

Public Quantitative Disclosure

CCP12 Newsflash

2020 Q4 Data

April 2021

The CCP12 Newsflash



- The CCP12 Public Quantitative Disclosure Newsflash provides an overview of the risk management provided by CCPs around the globe. It complements existing public statistics, such as the BIS derivatives statistics, by providing a summary of key indicators which provides market participants an overview of the CCP ecosystem.
- The data is aggregated directly from the source – the CCPs themselves – according to a standardized template carrying information stipulated in global regulatory guidance. Further details for individual CCPs can be found in links provided on the CCP12 website (<https://ccp12.org/pqd/>).
- This CCP12 Newsflash helps to inform participants, authorities, and the general public of key features, the scale and nature of financial market infrastructure risk management.
- This publication underlines the scope and scale of risk mitigation provided by central clearing:
 - CCPs exposure to credit risk is collateralized through high-quality and liquid collateral
 - CCPs risk-manage their clearing exposure by collecting *mark-to-market* losses through regular variation margin (or similar) payments

In this collation for 2020 Q4:

43 CCPs (equivalent to 28 CCP12 members) are included*:

- Americas 13
- APAC 16
- EMEA 14

6.1.1 Initial Margin (Required):	USD 1043 Billion
4.1.4 Default Fund Resources (Required):	USD 125 Billion
Global CCP Overcollateralization [†] :	USD 438 Billion

For any questions, please get in touch: question.pqd@ccp12global.com

*JSE, NSE, SHCH 2020 Q3 data used for this 2020 Q4 CCP12 Newsflash since PQDs are to be released after the NF publication.

[†]Calculated as (Total IM and DF Held PostHaircut) minus (Total IM and DF Required) (Only PostHaircut values used for Held values). Disclosures (6.2.15 + 4.3.15) – (6.1.1 + 4.1.4) = Total Overcollateralization

Headline Statistics of the Public Quantitative Disclosures



2020 Q4

Total Global Margin* (USD B)

Required

Total Global Initial Margin (IM) Required (6.1.1)	1,043
Total Global Default Fund (DF) Required (4.1.4)	125
Total Global CCP Collateral Required (6.1.1 + 4.1.4)	1,167

Held (PostHaircut)

Total Global IM Held PostHaircut (6.2.15)	1462
Total Global DF Held PostHaircut (4.3.15)	144
Total Global CCP Collateral Held PostHaircut (6.2.15 + 4.3.15)	1,606

Variation Margin (VM)

