

LCH SA - Risk Notice - Margin Eligible Securities Collateral and Haircut Schedule		Haircuts on 23/11/2022		
Eligible Government Securities		Buckets	Haircuts (Conventional Bonds)	Haircuts (Inflation Linked Bonds)
Australia	Debt Securities issued by the Australian State: Australian Treasury Bill (ACTB) Australian Government Bond (ACGB)	11 business days and <= 0,5 year	0.50%	N/A
		> 0.5 and <= 1 year	0.75%	N/A
		> 1 and <= 3 years	1.25%	N/A
		> 3 and <= 5 years	2.25%	N/A
		> 5 and <= 7 years	2.75%	N/A
		> 7 and <= 10 years	4.00%	N/A
		> 10 and <= 15 years	6.50%	N/A
		> 15 and <= 30 years	14.00%	N/A
		> 30 and <= 50 years	N/A	N/A
		Austria	Debt Securities issued by the Austrian State: Austrian Treasury Bill (RATB) Austrian Government Bond (RAGB)	4 business days and <= 0,5 year
> 0.5 and <= 1 year	0.75%			N/A
> 1 and <= 3 years	1.50%			N/A
> 3 and <= 5 years	2.50%			N/A
> 5 and <= 7 years	3.00%			N/A
> 7 and <= 10 years	3.75%			N/A
> 10 and <= 15 years	5.50%			N/A
> 15 and <= 30 years	12.25%			N/A
> 30 and <= 50 years	16.50%			N/A
Belgium	Debt Securities issued by the Belgian state: Belgian Treasury Bill (BGTB) Belgian Government Bond (BGB)			4 business days and <= 0,5 year
		> 0.5 and <= 1 year	1.00%	N/A
		> 1 and <= 3 years	2.00%	N/A
		> 3 and <= 5 years	2.75%	N/A
		> 5 and <= 7 years	4.25%	N/A
		> 7 and <= 10 years	5.25%	N/A
		> 10 and <= 15 years	7.50%	N/A
		> 15 and <= 30 years	14.00%	N/A
		> 30 and <= 50 years	18.75%	N/A
		Canada	Debt Securities issued by the Canadian State: Canadian Treasury Bill (CTB) Canadian Government Bond (CAN)	10 business days and <= 0,5 year
> 0.5 and <= 1 year	0.50%			N/A
> 1 and <= 3 years	1.00%			N/A
> 3 and <= 5 years	1.75%			N/A
> 5 and <= 7 years	2.25%			N/A
> 7 and <= 10 years	3.00%			N/A
> 10 and <= 15 years	4.25%			N/A
> 15 and <= 30 years	8.25%			N/A
> 30 and <= 50 years	11.00%			N/A
Denmark	Debt Securities issued by the Danish State: Danish Treasury Bill (DGTB) Danish Government Bond (DGB)			6 business days and <= 0,5 year
		> 0.5 and <= 1 year	0.50%	N/A
		> 1 and <= 3 years	1.25%	N/A
		> 3 and <= 5 years	1.75%	N/A
		> 5 and <= 7 years	2.50%	N/A
		> 7 and <= 10 years	3.50%	N/A
		> 10 and <= 15 years	5.25%	N/A
		> 15 and <= 30 years	12.50%	N/A
		> 30 and <= 50 years	N/A	N/A
		Finland	Debt Securities issued by the Finnish State: Finnish Treasury Bill (RFTB) Finnish Government Bonds (RFGB)	4 business days and <= 0,5 year
> 0.5 and <= 1 year	0.50%			N/A
> 1 and <= 3 years	1.25%			N/A
> 3 and <= 5 years	2.00%			N/A
> 5 and <= 7 years	2.75%			N/A
> 7 and <= 10 years	3.75%			N/A
> 10 and <= 15 years	5.50%			N/A
> 15 and <= 30 years	11.25%			N/A
> 30 and <= 50 years	15.00%			N/A
France	Debt Securities issued by the French state: Bons du Trésor à Taux Fixe et Intérêt Précompté (BTF) Bons du Trésor à Taux Fixe et Intérêt Annuel (BTNS) Bons du Trésor à Taux Fixe et Intérêt Annuel I/L (BTNS) Obligations Assimilables du Trésor (FRTR) Obligations Assimilables du Trésor I/L (FRTR)			4 business days and <= 0,5 year
