

PUBLIC QUANTITATIVE DISCLOSURE GLOBAL STATISTICAL BULLETIN NEWSLETTER



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SECTION 1 - INTRODUCTION

The Global Association of Central Counterparties (CCP12) publishes the quarterly Public Quantitative Disclosure (PQD) Global Statistical Bulletin Newsletter to present a panorama of the CCP industry to market participants, relevant authorities and the broader public. The analysis is based on PQD reports published by central counterparties (CCPs) globally under the Principles for Financial Market Infrastructures (PFMI) requirements set by Committee on Payments and Market Infrastructures and the International Organization of Securities Commissions (CPMI-IOSCO). For a full list of the CCPs whose PQD information was used in this report, please see Appendix 1.

CCP12 is a global association of 35 members who operate more than 50 individual CCPs globally across the Europe/Middle East/Africa (EMEA), Americas, and Asia-Pacific (APAC) regions. CCP12 aims to promote effective, practical and appropriate risk management and operational standards for CCPs to ensure the safety and efficiency of the financial markets it represents. CCP12 leads and assesses global regulatory and industry initiatives that concern CCPs to form consensus views, while also actively engaging with regulatory agencies and industry constituents through consultation responses, forum discussions and position papers.

In 2015, the CPMI-IOSCO published PQD standards for CCPs¹, as an important component of the set of PFMI public disclosure requirements, while also encouraging CCPs to use a common template. CCP12 supports CPMI-IOSCO's efforts to improve the level of standardization and transparency of the CCP industry; our members collaboratively worked to create a common PQD template in 2015, and officially released the CCP12 PQD Template in 2017.

¹ CPMI-IOSCO (2015). Public quantitative disclosure standards for central counterparties. [online] Available from: <<https://www.bis.org/cpmi/publ/d125.htm>>

In this PQD Newsletter, Q1 and Q2 2018 PQD data sets published by CCP12 members are grouped both by the region in which the CCP is located, as well as by the underlying asset classes cleared by the CCP. A number of CCP risk management indicators are examined, including Initial Margin Required, Default Fund Required, Collateral Make-Up of the Initial Margin and Default Fund contributions, and Average Daily Variation Margin. All indicators are measured in US dollar (USD).

It is important to note that for this PQD Newsletter, both the Q1 and Q2 data sets for MGEX and B3 have been added to the PQD pool. The addition of the Q1 PQD was done both to minimize any resulting jumps in the regional and quarter split for the Americas region, and due to the fact that both MGEX and B3 had their Q1 PQDs readily available.

SECTION 2 – PQD KEY INDICATORS

2.1 INITIAL MARGIN

2.1.1 INITIAL MARGIN REQUIRED TOTAL

Initial margin (IM) is the collateral required by the CCP to cover potential changes in the value of each participant's position (that is, potential future exposure) over the appropriate closeout period in the event the participant defaults (CPMI-IOSCO, 2012)². In the CCP12 PQD data set, the required initial margin at the end of Q2 2018 totaled USD 673,72 billion, of which 46.6% was from EMEA (USD 313,69 billion); 44.9% came from the Americas (USD 302,49 billion), while CCPs in the APAC region accounted for 8.5% (USD 57,53 billion). Compared with the data from Q1 2018, the required initial margin within the three regions remained relatively constant; the global total grew by USD 1.74 billion overall.

² CPSS-IOSCO (2012). *Principles for financial market infrastructures*. [online] Available from: <https://www.bis.org/cpmi/publ/d_101.htm>

