

GC Pooling

Secured Funding in Motion

September 2010

GC Pooling[®]

Take advantage of collateralized funding

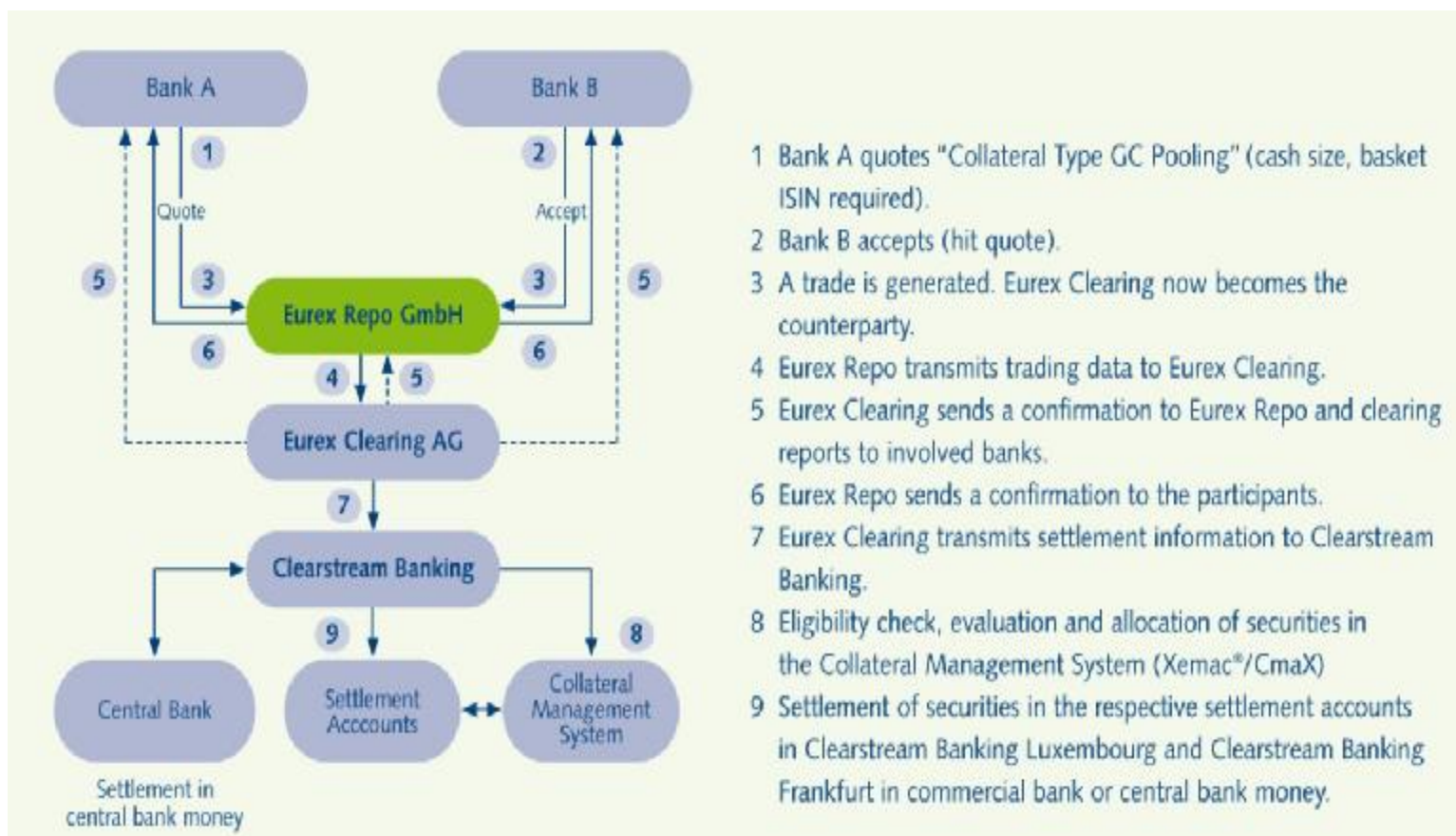
Benefits

- § Secured Euro and USD cash funding collateralized by unique, harmonized baskets
- § Cash-driven GC trading on an open order book basis
- § Re-use of collateral and pledge to ECB / Bundesbank within the GC Pooling ECB Basket (Tender auctions for participants based in Germany)
- § Anonymous trading via Eurex Clearing stepping in as central counterparty
- § Zero regulatory costs due to trading via Eurex Clearing depending on country of residence
- § Netting at clearing level with Eurex Clearing's delivery management
- § Balance Sheet Netting
- § Linking of CBL and CBF assets, creating one virtual collateral pool
- § Automated allocation of securities in CmaX/Xemac replaces manual completion via Eurex Repo trading front-end
- § Real-time substitution of securities
- § Use of existing and established STP-infrastructure (Eurex Repo / Eurex Clearing / Clearstream collateral management & settlement services)

GC Pooling®

Enables trading with automated collateral management

Concept



GC Pooling[®] ECB Basket

Basket Standards

- § Based on the Eligible Assets Database (EAD) the GC Pooling[®] ECB basket comprises over 9,000 ECB eligible securities denominated in EUR, USD, GBP and JPY
- § Assets rated below “A-/A3” are not eligible
- § No restriction on maturities
- § Re-use of received collateral for refinancing within the framework of ECB/Bundesbank open market operations and GC Pooling[®] trading

Basket Collateral

- § Around 3,000 Instruments of Central Banks, Central Governments, Regional/Local Governments and Supranationals
- § Around 6,000 Traditional and Jumbo “Pfandbriefe”-style instruments of credit institutions and Agency Credit Institutions

Countries

- § Location of bond issuance:
Austria, Belgium, Luxembourg, Germany, Italy, The Netherlands, France, Slovenia and international Eurobonds (XS ISINs)