		> 0.5 and <= 1 year	0.50%	1.25%
		> 1 and <= 3 years	1.25%	2.00%
		> 3 and <= 5 years	2.00%	3.00%
		> 5 and <= 7 years	2.75%	4.00%
		> 7 and <= 10 years	3.75%	5.00%
		> 10 and <= 15 years	5.50%	6.25%
		> 15 and <= 30 years	11.50%	14.00%
		> 30 and <= 50 years	15.50%	18.75%
		Germany	Debt Securities issued by the German Federal State: German Treasury Bill (BUBILL) Bundesschatzanweisungen (BKO) Bundesschatzobligationen (OBL) Bundesschatzobligationen I/L (OBIL) Deutsche Bundesrepublik (DBR) Deutschland I/L (DBRI)	3 business days and <= 0,5 year
> 0.5 and <= 1 year	0.50%			1.00%
> 1 and <= 3 years	1.25%			1.75%
> 3 and <= 5 years	2.00%			2.75%
> 5 and <= 7 years	2.50%			3.25%
> 7 and <= 10 years	3.50%			4.25%
> 10 and <= 15 years	5.00%			6.50%
> 15 and <= 30 years	11.25%			11.25%
> 30 and <= 50 years	15.00%			15.00%
Italy	Debt Securities issued by the Italian State: Buoni Ordinari del Tesoro (BOTS) Buoni del Tesoro Poliennali (BTPS) Buoni del Tesoro Poliennali I/L (BTPS) Certificati di Credito del Tesoro (CCTS)			3 business days and <= 0,5 year
		> 0.5 and <= 1 year	6.00%	6.00%
		> 1 and <= 3 years	7.00%	7.00%
		> 3 and <= 5 years	9.00%	10.00%
		> 5 and <= 7 years	10.50%	12.00%
		> 7 and <= 10 years	11.50%	14.25%
		> 10 and <= 15 years	13.00%	15.75%
		> 15 and <= 30 years	21.75%	21.75%
		> 30 and <= 50 years	26.50%	26.50%
		Japan	Debt Securities issued by the Japanese State: Japanese Treasury Bill (JGTB) Japanese Treasury Discount Bill (JTDB) Japanese Government Bond (JGB)	6 business days and <= 0,5 year
> 0.5 and <= 1 year	0.50%			N/A
> 1 and <= 3 years	0.50%			N/A
> 3 and <= 5 years	1.00%			N/A
> 5 and <= 7 years	1.50%			N/A
> 7 and <= 10 years	2.00%			N/A

		> 10 and <= 15 years	3.00%	N/A
		> 15 and <= 30 years	8.25%	N/A
		> 30 and <= 50 years	11.00%	N/A
Netherlands	Debt Securities issued by the Dutch State: Dutch Treasury Certificate (DTB) Dutch Government Bond (NETHER)	10 business days and <= 0,5 year	0.50%	N/A
		> 0.5 and <= 1 year	0.50%	N/A
		> 1 and <= 3 years	1.25%	N/A
		> 3 and <= 5 years	2.00%	N/A
		> 5 and <= 7 years	2.25%	N/A
		> 7 and <= 10 years	3.50%	N/A
		> 10 and <= 15 years	5.00%	N/A
		> 15 and <= 30 years	11.00%	N/A
		> 30 and <= 50 years	14.75%	N/A
Norway	Debt Securities issued by the Norwegian State: Norwegian Treasury Bill (NGTB) Norwegian Government Bond (NGB)	9 business days and <= 0,5 year	0.75%	N/A
		> 0.5 and <= 1 year	1.00%	N/A
		> 1 and <= 3 years	1.50%	N/A
		> 3 and <= 5 years	2.25%	N/A
		> 5 and <= 7 years	3.00%	N/A
		> 7 and <= 10 years	4.00%	N/A
		> 10 and <= 15 years	6.25%	N/A
		> 15 and <= 30 years	N/A	N/A
		> 30 and <= 50 years	N/A	N/A
Portugal	Debt securities issued by the Portuguese State Portuguese Treasury Bill (PORTB) Portuguese Government bond (PGB)	3 business days and <= 0,5 year	8.25%	N/A
		> 0.5 and <= 1 year	11.50%	N/A
		> 1 and <= 3 years	21.25%	N/A
		> 3 and <= 5 years	27.25%	N/A