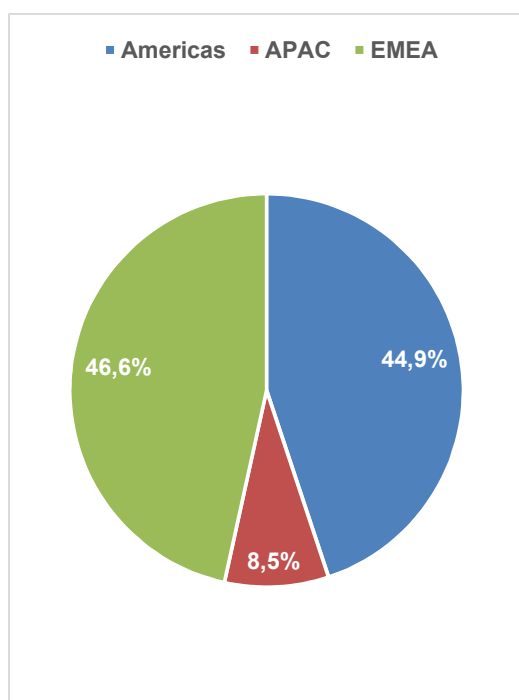


Chart 1:
Initial Margin Required Total - Q2 2018

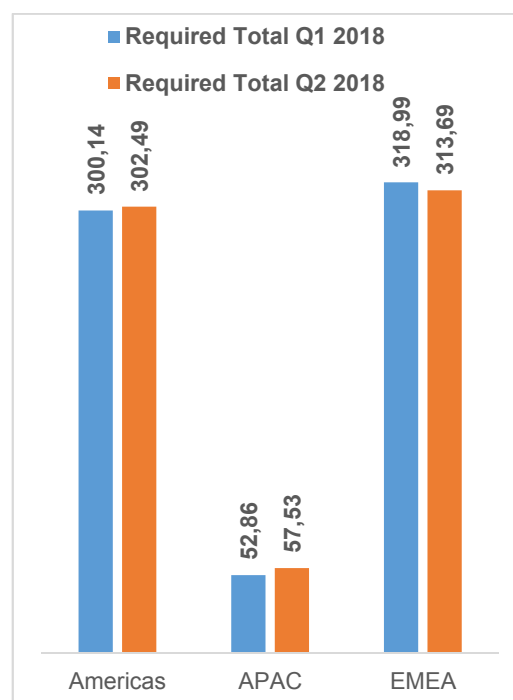


Chart 2:
Initial Margin Required Total
in USD billion – Q1 2018 vs. Q2 2018

In contrast to a geographical split, the initial margin can also be broken down by asset class. 29.4% (USD 197.96 billion) of the required initial margin is used to cover a Multi Asset class (Diversified/Other), where the initial margin encompasses multiple asset classes across the various CCP clearing services; Interest Rate Derivatives came in second at 25.5% (USD 171.63 billion), followed by IM for Equity Derivatives at 20.2% (USD 136.11 billion). Next in order were Bonds and Repo (11.6%; USD 77.88 billion), CDS (5.8%; USD 39.23 billion), Shares and Equities (3.9%; USD 26.32 billion), FX (2.2%; 14.96 billion), and Agriculture and Commodities (1.5%; USD 10.13 billion).