Total Global Average Daily VM Paid to the CCP by participants each business day (6.6.1)	25
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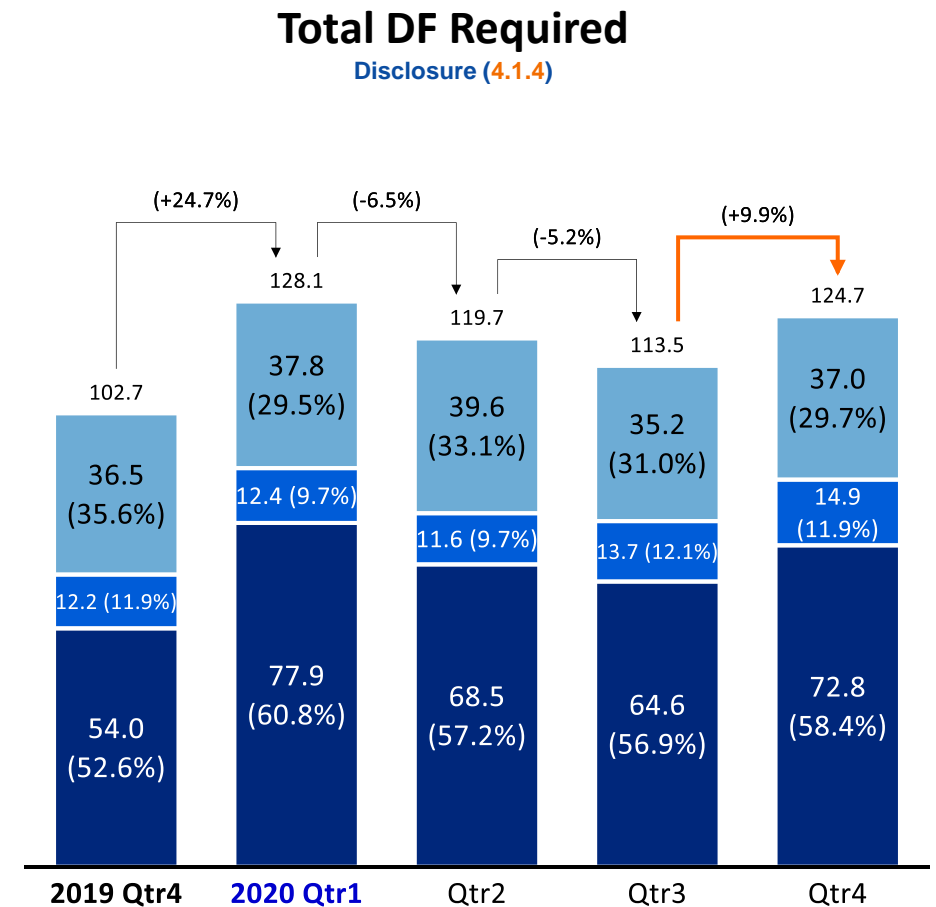
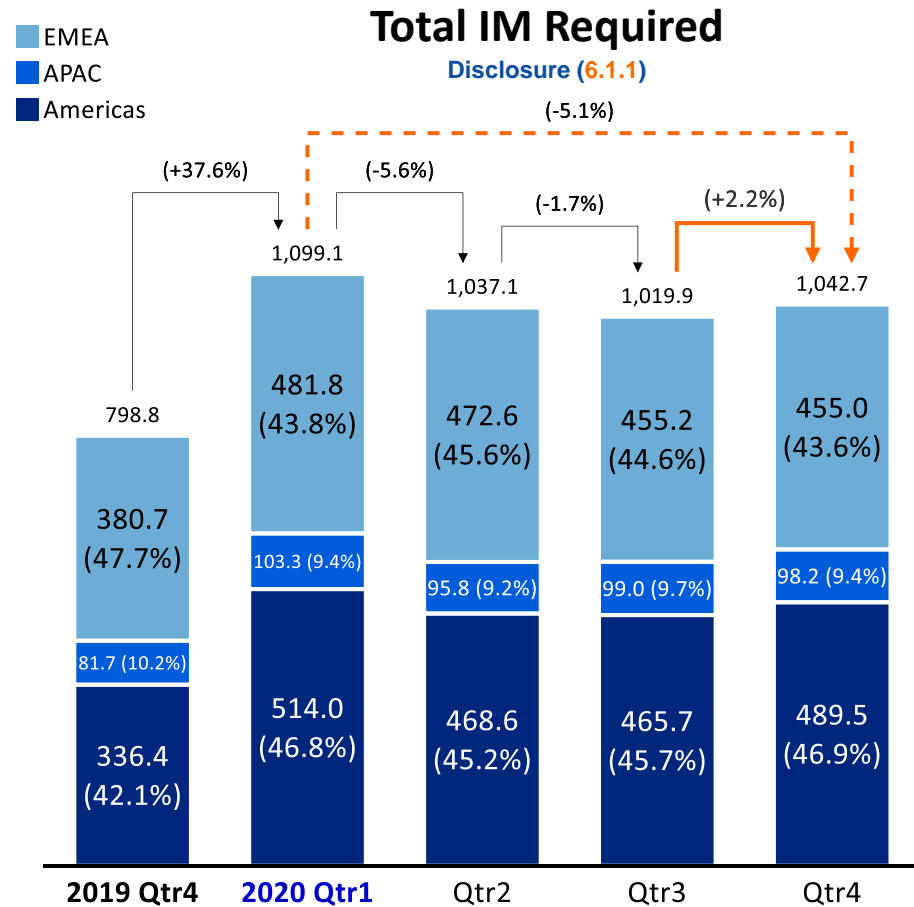
Total Global CCP Collateral (Held) in form of*:

	Disclosure	Initial Margin	Disclosure	Default Fund
Cash				
<i>At Central Bank</i>	(6.2.1 + 6.2.2)	16.6%	(4.3.1 + 4.3.2)	39.6%
<i>Secured Cash (incl. Reverse Repos) at Commercial Banks</i>	6.2.3	7.6%	4.3.3	11.0%
<i>Unsecured Cash at Commercial Banks</i>	6.2.4	4.3%	4.3.4	9.5%
Non-Cash				
<i>Sovereign Gov Bonds - Domestic</i>	6.2.5	26.6%	4.3.5	32.2%
<i>Sovereign Gov Bonds – Foreign</i>	6.2.6	17.2%	4.3.6	3.1%
<i>Agency Bonds</i>	6.2.7	1.2%	4.3.7	3.3%
<i>State/Municipal Bonds</i>	6.2.8	0.6%	4.3.8	0.2%
<i>Corporate Bonds</i>	6.2.9	6.0%	4.3.9	0.6%
<i>Equities</i>	6.2.10	4.3%	4.3.10	0.2%
<i>Commodities – Gold</i>	6.2.11	0.3%	4.3.11	0.0%
<i>Commodities – Other</i>	6.2.12	0.0%	4.3.12	0.0%
<i>Mutual Funds/UCITs</i>	6.2.13	0.2%	4.3.13	0.0%
<i>Other</i>	6.2.14	2.9%	4.3.14	0.4%