		> 5 and <= 7 years	32.25%	N/A
		> 7 and <= 10 years	32.25%	N/A
		> 10 and <= 15 years	32.25%	N/A
		> 15 and <= 30 years	47.00%	N/A
		> 30 and <= 50 years	54.00%	N/A
Spain	Debt Securities issued by the Spanish State: Spanish Letras del Tesoro (SGLT) Spanish Government Bond (SPGB)	3 business days and <= 0,5 year	2.25%	N/A
		> 0.5 and <= 1 year	3.00%	N/A
		> 1 and <= 3 years	6.50%	N/A
		> 3 and <= 5 years	9.25%	N/A
		> 5 and <= 7 years	10.50%	N/A
		> 7 and <= 10 years	12.25%	N/A
		> 10 and <= 15 years	15.25%	N/A
		> 15 and <= 30 years	25.50%	N/A
		> 30 and <= 50 years	31.50%	N/A
Sweden	Debt Securities issued by the Swedish State: Swedish Treasury Bill (SWTB) Swedish Government Bond (SGB)	4 business days and <= 0,5 year	0.50%	N/A
		> 0.5 and <= 1 year	0.50%	N/A
		> 1 and <= 3 years	1.00%	N/A
		> 3 and <= 5 years	1.75%	N/A
		> 5 and <= 7 years	2.25%	N/A
		> 7 and <= 10 years	3.50%	N/A
		> 10 and <= 15 years	5.50%	N/A
		> 15 and <= 30 years	11.75%	N/A
		> 30 and <= 50 years	N/A	N/A
Switzerland	Debt Securities issued by the Swiss State: Swiss Treasury Bill (SWISTB) Swiss Government Bond (SWISS)	3 business days and <= 0,5 year	0.50%	N/A
		> 0.5 and <= 1 year	0.50%	N/A
		> 1 and <= 3 years	1.50%	N/A
		> 3 and <= 5 years	1.75%	N/A
		> 5 and <= 7 years	2.25%	N/A
		> 7 and <= 10 years	3.50%	N/A
		> 10 and <= 15 years	5.25%	N/A
		> 15 and <= 30 years	13.50%	N/A
		> 30 and <= 50 years	18.00%	N/A
UK	Debt Securities issued by the United Kingdom State: United Kingdom Treasury Bill (UKTB) United Kingdom Gilt (UKT)	9 business days and <= 0,5 year	0.50%	N/A
		> 0.5 and <= 1 year	0.70%	N/A
		> 1 and <= 3 years	1.50%	N/A
		> 3 and <= 5 years	2.50%	N/A
		> 5 and <= 7 years	3.25%	N/A
		> 7 and <= 10 years	5.00%	N/A
		> 10 and <= 15 years	8.25%	N/A
		> 15 and <= 30 years	14.25%	N/A
		> 30 and <= 50 years	19.00%	N/A
USA	Debt Securities issued by the United States of America: US Treasury Bills (B)	3 business days and <= 0,5 year	0.50%	N/A
		> 0.5 and <= 1 year	0.70%	N/A
		> 1 and <= 3 years	1.50%	N/A
		> 3 and <= 5 years	2.50%	N/A
		> 5 and <= 7 years	3.50%	N/A
		> 7 and <= 10 years	5.00%	N/A
		> 10 and <= 15 years	7.50%	N/A
		> 15 and <= 30 years	16.25%	N/A
		> 30 and <= 50 years	22.00%	N/A

Eligible Securities (Supra & Agencies)		Buckets	Haircuts	Haircuts (Inflation Linked Bonds)
European Financial Stability Facility	Debt securities issued by the European Financial Stability Facility: European Financial Stability Facility bond (EFSF)	4 business days and <= 0,5 year	1.50%	N/A
		> 0.5 and <= 1 year	1.50%	N/A
		> 1 and <= 3 years	2.50%	N/A
		> 3 and <= 5 years	3.00%	N/A
		> 5 and <= 7 years	3.75%	N/A
		> 7 and <= 10 years	8.00%	N/A
		> 10 and <= 15 years	8.25%	N/A
		> 15 and <= 30 years	16.50%	N/A
		> 30 and <= 50 years	N/A	N/A

European Investment Bank	Debt securities issued by the European Investment Bank: European Investment Bank bonds (EIB) European Investment Bank Floater (EIB)	9 business days and <= 0,5 year	1.00%	N/A