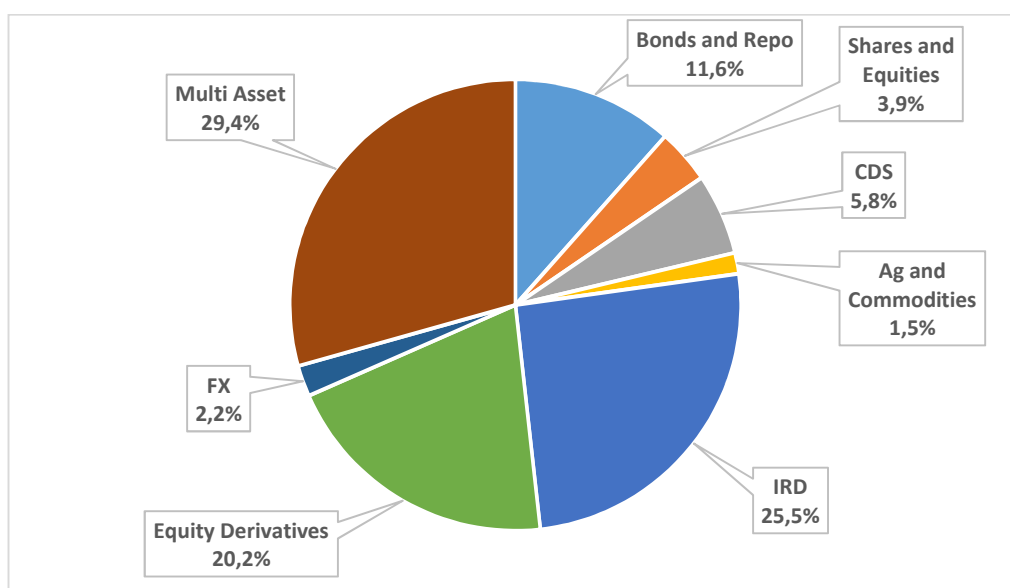


Chart 3:
Asset Class Split of Total Required Initial Margin – Q2 2018

Asset Class	Q1 2018	Q2 2018	+ / -
Bonds and Repo	74.89	77.88	3.99%
Shares and Equities	29.79	26.32	-11.62%
CDS	38.71	39.23	1.34%
Ag and Commodities	9.38	10.13	7.98%
IRD	171.39	171.63	0.13%
Equity Derivatives	142.56	136.11	-4.52%
FX	5.57	14.96	168.35%
Multi Asset	199.89	197.96	-0.97%

Chart 4:
Asset Class Split of Total Required Initial Margin in USD billion– Q1 2018 vs. Q2 2018

2.1.2 INITIAL MARGIN REQUIRED HOUSE/CLIENTS TOTAL

Initial margin requirements can apply to both clearing members' own accounts (i.e. house or proprietary account), and/or those of their client. By the end of Q2 2018, reporting CCPs' total initial margin requirements for clients in America more than tripled the requirements for clearing members (client USD 229.10 billion vs. house USD 73.52 billion). The APAC (client USD 30.28 billion vs. house USD 24.71 billion) and EMEA (client USD 158.33 billion vs. house USD 155.37 billion) regions also had higher client clearing, although not to the extent found in the Americas. The global asset class splits for the house and client IM totals can be found in the table below:

Asset Class	House Total	Client Total
Bonds and Repo	67.55	10.33
Shares and Equities	9.49	16.56
CDS	20.64	18.59
Ag and Commodities	2.86	7.27
IRD	72.47	99.15
Equity Derivatives	24.72	111.39
FX	14.93	0.03
Multi Asset	40.91	154.27

Chart 5:

Global Asset Class Split for House and Client Initial Margin Totals in USD billion – Q2 2018

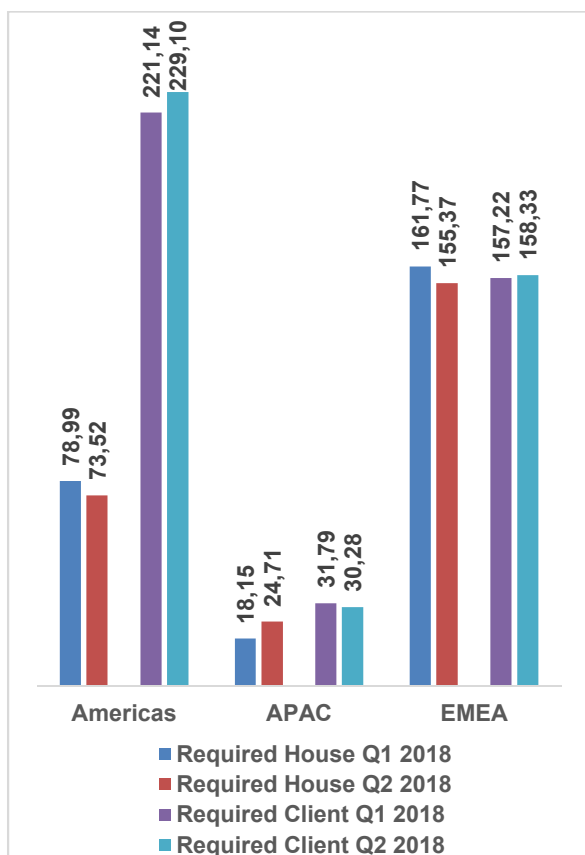


Chart 6:

Initial Margin Required House/Clients Total in USD billion – Q1 2018 vs. Q2 2018

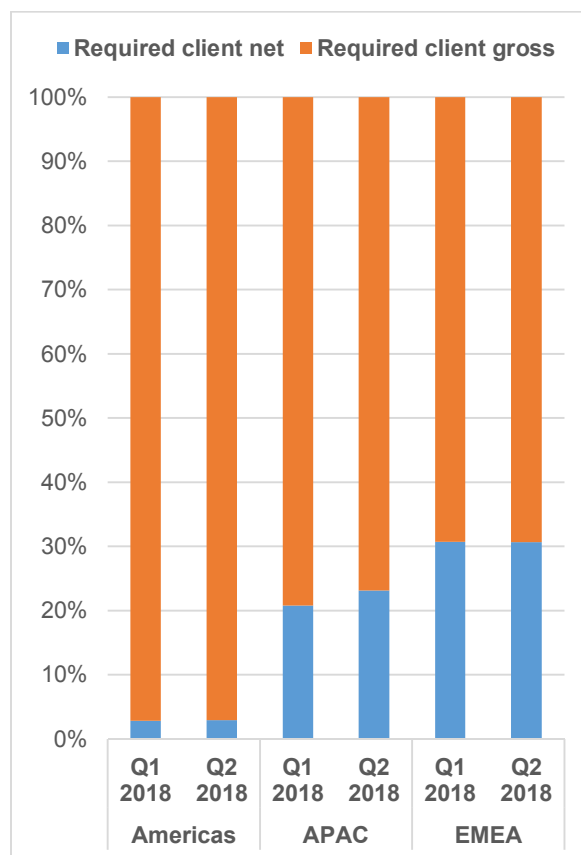


Chart 7:

Initial Margin Required Client Net and Gross in USD billion – Q1 2018 vs. Q2 2018

2.1.3 INITIAL MARGIN REQUIRED CLIENTS NET/GROSS

Under CPMI-IOSCO PQD requirements, CCPs should clarify whether initial margin for the positions of indirect participants must be provided for each indirect participant’s own position (i.e. required client gross), or for the net position of a group of indirect participants (i.e. required client net) (CPMI-IOSCO, 2015).

Overall, the majority of clients' initial margin required by reporting CCPs were collected on a gross basis. As of the end of Q2 2018, the comparison between gross and net basis in Americas was a respective USD 222.47 billion vs. USD 6.63 billion; in EMEA, USD 109.78 billion (gross) vs. USD 48.55 billion (net); and in APAC, USD 23.28 billion (gross) vs. USD 7.00 billion (net). Specifically, in the Americas, nearly all (97%) of the initial margin posted by clearing members on behalf of their clients was on a gross basis. The global asset class splits for the client net and client gross totals can be found in the table below:

Asset Class	Client Gross	Client Net
Bonds and Repo	1.31	9.02
Shares and Equities	6.64	9.92
CDS	18.59	-
Ag and Commodities	0.73	6.54
IRD	92.97	6.18
Equity Derivatives	93.97	17.42
FX	0.01	0.02
Multi Asset	141.19	13.08

Chart 8:
Global Asset Class Split for Client Gross and Client Net Initial Margin Totals in USD billion – Q2 2018

2.2 DEFAULT FUND

2.2.1 DEFAULT FUND REQUIRED

Default fund (DF) is one of the components of the pre-funded financial resources provided by participants, used to allocate any losses arising in the event that one or more participants defaults on their obligations to the FMI and the resources provided by the defaulting party (or parties) are not sufficient to cover such losses (CPMI-IOSCO, 2015). EMEA, which made up 46% of the total figure, had the largest default fund requirement at the end of 2018 Q2 (USD 33.46 billion); the Americas was next with 37% (USD 26.75 billion), followed by APAC with 17% (USD 12.29 billion).

