

## Acceptable Collateral for Clearing Fund, Margin and Interoperability Fund requirements

Asset Class	Description	Eligibility	ligibility				Notes	
		Clearing Fund	Margin collateral	Cboe Clear collateral	Cboe Clear Liquidity -SPR-	Cboe Clear Liquidity -SEA-	Interoperability Fund	
	British pound (GBP)							
	Euro (EUR)							
	Danish krone (DKK)						Not eligible	
Cash	Norwegian krone (NOK)						Not eligible	
	Swedish krona (SEK)						Not eligible	
	Swiss franc (CHF)						Not eligible	
	United States dollar (USD)						Not eligible	
Asset Class	Issuer group	Haircut category	/					Notes
	IG1 - Central Bank	I	I	I	I	I		Restriction: only acceptable if issued by Austria, Belgium, Denmark, Finland, France, Germany,
	IG2 - Central government	1	1	1	1	1	1	Sweden, Switzerland, United Kingdom, The Netherlands or the United States of America.
Bonds	IG5- Regional/Local Government	Not eligible	II	II	II	II	II	Restriction for Interoperability Fund: only acceptable if issued by Austria, Belgium, Finland, France,
	IG6 - Supranational	Not eligible	II	II.	II	II	II	Germany, The Netherlands.
	IG7 - Agency - Non Credit Institution	Not eligible	II.	II .	II	II	II .	

## Notes to the table

#### Issuer criteria:

Both bank guarantees and securities guaranteed by a credit institution are not acceptable

- Asset type Multi- cédulas is not acceptable
- Both gold and equities are not acceptable

#### Minimum rating criteria

	Long term	or short term
Fitchratings	A-	F1
Moody's	A3	P-1
Standard & Poor's	A-	A-1

If available, the 5-year Credit Default Swap (CDS) rate must be lower than 200 basis points.

If the 5-year Credit Default Swap (CDS) rate >200 basis points: Cboe Clear might revoke eligibility

#### Liquidity

Euro denomination

Liquidity classes L1A (Haircut Cat. I), L1B (Haircut Cat. II) or L1C (Haircut Cat. III) of the ECB (or equivelant)

Non-Euro denomination

- Trading on regulated markets
- Sizeable bid quotes of at least 5 different buyers
- Daily historical volume of at least the highest of
- (1) requested nominal quantity and
- (2) total combined collateral quantity (calculated over the last 125 days).

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## Haircut schedule

Haircut schedule bonds				
Residual maturity (years)	Category I Fixed cpn	Category I Zero cpn	Category II Fixed cpn	Category II Zero cpn
0-1	0.5	0.5	1.0	1.0
1-3	1.0	2.0	1.5	2.5
3-5	1.5	2.5	2.5	3.5
5-7	2.0	3.0	3.5	4.5
7-10	3.0	4.0	4.5	6.5
>10	5.0	7.0	8.0	10.5

The minimum collateral haircut will be floored at the maximum of the observed historical volatility and bottom volatility:

Applicable haircut will be set at: maximum(Haircut above table, Historical volatility, Bottom Volatility)

#### Historial volatility

The price volatility specific haircut is determined by the EWMA volatility over the last 250 trading days, with a minimum haircut of 3%

#### Bottom volatility

The bottom volatility is set at the combined stress levels in the maturity buckets and credit rating buckets listed below.

As an example the haircut for an A rated bond with a residual maturity of 11 years will be at least 9.5% (rating) + 6% (maturity) = 15.5%.

Residual maturity (years)		Haircut				
	0-3 3-5 5-7	1.0				
	3-5	2.0				
	5-7	2.5				
	7-10	3.5				
	>10	6.5				

Rating	Haircut		
AAA	2.5		
AA	3.5		
Α	9.5		

#### Haircut schedule currency mismatch

Collateral (cash and non-cash) deposited in currencies other than the reporting currency are subject to an additional haircut (with the exception for liquidity requirements, which will not be subject to an additional haircut).

This additional haircut is equal to the stressed fx return.