*Sum of IM Held across 6.2.1 – 6.2.14 is slightly lower than the Total IM Held Values for 6.2.15, due to DTCC requesting that 6.2.15 figures be equivalent to 4.3.15 figures. OCC 6.2.1 – 6.2.14 House, Client and Total PreHaircut figures are considered "PostHaircut" values for the purpose of analysis. Data has been normalized to USD equivalent, based on foreign exchange rates at the quarter-end for each PQD quarterly release.

Across the CCPs, a slightly higher level of Total IM and DF required collateral was observed for 2020 Q4

Global CCP Collateral (Required) - Grand Total
2019 Q4 to 2020 Q4 (USD B and %)

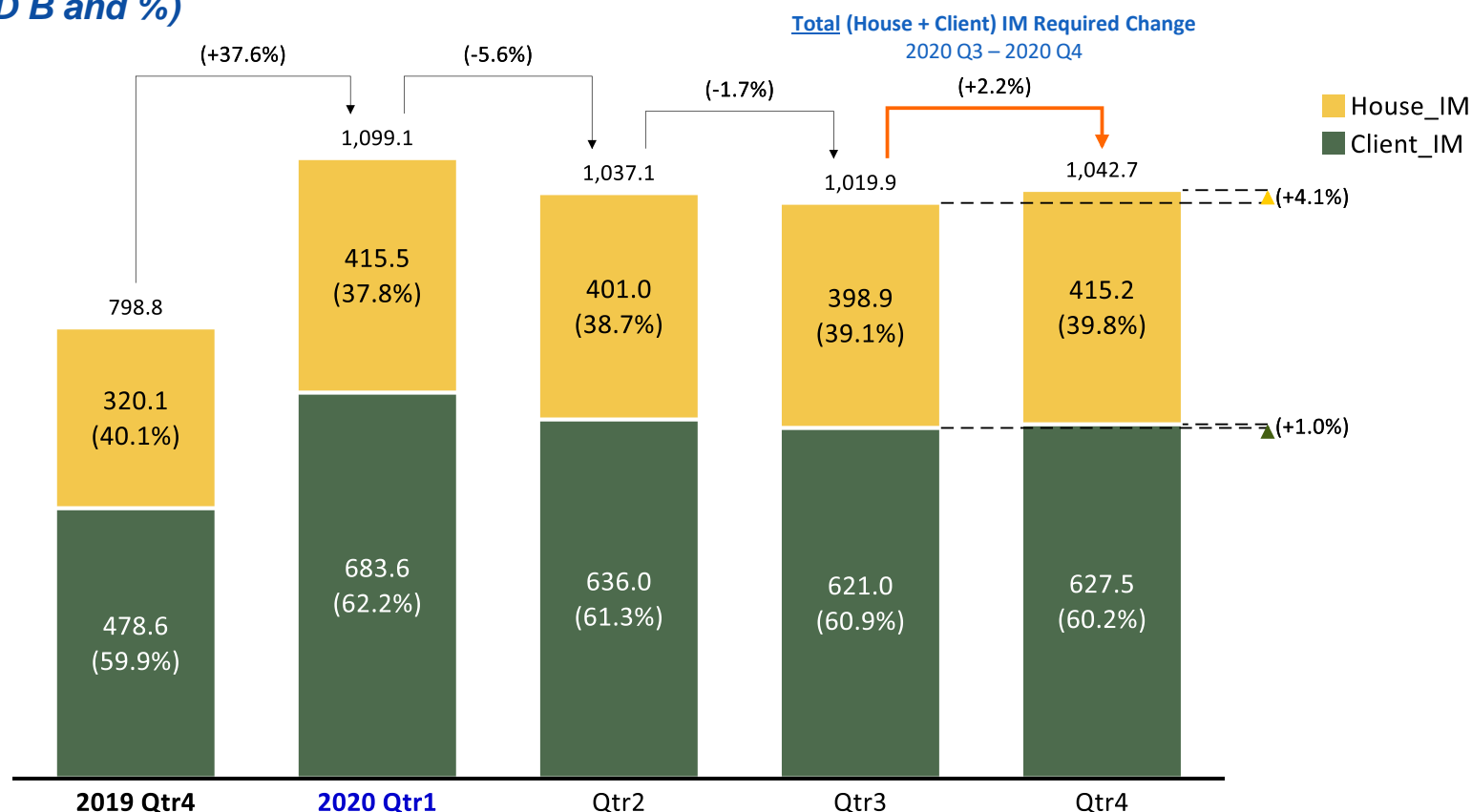


House and Client IM required remains flat for 2020 Q4.
 House and Client IM increases by 4.1% and 1.0%, respectively.
 QoQ proportion between both remains constant.

Global IM breakdown: House IM vs. Client IM (Required)

Disclosure (6.1.1):

2019 Q4 to 2020 Q4 (USD B and %)



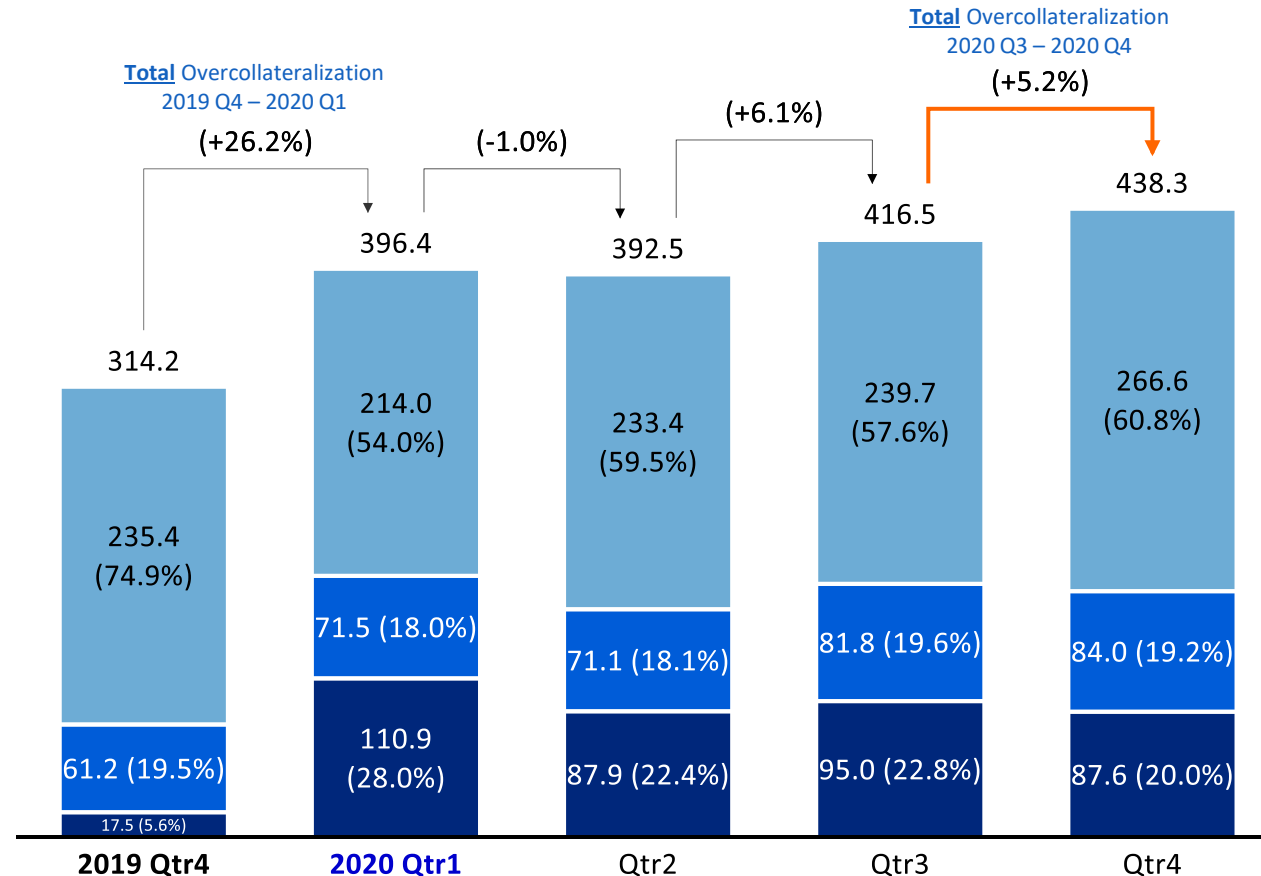
*Sum of IM Required is slightly lower than the Total IM Required on slide 4, due to no breakdown of House/Client IM Required for HKEX HKSCC, HKEX OTCC and NSE. As a result, these are assumed House_IM.