- § Bond issuer must be established in the European Economic Area (EEA) or in one of the non-EEA G10 countries (i.e. USA, Canada, Japan or Switzerland)

GC Pooling ECB EXTended[®] Basket

Basket Standards

- § Based on the Eligible Assets Database (EAD) the GC Pooling[®] ECB EXT basket comprises approximately 27,000 ECB eligible securities
- § Excluded are T-Bills, Commercial Papers and Certificates of Deposit issued by corporate issuers and Non-Agency credit Institutions as well as all assets defined as ABS/MBS and other securitized bonds
- § Assets rated below “BBB-” are not eligible
- § No restriction on maturities
- § Securities are denominated in EUR, USD, GBP and JPY
- § Re-use of received collateral within the GC Pooling[®] EXTended basket

Basket Collateral

- § Around 3,000 Instruments of Central Banks, Central Governments, Regional/Local Governments and Supranationals
- § Around 6,000 Traditional and Jumbo “Pfandbriefe”-style instruments of credit institutions and Agency Credit Institutions
- § Around 18,000 instruments of credit institutions, agency - non credit institutions, corporate and other issuers

Countries

- § Location of the bond issuance:
Austria, Belgium, Cyprus, Finland, France, Germany, Ireland, Italy, Luxembourg, Malta, Portugal, Slovenia, Spain, Netherlands and international Eurobonds (XS ISINs)
- § Bond issuer must be established in the European Economic Area (EEA) or in one of the non-EEA G10 countries (i.e. USA, Canada, Japan or Switzerland)

GC Pooling[®]

Cash Funding in USD

Product Specifications

- § On January 29, 2010 Eurex Repo introduced USD funding
- § Existing GC Pooling[®] Basket ISINs will be used, same eligibility criteria applied
- § Dedicated USD standard contract terms, ON term will be introduced later
- § Daily management of USD FX risk within the Eurex Clearing margin system
- § USD cash settlement in commercial bank money real-time from 11:00 till 17:00

Ø German customers: CBF-I account, i.e. "6-series" main account

Ø International Customers: CBL account (same account as for all GC Pooling[®] cash clearing activities)