Below table shows the applicable haircuts against the euro.

Currency	Haircut		
GBP	7.0		
DKK	9.0		
NOK	7.0		
SEK	10.0		
CHF	19.5		
USD	8.5		

## Notes to the table

The haircut applied to collateral instruments is the result of the combination of the haircuts of each specific risk

Haircut refers to the percentage discount applied to the market value of collateral valuation

Interoperability Fund: a minimum haircut of 10% applies for non-cash Deposits

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# C'boe Clear

## **Cboe Clear Concentration limits**

Concentration limits- individual clearing members			
			- -
Combined collater	al to cover both margin requirements and Clearing Fund		
Issuer Type	Type of asset - Definition	Limit	Notes
	Cash	≤ 100%	Clearing Participants may cover up 75% of Margin requirements (Non-liquidity requirements) with
IG1	Non-cash - Central Bank	≤ 100%	United States treasury securities.
IG2	Non-cash - Central Government	≤ 100%	
IG3			Clearing Participants may cover up to 100% of margin calls resulting from liquidity margin
IG4		0% - Not accepted	requirements with United States treasury securities.
IG5	Non-cash - Regional/Local Government	≤ 75%	
IG6	Non-cash - Supranational Issuer	≤ 75%	
IG7	Non-cash - Agency – Non Credit Institution	≤ 75%	
IG8	Non-cash - Agency - Credit Institution	0% - Not accepted	
IG9	Non-cash - Financial Corporations Other Than Credit Institutions	0% - Not accepted	

#### Individual issuers - geographic region

Government bonds per instrument (ISIN) excluding France or Germany: < 200 million equivalent EURO market value including accrued interest and ≤ 100% of combined requirements

Government bonds per instrument (ISIN) for countries being France or Germany: < 400 million equivalent EURO market value including accrued interest and < 100% of combined requirements

Clearing Fund:			
Issuer Type	Type of asset - Definition		Notes
	Cash	≤ 100%	
IG1	Non-cash - Central Bank	≤ 100%	
IG2	Non-cash - Central Government	≤ 100%	
IG3	Non-cash - Corporate and Other Issuer	0% - Not accepted	
IG4	Non-cash - Credit Institution (excluding Agencies)	0% - Not accepted	
IG5	Non-cash - Regional/Local Government	0% - Not accepted	
IG6	Non-cash - Supranational Issuer	0% - Not accepted	
IG7	Non-cash - Agency – Non Credit Institution	0% - Not accepted	
IG8	Non-cash - Agency - Credit Institution	0% - Not accepted	
IG9	Non-cash - Financial Corporations Other Than Credit Institutions	0% - Not accepted	

#### Individual issuers - geographic region

Non-cash - Agency - Non Credit Institution

Non-cash - Financial Corporations Other Than Credit Institutions

Non-cash - Agency - Credit Institution

Government bonds per instrument (ISIN) excluding France or Germany: < 50 million equivalent EURO market value including accrued interest and ≤ 100% Government bonds per instrument (ISIN) for countries being France or Germany: < 100 million equivalent EURO market value including accrued interest and ≤ 100%

Concentration limits- all clearing members Issuer Type Type of asset - Definition Limit Notes ≤ 100% ≤ 100% IG1 Non-cash - Central Bank IG2 Non-cash - Central Government ≤ 100% IG3 Non-cash - Corporate and Other Issuer 0% - Not accepted IG4 Non-cash - Credit Institution (excluding Agencies) 0% - Not accepted IG5 Non-cash - Regional/Local Government ≤ 75% IG6 Non-cash - Supranational Issuer ≤ 75%

## Individual issuers

IG7

IG8

IG9

Government bonds per instrument (ISIN) country excluding France or Germany: < 1,000 million equivalent EURO market value including accrued interest and ≤ 100% Government bonds per instrument (ISIN) for countries being France or Germany: < 2,000 million equivalent EURO market value including accrued interest and ≤ 100%

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≤ 75%

0% - Not accepted

0% - Not accepted