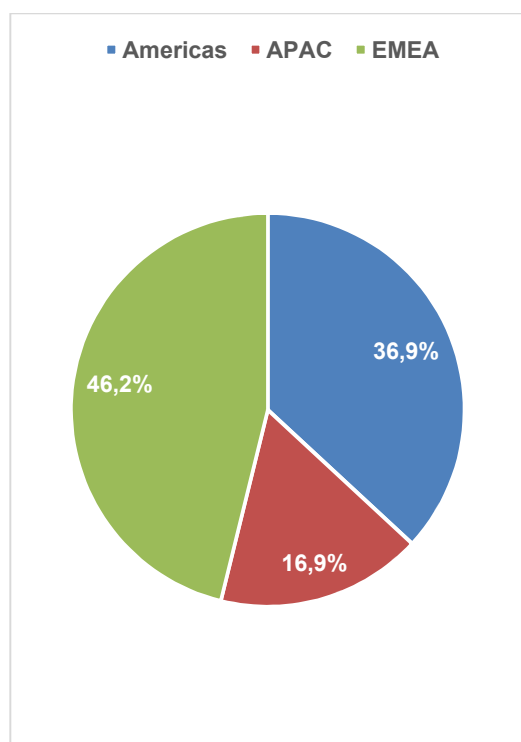


Chart 9:
Default Fund Required - Q2 2018

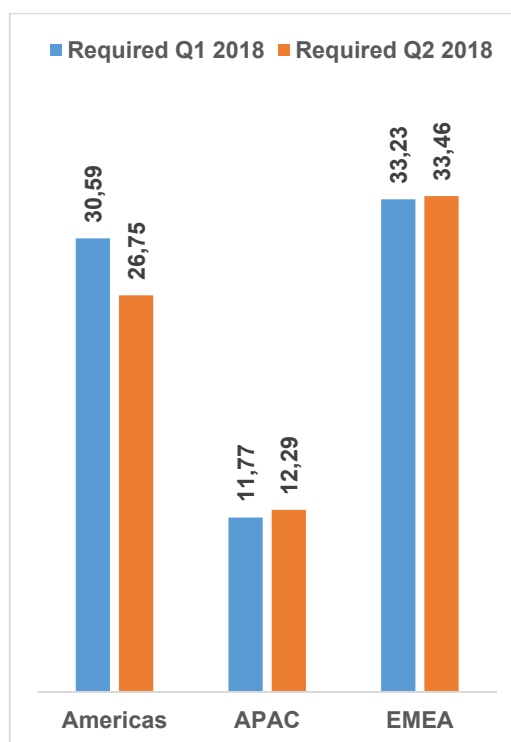


Chart 10:
Default Fund Required in USD billion – Q1 2018 vs. Q2 2018

2.3 COLLATERAL MAKEUP OF IM / DF

While members are required to post a set amount of initial margin and default fund contribution, the makeup of the collateral posted may have flexibility subject to the schedule of the CCP. The collateral can be made up of a combination of cash and non-cash collateral, and can be held at a variety of locations; the global totals can be seen below:

Collateral Posted in the Form of		Initial Margin	Default Fund
Cash	At Central Bank of Issue	14.2%	33.4%
	At Other Central Bank	0.1%	-
	Secured Cash (Reverse Repo)	10.8%	22.5%
	Unsecured at Commercial Banks	5.3%	6.7%
Non-Cash	Sovereign Gov't Bonds - Domestic	33.2%	29.7%
	Sovereign Gov't Bonds - Foreign	18.6%	3.8%
	Agency Bonds	1.6%	1.0%
	State/Municipal Bonds	0.4%	0.4%
	Corporate Bonds	5.5%	0.6%
	Equities	8.8%	1.0%
	Mutual Funds/UCITS	0.1%	-
	Commodities - Gold	-	-
	Commodities - Other	0.2%	-
	Other	1.2%	1.0%

Chart 11:
Collateral Makeup of Initial Margin and Default Fund - Q2 2018

2.4 MARK-TO-MARKET

2.4.1 AVERAGE DAILY VARIATION MARGIN

Variation Margin can be defined as funds that are collected and paid out to reflect current exposures resulting from actual changes in market prices (CPMI-IOSCO, 2012). In the CCP12 PQD data set, a majority of the total variation margin paid through the CCP by participants on each business day during the second quarter of 2018 occurred in the EMEA (48.5%, USD 7.87 billion) and Americas (38.5%, USD 6.24 billion); 13.0% was generated in APAC (USD 2.10 billion).

