169.3%	✓	\checkmark	10%	Level 1 / 7%
		1 6 11 2 22 22					•



Country	Cover Pool	Rating (Fitch/Moody's/S&P/DBRS)	ОС	Law	CBD	RW	LCR level / Haircut as of 30 June 22
Spain							
IBERCAJA BANCO SA	<u>Mortgages</u>	-/Aa1/AA/-	344.7%	\checkmark	\checkmark	10%	Level 1 / 7%
KUTXABANK SA	<u>Mortgages</u>	-/Aa1/AA+/-	1717.8%	\checkmark	\checkmark	10%	Level 1 / 7%
UNICAJA BANCO	<u>Mortgages</u>	-/Aa1/-/-	272.4%	\checkmark	\checkmark	10%	Level 1 / 7%
CAJA RURAL DE NAVARRA	<u>Mortgages</u>	-/Aa1/-/-	119.1%	\checkmark	\checkmark	10%	Level 1 / 7%
Sweden							
LANSFORSAKRINGAR HYPOTEK	Mortgages	- / Aaa / AAA / -	25.7%	\checkmark	→	10%	Level 1 / 7%
SKANDINAVISKA ENSKILDA	<u>Mortgages</u>	- / Aaa / - / -	116.3%	\checkmark	→	10%	Level 1 / 7%
STADSHYPOTEK AB	Mortgages (FI Pool)	- / Aaa / - / -	12.1%	✓	→	10%	Level 1 / 7%
STADSHYPOTEK AB	Mortgages (SE Pool)	- / Aaa / - / -	10.5%	\checkmark	→	10%	Level 1 / 7%
STADSHYPOTEK AB	Mortgages (NO Pool)	- / Aaa / - / -	15.3%	\checkmark	→	10%	Level 1 / 7%
SWEDISH COVERED BOND	<u>Mortgages</u>	- / Aaa / - / -	28.3%	\checkmark	→	10%	Level 1 / 7%
UK*							
CLYDESDALE BANK PLC	<u>Mortgages</u>	AAA / Aaa / - / -	157.9%	✓	×	20%	Level 2A / 15%
COVENTRY BLDG SOCIETY	<u>Mortgages</u>	AAA / Aaa / - / -	73.1%	\checkmark	×	20%	Level 2A / 15%
LEEDS BUILDING SOCIETY	<u>Mortgages</u>	AAA / Aaa / - / -	41.9%	\checkmark	×	20%	Level 2A / 15%
LLOYDS BANK PLC	<u>Mortgages</u>	AAA / Aaa / - / -	55.4%	\checkmark	×	20%	Level 2A / 15%
NATL WESTMINSTER BANK	<u>Mortgages</u>	AAA / Aaa / - / -	172.1%	\checkmark	×	20%	Level 2A / 15%
NATIONWIDE BLDG SOCIETY	<u>Mortgages</u>	AAA / Aaa / AAA / -	59.3%	\checkmark	×	20%	Level 2A / 15%
SANTANDER UK PLC	<u>Mortgages</u>	AAA / Aaa / AAA / -	41.0%	\checkmark	×	20%	Level 2A / 15%
SKIPTON BUILDING SOCIETY	<u>Mortgages</u>	AAA / Aaa / - / -	47.3%	\checkmark	×	20%	Level 2A / 15%
YORKSHIRE BUILDING SOC	<u>Mortgages</u>	AAA / Aaa / - / -	54.3%	\checkmark	×	20%	Level 2A / 15%

Source: Issuer, rating agencies, NORD/LB Markets Strategy & Floor Research; <u>full transposition as officially stated by EU Commission</u>
*best possible valuation in case of compliance with Art. 14 CBD and an equivalent supervisory

y = fully transposed, > = partially transposed, x = not transposed



Appendix Publication overview

Covered Bonds:

Issuer Guide Covered Bonds 2021

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

Transparency requirements §28 PfandBG (quarterly update)

Covered bonds as eligible collateral for central banks

SSA/Public Issuers:

Issuer Guide - German Agencies 2022

<u>Issuer Guide – German Laender 2021</u>

Beyond Bundeslaender: Greater Paris (IDF/VDP)

Spotlight on Belgian regions

Spotlight on Spanish regions

Fixed Income Specials:

ESG-Update 2022

ECB ready for lift-off: Every journey starts with a first step

Face-saving ECB decision: Hawks have won – for now

ECB decision: PEPP benched for now, APP comes in as Point Guard

ECB holds course, but ups the ante - PEPP running until 2022



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