		> 0.5 and <= 1 year	1.00%	N/A
		> 1 and <= 3 years	2.50%	N/A
		> 3 and <= 5 years	3.50%	N/A
		> 5 and <= 7 years	4.50%	N/A
		> 7 and <= 10 years	8.00%	N/A
		> 10 and <= 15 years	11.50%	N/A
		> 15 and <= 30 years	16.25%	N/A
		> 30 and <= 50 years	N/A	N/A
European Union	Debt securities issued by the European Union (EU): European Union bonds (EU)	12 business days and <= 0,5 year	1.00%	N/A
		> 0.5 and <= 1 year	1.00%	N/A
		> 1 and <= 3 years	1.75%	N/A
		> 3 and <= 5 years	2.75%	N/A
		> 5 and <= 7 years	4.50%	N/A
		> 7 and <= 10 years	8.00%	N/A
		> 10 and <= 15 years	8.00%	N/A
		> 15 and <= 30 years	15.25%	N/A
		> 30 and <= 50 years	N/A	N/A
International Bank for Reconstruction and Development	Debt securities issued by the International Bank for Reconstruction and Development : International Bank for Reconstruction and Development Bond (IBRD)	12 business days and <= 0,5 year	1.00%	N/A
		> 0.5 and <= 1 year	1.00%	N/A
		> 1 and <= 3 years	1.75%	N/A
		> 3 and <= 5 years	2.75%	N/A
		> 5 and <= 7 years	4.50%	N/A
		> 7 and <= 10 years	8.00%	N/A
		> 10 and <= 15 years	8.00%	N/A
		> 15 and <= 30 years	15.25%	N/A
		> 30 and <= 50 years	N/A	N/A
European Stability Mechanism	Debt securities issued by the European Stability Mechanism: European Stability Mechanism Bond (ESM) European Stability Mechanism T-bill (ESMT)	4 business days and <= 0,5 year	1.00%	N/A
		> 0.5 and <= 1 year	1.00%	N/A
		> 1 and <= 3 years	1.50%	N/A
		> 3 and <= 5 years	2.75%	N/A
		> 5 and <= 7 years	3.50%	N/A
		> 7 and <= 10 years	4.50%	N/A
		> 10 and <= 15 years	8.00%	N/A
		> 15 and <= 30 years	16.50%	N/A
		> 30 and <= 50 years	N/A	N/A
Landwirtschaftliche Rentenbank	Debt securities issued by the Landwirtschaftliche Rentenbank: Landwirtschaftliche Rentenbank Bond (RENTEN). Landwirtschaftliche Rentenbank Floater (RENTEN)	2 business days and <= 0,5 year	1.00%	N/A
		> 0.5 and <= 1 year	1.25%	N/A
		> 1 and <= 3 years	1.50%	N/A
		> 3 and <= 5 years	2.75%	N/A
		> 5 and <= 7 years	3.50%	N/A
		> 7 and <= 10 years	4.50%	N/A
		> 10 and <= 15 years	8.00%	N/A
		> 15 and <= 30 years	14.00%	N/A
		> 30 and <= 50 years	N/A	N/A
Kreditanstalt für Wiederaufbau	Debt securities issued by the Kreditanstalt für Wiederaufbau: Kreditanstalt für Wiederaufbau Bond (KFW) Kreditanstalt für Wiederaufbau Floater (KFW)	3 business days and <= 0,5 year	1.00%	N/A
		> 0.5 and <= 1 year	1.25%	N/A
		> 1 and <= 3 years	1.50%	N/A
		> 3 and <= 5 years	2.75%	N/A
		> 5 and <= 7 years	3.50%	N/A
		> 7 and <= 10 years	4.50%	N/A
		> 10 and <= 15 years	8.00%	N/A
		> 15 and <= 30 years	14.00%	N/A
		> 30 and <= 50 years	N/A	N/A

Other stipulations				
Equities	<ul style="list-style-type: none"> • Stocks incorporated European index EURO STOXX 50 (Excluding Banking & Insurance stocks) within the limits set out by LCH SA; • An haircut of 35 % is applied on shares accepted as collateral; • Equity Securities not accepted for CDS/Clear Margins. 			