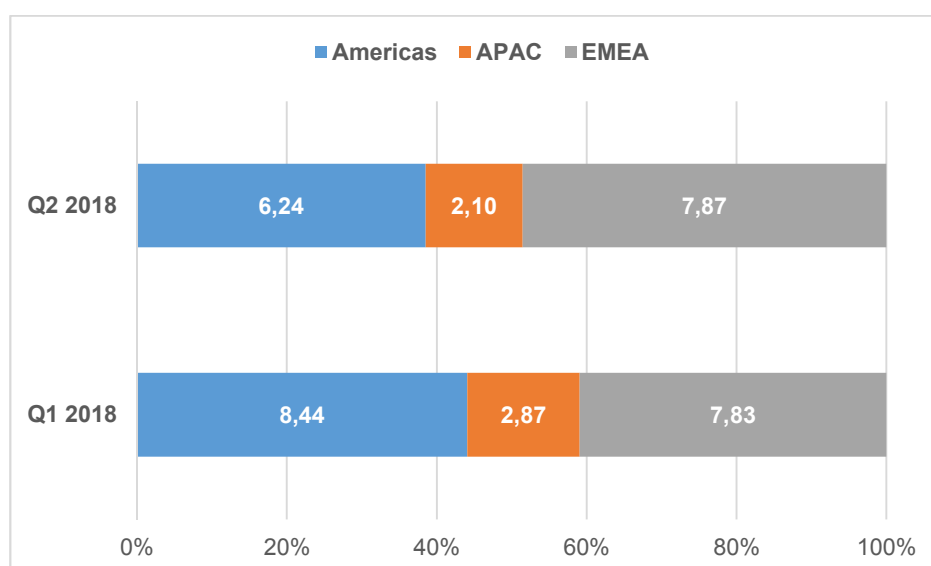


Chart 12:
Average Daily Variation Margin in USD billion – Q1 2018 vs. Q2 2018

APPENDIX 1 – THE LIST OF CCPS AND REGIONS

ORGANISATION ³	REGION	Website for PQD Reports
B3 - Brasil Bolsa Balcao	Americas	http://www.b3.com.br/en_us/products-and-services/clearing-and-settlement/clearing/
Chicago Mercantile Exchange Group	Americas	http://www.cmegroup.com/clearing/cpmi-iosco-reporting.html
Depository Trust & Clearing Corporation	Americas	http://www.dtcc.com/en/legal/policy-and-compliance
Intercontinental Exchange (Credit)	Americas	https://www.theice.com/clear-credit/regulation
Intercontinental Exchange (US)	Americas	https://www.theice.com/clear-us/regulation#quantitative-disclosures
Intercontinental Exchange (Canada)	Americas	https://www.theice.com/clear-canada/regulation#quantitative-disclosures
Minneapolis Grain Exchange	Americas	http://www.mgex.com/regulation.html
The Options Clearing Corporation	Americas	https://www.theocc.com/about/corporate-information/pfmi-disclosures.jsp
TMX Group	Americas	http://www.cdcc.ca/publications_qtdFiles_en
ASX Limited (Clear)	APAC	http://www.asx.com.au/regulation/regulatory-compliance/asx-clear.htm
ASX Limited (Futures)	APAC	https://www.asx.com.au/regulation/regulatory-compliance/asx-clear-futures.htm
Hong Kong Exchanges & Clearing Ltd (HKCC)	APAC	https://www.hkex.com.hk/eng/market/clr/SpecialTopics/IOSCO.htm
Hong Kong Exchanges & Clearing Ltd (SECH)	APAC	https://www.hkex.com.hk/eng/market/clr/SpecialTopics/IOSCO.htm
Intercontinental Exchange (Singapore)	APAC	https://www.theice.com/clear-singapore/regulation#quantitative-disclosures
Japan Securities Clearing Corporation	APAC	https://www.jpx.co.jp/jsccl/en/company/fmi-pdf2.html
Korea Exchange	APAC	https://global.krx.co.kr/contents/GLB/02/0202/0202020203/GLB0202020203.jsp
Shanghai Clearing House	APAC	http://www.shclearing.com/zcyj/jgyzl/pfmi/
Singapore Exchange Ltd (DC)	APAC	http://www.sgx.com/wps/portal/sgxweb/home/clearing/derivatives/pfmi_disclosure
Singapore Exchange Ltd (CDP)	APAC	http://www.sgx.com/wps/portal/sgxweb/home/clearing/securities/pfmi_disclosure
Thailand Clearing House Co. Ltd.	APAC	https://www.set.or.th/tch/en/pfmi/pfmi_disclosure.html
The Clearing Corporation of India Ltd	APAC	https://www.ccilindia.com/RiskManagement/Pages/PFMIIDisclosures.aspx