- § Collateral re-use opportunity towards Bundesbank / ECB possible
- § Re-use within same GC Pooling baskets and currency
- § Separated USD and EUR exposure managed and reported in Xemac as well as via SWIFT MT569
- § Regular CBF / CBL cash and securities settlement reporting

GC Pooling® Trading Specifications

Trading Hours

- § Pre-trading: 7:00 – 7:30 CET
- § Trading: 7:30 – 18:00 CET
- § Cut-Off time for EUR overnight: 16:00 CET

Open Order Book

- § Display of entire market depth
- § No automatic matching

Contract Size

- § Minimum EUR 1 million.
- § Large tickets of several billion are possible

Standard Terms

- § Overnight (ON), TomNext (TN), SpotNext (SN), SpotTerm, Tender, FlexTerm, no overnight trading for USD GC Pooling

Trade & Quote Information

- § Via OTX (Own Trade File Extractor)
- § Via PAPI (Participant Applicant Programming Interface)
- § Via Trade Confirmation on screen
- § Quotes are available on Reuters page <0#EUREXREPO=EX>

Eurex Clearing – Margin Calculation

Current Liquidating Margin (CLM)

- § The current liquidating margin covers losses that would occur in the case that a position were closed out today.
- § The CLM for the cash amount is calculated by Eurex Clearing after the trade is done until the settlement of the term leg. It is the daily adjustment of the margin for the Repo rate and will be a debit for the cash taker and a credit for the cash provider.
- § The CLM for the securities is calculated by Clearstream/Xemac. It is the daily re-evaluation and adjustment of allocated collateral based on ECB haircuts.
- § In case of under-collateralization, Xemac automatically allocates sufficient additional collateral. If a claim cannot be fully covered, Eurex Clearing initiates an intraday margin call.

Additional (Initial) Margin (AM)

- § The additional (initial) margin serves to cover through the next trading any potential additional costs that could arise if the positions had to be liquidated immediately. A worst case loss is anticipated.
- § The AM for the cash provider is calculated by Clearstream/Xemac by using the security specific ECB haircuts.
- § The AM for the cash taker is already covered by the daily re-evaluation and adjustment of allocated collateral within Xemac.

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Example: Margin Calculation Cash Provider

Cash Provider

**Buy
100 mn EUR
Term:
1 Week
Repo Rate
1.00 %
ECB Haircut
5%
Trade Price
100%**

CLM Front Leg

+ 100.000.000 EUR CLV securities
- 99.999.950 EUR CLV cash (discounted by risk adapted interest rate – down (RAIRD))
+ 50 EUR (credit)

CLM Term Leg

- 100.000.000 EUR CLV securities
+100.019.444 EUR CLV cash (repo rate)
+ 19.444 EUR (credit)

Total CLM cash

+ 50 EUR (will be zero after the settlement of the Front Leg)
+ 19.444 EUR (Term Leg)
+ 19.494 EUR (credit)

CLM securities (Correlates to the additional allocated collateral by the application of the ECB haircut)
- 5.000.000 EUR (debit)

AM (based on ECB haircuts)
- 5.000.000 EUR (debit)

Total Margin Requirement

+ 19.494 EUR CLM cash
- 5.000.000 EUR CLM securities
- 5.000.000 EUR AM

- **9.980.506 EUR (debit)**

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Example: Margin Calculation Cash Taker

Cash Taker

CLM Front Leg

- 100.000.000 EUR CLV securities
- + 99.999.950 EUR CLV cash (discounted by risk adapted interest rate – up)
- 50 EUR (debit)

CLM Term Leg

- + 100.000.000 EUR CLV securities
- 100.019.444 EUR CLV cash (incl. repo rate)
- 19.444 EUR (debit)

Total CLM cash

- 50 EUR (will be zero after the settlement of the Front Leg)
- 19.444 EUR (Term Leg)
- 19.494 EUR (debit)

CLM securities (Correlates to the additional allocated collateral by the application of the ECB haircut)

- + 5.000.000 EUR (credit)

AM (based on ECB haircuts)

- 5.000.000 EUR (debit)

Total Margin Requirement

- 19.444 EUR CLM cash
- + 5.000.000 EUR CLM securities
- 5.000.000 EUR AM
- 19.444 EUR (debit)

Sell
100 mn EUR
Term:
1 Week
Repo Rate
1.00 %
ECB Haircut
5%
Bond Price
100%

Eurex Clearing – Default Procedures

**Default on the
delivery day of
the Front Leg**

§ Eurex Clearing is entitled or on request of the Clearing Member which does not receive delivery on time, obligated to set the present business day as an advanced repurchase date of the term leg. The obligations are offset and the repo rate will be settled.