Haircut allocation rule	<ul style="list-style-type: none"> • For non-cash collateral lodged bilaterally, the duration is used to determine the haircut; • For non-cash collateral lodged using triparty solution, the time to maturity is used to determine the haircut. 			
Additional Haircuts	Certain collateral can from time to time be subject to additional haircuts above those stated.			
Excluded bonds instruments	LCH SA deems non eligible the following securities : <ul style="list-style-type: none"> • Zero coupon bonds (excluding T-Bills), stripped bonds and perpetual bonds • Bonds close to maturity • Optionable bonds (Sinkable, Callable, Puttable) • Bonds not issued in the local country currency (e.g. France issuing USD debt) 			
Concentration Limits	LCH SA reserves the right to manage specific concentrations in margin collateral in all circumstances. Where positions are considered to be excessively concentrated, members will be contacted directly with a view to re-alignment of their portfolio.			
Currency Haircut	• For payment in non EURO, LCH SA applies a haircut on the equivalent in EURO calculated from the currency exchange rate the below incremental FX Haircut apply.			
		Currency	FX HC	Minimum nominal Value in ccy
		AUD	6.90%	100,000
		CAD	4.50%	100,000
		CHF	6.20%	100,000
		DKK	0.20%	1,000,000
		EUR	0.00%	100,000
		GBP	5.40%	100,000
		JPY	7.50%	10,000,000
		NOK	4.90%	1,000,000
		SEK	3.50%	1,000,000
	USD	4.80%	100,000	

Outstanding Amount	• To be eligible, securities need to have an Outstanding Amount above the following limits.		
	Currency	Minimum outstanding amount in ccy (Million)	
	AUD	750	
	CAD	750	
	CHF	500	
	DKK	5,000	
	EUR	500	
	GBP	500	
	JPY	70,000	
	NOK	5,000	
SEK	5,000		
USD	500		
Tri Party	<ul style="list-style-type: none"> • For non-cash collateral lodged using triparty solution, same haircuts apply • For non-cash collateral lodged using triparty solution, the minimum Nominal value is defined in the Triparty contract 		
Maturities	Debt	Min Maturity (in business days)	Max Maturity*
	Australia	11	30Y
	Austria	4	50Y
	Belgium	4	50Y
	Canada	10	50Y
	Denmark	6	30Y
	Finland	4	50Y
	France	4	50Y
	Germany	3	50Y
	Italy	3	50Y
	Japan	6	50Y
	Netherland	10	50Y
	Norway	9	11Y
	Portugal	3	50Y
	Spain	3	50Y
	Sweden	4	30Y
	Switzerland	3	50Y
	UK	9	50Y
	USA	3	50Y
	EFSF	4	30Y
	EIB	9	30Y
	EU	12	30Y
IBRD	12	30Y	
ESM	4	30Y	
Rentenbank	2	30Y	
KFW	3	30Y	
*The maximum maturity is here referring to the associated benchmark of the mentioned tenors.			
Haircut Application	The application of the haircuts is performed according to the below formula: $Price \times (1 - HC) \times (1 - Fx HC)$		