³ Blue highlight signifies a CCP whose PQD data is new to the data pool

London Stock Exchange Group Ltd (CC&G)	EMEA	http://www.lseg.com/markets-products-and-services/post-trade-services/ccp-services/ccg/statistics/iosco-quantitative-disclosure
Eurex Clearing	EMEA	http://www.eurexclearing.com/clearing-en/about-us/regulatory-standards
Hong Kong Exchanges & Clearing Ltd (LME)	EMEA	https://www.lme.com/en-GB/LME-Clear/Technology/Reports/CPMI-IOSCO-Disclosure
Intercontinental Exchange (Europe)	EMEA	https://www.theice.com/clear-europe/regulation#quantitative-disclosures
Intercontinental Exchange (Netherlands)	EMEA	https://www.theice.com/clear-netherlands/regulation#quantitative-disclosures
Johannesburg Stock Exchange	EMEA	https://www.jse.co.za/services/post-trade-services/risk-management/quantitative-disclosures
KDPW_CCP S.A.	EMEA	http://www.kdpwccp.pl/en/Members/Transparency/Pages/Terms_of_Use.aspx
London Stock Exchange Group Ltd (LCH LTD)	EMEA	https://www.lch.com/resources/rules-and-regulations/ccp-disclosures
London Stock Exchange Group Ltd (LCH SA)	EMEA	https://www.lch.com/resources/rules-and-regulations/ccp-disclosures
Nasdaq Clearing	EMEA	https://business.nasdaq.com/trade/clearing/nasdaq-clearing/about-nasdaq-clearing/index.html
Central Counterparty National Clearing Centre	EMEA	http://www.nkcbank.com/viewCatalog.do?menuKey=461

APPENDIX 2 – SUMMARIZED RESULTS FOR Q1 2018 VS. Q2 2018

Americas		Q1 2018	Q2 2018	+ / -
Initial Margin	Required house	USD 78,992,573,605.95	USD 73,517,205,364.99	-6.93%
	Required client net	USD 6,174,982,179.64	USD 6,633,228,287.76	7.42%
	Required client gross	USD 214,969,056,097.73	USD 222,465,338,657.77	3.49%
	Required total	USD 300,136,611,883.30	USD 302,491,890,051.16	0.78%
	Held (pre-haircut)	USD 372,040,502,984.42	USD 369,325,015,033.00	-0.73%
	Held (post-haircut)	USD 364,670,167,247.82	USD 361,579,850,674.12	-0.85%
Default Fund	Required	USD 30,587,274,264.93	USD 26,752,354,686.97	-12.54%
	Posted (pre-haircut)	USD 33,007,486,945.20	USD 29,624,633,364.09	-10.25%
	Posted (post haircut)	USD 32,454,462,466.17	USD 29,192,092,887.29	-10.05%
Mark-to-Market	Average total VM paid to CCP each business day	USD 8,439,865,676.51	USD 6,244,710,578.88	-26.01%

APAC		Q1 2018	Q2 2018	+ / -
Initial Margin	Required house	USD 18,152,627,092.02	USD 24,705,952,608.48	36.10%
	Required client net	USD 6,590,540,409.43	USD 7,002,338,544.88	6.25%
	Required client gross	USD 25,200,019,944.55	USD 23,278,236,005.98	-7.63%
	Required total	USD 52,859,016,587.50	USD 57,534,433,357.91	8.85%
	Held (pre-haircut)	USD 92,047,893,241.96	USD 95,790,609,795.52	4.07%
	Held (post-haircut)	USD 87,948,496,315.52	USD 92,085,018,605.68	4.70%

Default Fund	Required	USD 11,771,285,652.20	USD 12,288,285,972.97	4.39%
	Posted (pre-haircut)	USD 15,764,359,373.94	USD 16,309,552,099.47	3.46%
	Posted (post haircut)	USD 15,329,095,252.08	USD 15,872,669,694.86	3.55%
Mark-to-Market	Average total VM paid to CCP each business day	USD 2,869,428,581.20	USD 2,099,958,856.14	-26.82%