**Default on the
delivery day of
the Term Leg**

§ In case a Clearing Member fails to transfer the underlying securities, Eurex Clearing is entitled or on request of the Clearing Member which does not receive delivery on time, obligated to make a replacement purchase as from the fifth day following the delivery date of the term leg.

**Default on the
cash leg**

§ In case a Clearing Member fails to deliver the cash amount and a technical default can be excluded, Eurex Clearing will assume the Clearing Member' default according to part 7 of the Eurex Clearing rules. Consequently, the Clearing Member will be set on hold, positions will be closed out and the remaining obligations will be covered by the margin collateral previously provided.

Eurex Clearing

Risk and Delivery Information

Eurex Clearing Reports

- § XE01 is the margin class for GC Pooling® ECB Basket
- § XE05 is the margin class for GC Pooling® ECB EXT Basket
- § Risk Reports:
 - § CC011 Current Liquidating Margin (CLM)
 - § CC045 Additional Margin (Initial) (AM)
 - § CI050 Daily Margin, which shows both CLM and AM and the resulting margin requirement. This report will be updated and distributed via the Eurex network four times a day (around 10:30, 13:30, 16:00, 18:00 CET)
 - § CI042 Daily Settlement Statement (reconciliation of total margin requirement and pledged securities account)
 - § CD010 Daily Cash Account Statement (movements of target II account)

CCP Delivery Reports

- § Mapping between GC Pooling® trades and delivery instructions is available via RPTCE270 (8 times per day) Settled Delivery
- § Trade number and delivery id enable the identification of single trades after netting
- § Report RPTCE260 provides an overview of pending trades

§ More details on reporting under
www.eurexclearing.com/services/reporting

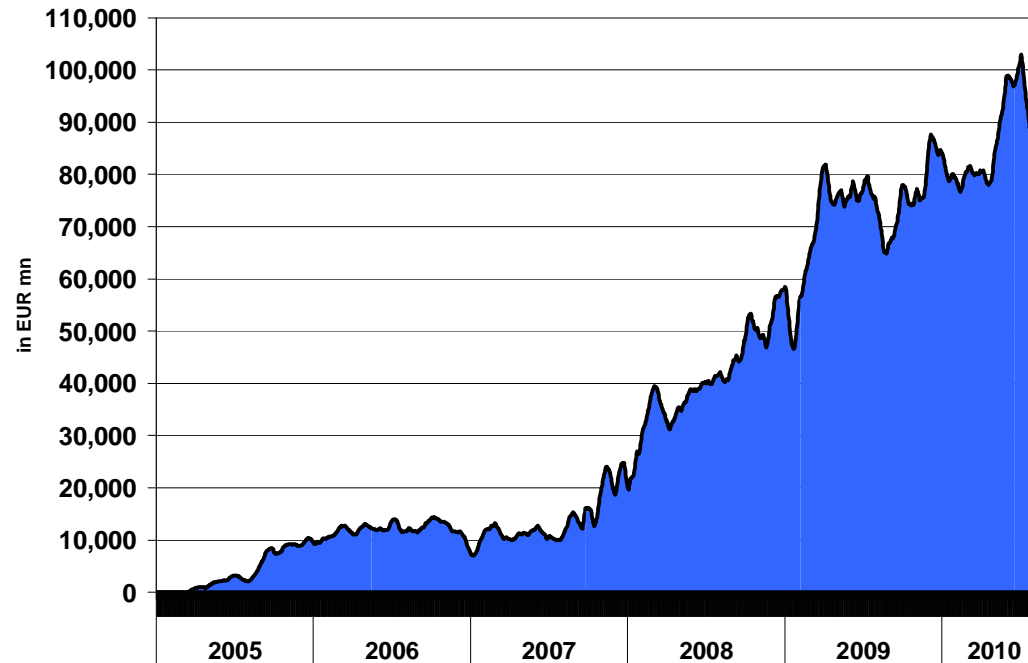
GC Pooling®

A strong growth in 2009 and 2010



Volume

Daily Average Outstanding Volume March 2005 - August 2010



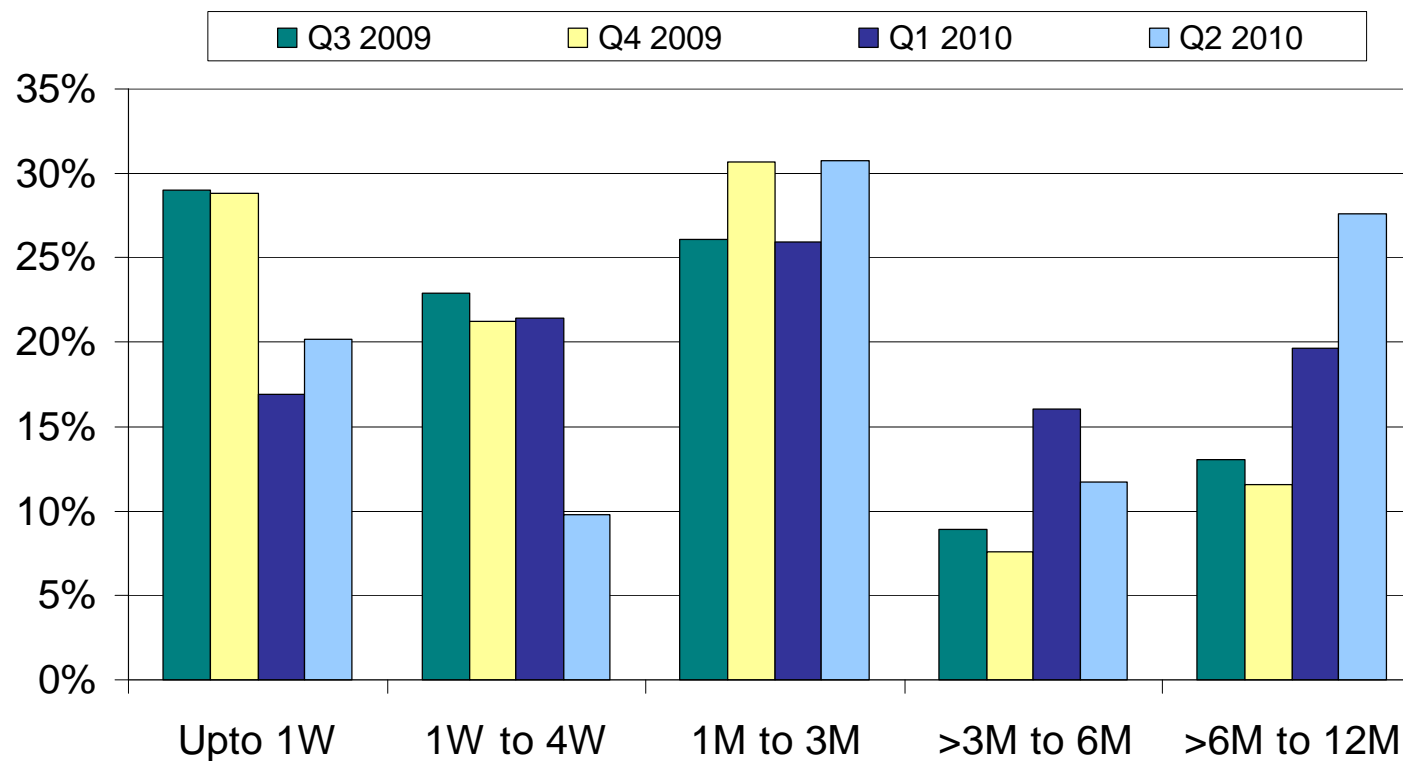
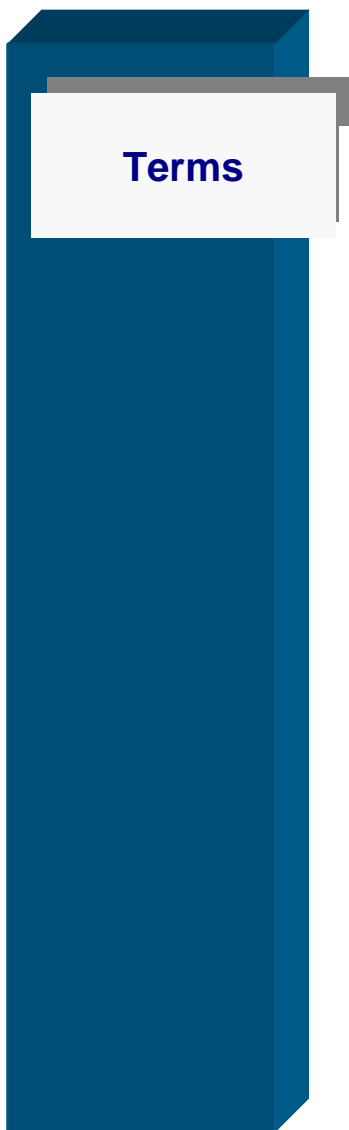
20 days moving average/ single counted