EMEA		Q1 2018	Q2 2018	+ / -
Initial Margin	Required house	USD 161,765,830,118.66	USD 155,365,769,442.59	-3.96%
	Required client net	USD 48,284,499,981.60	USD 48,546,957,757.50	0.54%
	Required client gross	USD 108,937,970,754.94	USD 109,781,138,959.72	0.77%
	Required total	USD 318,988,300,855.37	USD 313,693,866,159.80	-1.66%
	Held (pre-haircut)	USD 589,944,403,397.17	USD 570,486,752,086.95	-3.30%
	Held (post-haircut)	USD 486,532,176,481.13	USD 482,006,521,260.61	-0.93%
Default Fund	Required	USD 33,228,147,259.70	USD 33,459,490,336.69	0.70%
	Posted (pre-haircut)	USD 35,042,489,806.50	USD 35,334,953,530.00	0.83%
	Posted (post haircut)	USD 34,708,782,132.33	USD 34,989,694,285.84	0.81%
Mark-to-Market	Average total VM paid to CCP each business day	USD 7,829,960,474.53	USD 7,865,629,995.95	0.46%

Global		Q1 2018	Q2 2018	+ / -
Initial Margin	Required house	USD 258,911,030,816.63	USD 253,588,927,416.06	-2.06%
	Required client net	USD 61,050,022,570.67	USD 62,182,524,590.15	1.86%
	Required client gross	USD 349,107,046,797.22	USD 355,524,713,623.47	1.84%
	Required total	USD 671,983,929,326.17	USD 673,720,189,568.86	0.26%
	Held (pre-haircut)	USD 1,054,032,799,623.54	USD 1,035,602,376,915.47	-1.75%
	Held (post-haircut)	USD 939,150,840,044.47	USD 935,671,390,540.40	-0.37%
Default Fund	Required	USD 75,586,707,176.83	USD 72,500,130,996.62	-4.08%
	Posted (pre-haircut)	USD 83,814,336,125.65	USD 81,269,138,993.55	-3.04%
	Posted (post haircut)	USD 82,492,339,850.57	USD 80,054,456,867.98	-2.96%
Mark-to-Market	Average total VM paid to CCP each business day	USD 19,139,254,732.24	USD 16,210,299,430.97	-15.30%

APPENDIX 3 - INDICATORS

NO.	INDICATOR	DEFINITION
1	Initial margin (IM)	Collateral that is collected to cover potential changes in the value of each participant's position (that is, potential future exposure) over the appropriate closeout period in the event the participant defaults. (CPMI-IOSCO, 2012) ⁴ .
1.1	IM Required house	This term indicates the total Initial Margin Requirements of a CCP for clearing members (i.e. excluding their clients).
1.2	IM Required client net/client gross	Collecting margin on a gross basis means that the amount of margin a participant must post to the CCP on behalf of its customers is the sum of the amounts of margin required for each such customer. Collecting margin on a net basis means that the participant may, in calculating the amount of margin it must post to the CCP on behalf of its customers, offset the amounts of margin associated with the portfolios of different customers (CPMI-IOSCO, 2012). Under PQD requirements, CCPs should clarify whether Initial Margin Requirements for their clients are under client gross structure, or client net structure, or both.
1.3	IM Required total	This term indicates all the initial margin required by CCPs.
2	Default Fund (DF)	A fund, comprising pre-funded financial resources provided by participants, to allocate any losses arising in the event that one or more participants defaults on their obligations to the FMI and resources provided by the defaulting party (or parties) are not sufficient to cover such losses (CPMI-IOSCO, 2015).
2.1	DF Required	The total prefunded default fund contributions from clearing members required by CCPs.
3	Collateral makeup of IM / DF	Initial Margin and Default Fund contributions can be made up of (1) Cash at a central bank, (2) secured cash i.e. reverse repo, (3) unsecured cash at a commercial bank, (4) domestic and (5) foreign sovereign government bonds, (6) agency bonds, (7) state/municipal bonds, (8) corporate bonds, (9) equities, (10) mutual funds/UCITs, commodities (11) gold or (12) other, and (13) other.

⁴ CPSS-IOSCO (2012). *Principles for financial market infrastructures*. [online] Available from: <
https://www.bis.org/cpmi/publ/d_101.htm >

4**Mark-to-Market
enforced by CCP**

This value calculated by the average total variation margin paid to the CCP by participants on each business day over the period multiplied by the number of business days during that period. Variation Margin can be defined as funds that are collected and paid out to reflect current exposures resulting from actual changes in market prices (CPMI-IOSCO, 2012). The higher amount of Mark-to-Market enforced by CCP indicates the more liquidity requirement for clearing members to cover mark-to-market losses.

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APPENDIX 5 - CCP12 MEMBERSHIP



DISCLAIMER

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