Key Figures
& News

- § Daily outstanding volume record **€108.5 bn** reached on June 21, 2010
- § **+24% year-on-year:** €117.8 bn August 2010 average outstanding volume (€95.1 bn in August 2009)
- § New USD GC Pooling Basket was launched in January 2010

GC Pooling®

Volume by Terms in Q3, Q4 2009 and Q1, Q2 2010



Average term adjusted volume in percent (single counted)

Market Quotes on GC Pooling[®]

Market Quotes

Market Overview - Filter: Basket Filter

File Quote All Quotes Tab Setup Help

Collateral Overview Term Overview

Index	Currency	Collateral	Term	Buy	Sell	Σ Cash	Σ Size	Last	High	Low		
USD	GCP ECB BASKET	USD GCP FLEX TERM [21.04.10-23.04.10]		230c	0.31							
			USD GCP FLEX TERM [21.04.10-03.05.10]	230c	0.35	0.32	230c					
EUR	GCP ECB BASKET	EUR GCP ON		600c	0.27	0.24	500c/1'000	5'025	5'025	0.2600	0.2800	0.2600
		EUR GCP TN				0.26	500c	2'055	2'055	0.2800	0.2800	0.2800
		EUR GCP SN		500c/1'500	0.30	0.27	500c	2'200	2'200	0.2800	0.2800	0.2800
		EUR GCP FLEX TERM [21.04.10-28.04.10]		150c	0.30	0.27	150c	500	500	0.2800	0.2800	0.2800
		EUR GCP FLEX TERM [22.04.10-24.05.10]		300c	0.35	0.32	500c	100	100	0.3500	0.3500	0.3500
		EUR GCP FLEX TERM [30.04.10-31.05.10]					0.32	300c/500				
		EUR GCP FLEX TERM [22.04.10-22.06.10]		300c	0.35	0.34	500c					
		EUR GCP FLEX TERM [22.04.10-22.07.10]		300c	0.38	0.38	300c	500	500	0.3850	0.3850	0.3850
		EUR GCP FLEX TERM [21.04.10-23.08.10]		300c	0.43	0.41	300c					
		EUR GCP FLEX TERM [22.04.10-23.08.10]		300c	0.44	0.42	300c	300	300	0.4300	0.4300	0.4300
		EUR GCP FLEX TERM [30.04.10-30.08.10]					0.43	250c/500				
		EUR GCP FLEX TERM [21.04.10-21.09.10]		300c	0.47	0.45	300c	300	300	0.4600	0.4600	0.4600
		EUR GCP FLEX TERM [22.04.10-08.10.10]					0.46	200c				
		EUR GCP FLEX TERM [22.04.10-21.01.11]					0.63	100c				
		EUR GCP FLEX TERM [22.04.10-22.02.11]		50c	0.68	0.66	100c	100	100	0.6700	0.6700	0.6700
EUR GCP FLEX TERM [22.04.10-21.04.11]		50c	0.75	0.73	100c							
GCP ECB X BASKET	EUR GCP TN			100c	0.29	0.28	300c					
	EUR GCP SN				0.28	250c/750						
	EUR GCP FLEX TERM [22.04.10-21.05.10]				0.33	100c						
	EUR GCP FLEX TERM [22.04.10-22.02.11]				0.67	100c						

Quote Detail Book

Buy							Sell						
Collateral	Term	Max.Sec.	FoK	Total Size	Size	Repo Rate	Repo Rate	Size	Total Size	FoK	Max.Sec.	Term	Collateral
GCP ECB BASKET	USD GCP FLEX TE...		N		230c	0.350000	0.320000	230c		N		USD GCP FLEX TE...	GCP ECB BASKET

Terms up to 12M

Tight spreads

Good sizes

Trading Admission

Legal Requirements

- § the applicant must be under the regulation of a domestic regulatory authority
- § the applicant must be subject in its country of domicile to a financial market supervisory authority and hold the status of a credit institution or an investment firm according to the definition set forth in Art. 1 Paragraph 1 and 2 and Art. 4 Paragraph 1 of the Council Directive on markets for financial instruments 2004/39/EG (“MiFID”)
- § the applicant is required to participate in the Eurex Clearing repo clearing process

Technical Requirements

- § the applicant is responsible for the technical connection to the Eurex Repo trading system
- § internet connection (at least 128 kbps)
 - Ø own internet provider costs
- § leased lines (at least 128 kbps)
 - Ø EUR 700,00 – 900,00 monthly dependent on bandwidth
 - Ø EUR 3.400,00 on-time installation fee.
 Installation is offered by Verizon Business, alternatively Radianz.
- § ExServes Eurex Repo Connectivity
 - Ø via SCAP VPN infrastructure over Deutsche Boerse Systems network, costs on request

Clearing Admission

Clearing

Fee, Margin, Buy-In:	- Target 2 account
Cash Clearing EUR:	- CBF – Target 2, CBL – CBL cash account
Cash Clearing USD:	- CBF – CBF 6series account, CBL – CBL cash account
Settlement and Pledging of Securities:	- Securities deposit at Clearstream Banking - Pledged Securities Account at CBF or SegalInterSettle (SIS)

Equity capital requirements are dynamic: ³⁾

License	Equity Capital GCM/DCM	Clearing fund GCM/DCM ⁴⁾	
Derivates Clearing ¹⁾	EUR 125 m/ EUR 12,5 m	} minimum EUR 5 m/ EUR 1 m	Contributions to Clearing fund
Cash Bonds Clearing ¹⁾	EUR 50 m/ EUR 5 m		
Repo Clearing ²⁾	EUR 175 m/ EUR 17,5 m		

1) Capital which is already in an account for clearing of derivatives or bonds can be taken into account for repo clearing

2) If admission to repo clearing exists, it is not required to provide evidence of capital for derivatives and cash bonds clearing

3) Equity capital requirement is adapted dynamically

4) If Value of 2% of 30 days or 250 days average „Total Margin Requirements“ exceeds total minimum choose maximum of these values

Note: All Eurex Repo Euro Market members are required to participate, either directly as GCM or DCM or indirectly as NCM-GCM /DCM, in the clearing process of Eurex Clearing AG

Technical Connection to CCP/Eurex

Costs for a Eurex Clearing connection:

Connection

CCP Connection Type	Bandwidth	Price/Month
Dedicated leased line	128 kbps	EUR 450,-
Dedicated leased line (back-up)	128 kbps	EUR 450,-
Internet connection	128 kbps	EUR 200,-
ExServes – Internet Application		EUR 600,- for two token, each additional token EUR 300,-
Clearing Service Fee		EUR 500,- (not applicable for ExServes internet application)

Participants may choose between connections via a leased line, via internet connection or via internet application without own server installation. For a leased line connection, a backup-connection is required in all cases. The back-up connection must have the same bandwidth as the principal line. For members with existing leased lines to the CCP/Eurex Clearing system, it is possible to use these connections, no additional connection is necessary provided there is sufficient bandwidth capacity.

Fee Model

Fees

Eurex Repo

	Liquidity Provider I		Liquidity Provider II		Liquidity Taker	
	Non-Aggressor	Aggressor	Non-Aggressor	Aggressor	Non-Aggressor	Aggressor
Min. fee per trade in €	5,-		5,-		10,-	
ON/TN (in Basis points p.a.)	0,1	0,6	0,4	0,6	0,6	0,6
All other terms	0,1	0,3	0,2	0,3	0,3	0,3
Annual fee in €	100.000,-		25.000,-		10.000,-	

Eurex Clearing

Basis points p.a.	0,3 (min. 5,- € or 7,- \$)
Admission fee for clearing members (DCM):	0 €
Annual fee for clearing members (DCM):	0 €

Clearstream Collateral Management Systems

Fees for GC Pooling are charged on a monthly basis according to the outstanding amount of collateral (in EUR) to the collateral giver and collateral receiver	Xemac	CmaX
Collateral giver (in Bp p.a.)	0,2	0,35
Collateral receiver (in Bp p.a.)	0,2	0,35

List of Participants

Participant	Country	City	Participant	Country	City
Aareal Bank AG	D/IRL	Wiesbaden/Dublin	IKB Deutsche Industriebank AG	D	Dusseldorf
Banque LBLux S.A.	L	Luxembourg	Jefferies International Ltd.	GB	London
Banque Privée Edmond de Rothschild	L	Luxembourg	J.P. Morgan AG	D	Frankfurt
Barclays Capital PLC. Ltd.	GB	London	KfW Bankengruppe	D	Frankfurt
Bayerische Landesbank AG	D	Munich	Landesbank Baden-Württemberg	D	Stuttgart
BHF Bank AG	D	Frankfurt	Landesbank Berlin AG	D	Berlin
BNP Paribas S.A.	GB	London	Landesbank Hessen-Thüringen	D	Frankfurt
BRD Finanzagentur	D	Frankfurt	Landwirtschaftliche Rentenbank	D	Frankfurt
Caja de Madrid	E	Madrid	Maple Bank GmbH	D	Frankfurt
Commerzbank AG	D	Frankfurt	Morgan Stanley Bank AG	D	Frankfurt
CorealCredit Bank AG	D	Frankfurt	NATIXIS	F	Paris
Credit Suisse Securities (Europe) Ltd.	GB	London	Norddeutsche Landesbank	D	Hanover
Danske Bank S/A	DK	Copenhagen	Nordea Bank Danmark A/S	DK	Copenhagen
Deka Bank Deutsche Girozentrale	D	Frankfurt	NRW Bank AG	D	Dusseldorf
Deutsche Bank AG	D	Frankfurt	Royal Bank of Scotland plc	GB	London
Deutsche Postbank AG	D	Bonn	RZB AG	A	Vienna
Dutch State Treasury Agency	NL	The Hague	Sal.Oppenheim jr. & Cie. KGaA	D	Frankfurt
DZ Bank AG	D	Frankfurt	SEB AG	D	Frankfurt
Fortis Bank SA NV	B	Brussels	Société Générale S.A.	F	Paris
Hamburger Sparkasse AG	D	Hamburg	Stadtsparkasse Düsseldorf	D	Dusseldorf
HSBC France	F	Paris	UniCredit Bank AG	D	Munich
HSBC Trinkaus & Burkhardt	D	Dusseldorf	Valartis Bank AG	CH	Zurich
HSH Nordbank AG	D	Kiel	WestLB AG	D	Dusseldorf

§ In total 46 participants are actively trading in the GC Pooling® market

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