Total Overcollateralization[†] is USD 438.3 B for 2020 Q4, and increased by 5.2% from 2020 Q3



Global CCP Overcollateralization (IM and DF Held (PostHaircut) – IM and DF Required)
2019 Q4 to 2020 Q4 (USD B and %)

- EMEA
- APAC
- Americas



[†]Calculated as (Total IM and DF Held (PostHaircut)) minus (Total IM and DF Required) (Only PostHaircut values used for Held values). Disclosures (6.2.15 + 4.3.15) – (6.1.1 + 4.1.4) = Total Overcollateralization

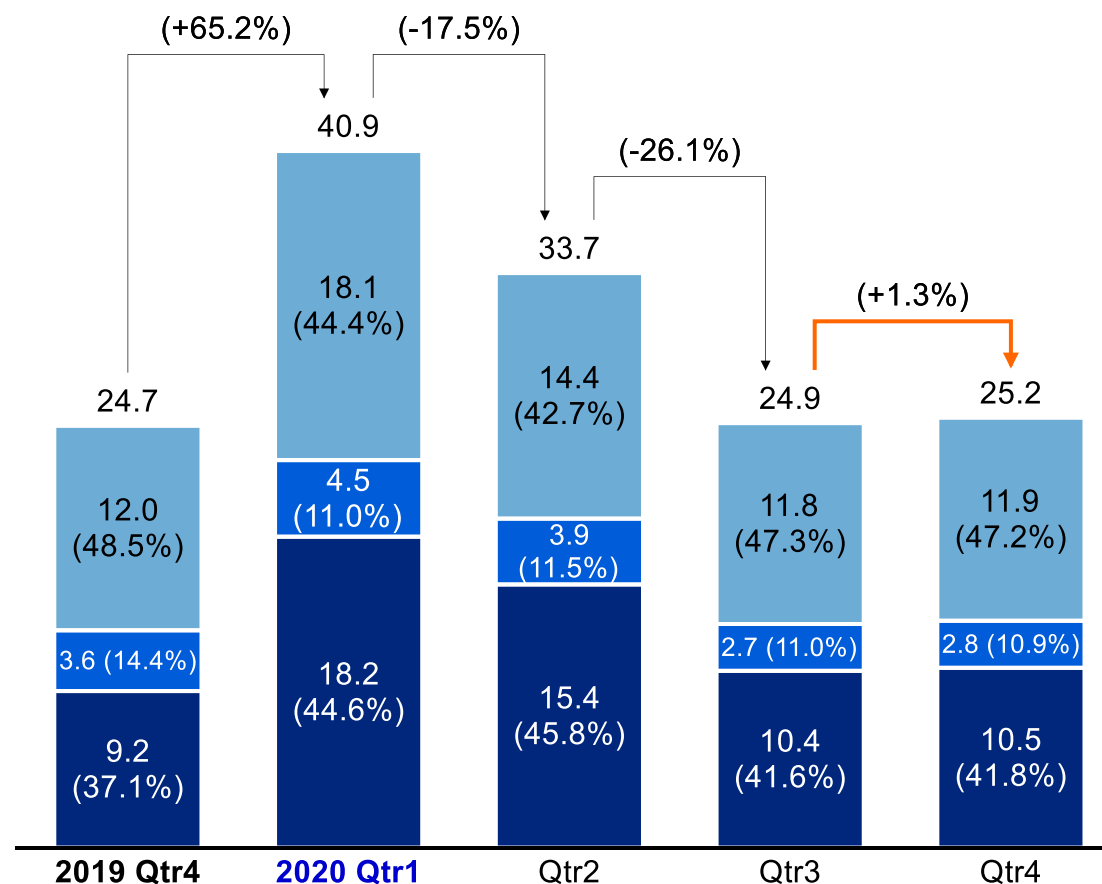
Average Total VM Paid to the CCP by participants each business day increases 1.3% in 2020 Q4. Proportion of VM paid per region remains constant

Total Global VM Paid to the CCP by participants each business day

Disclosure (6.6.1)

2019 Q4 to 2020 Q4 (USD B)

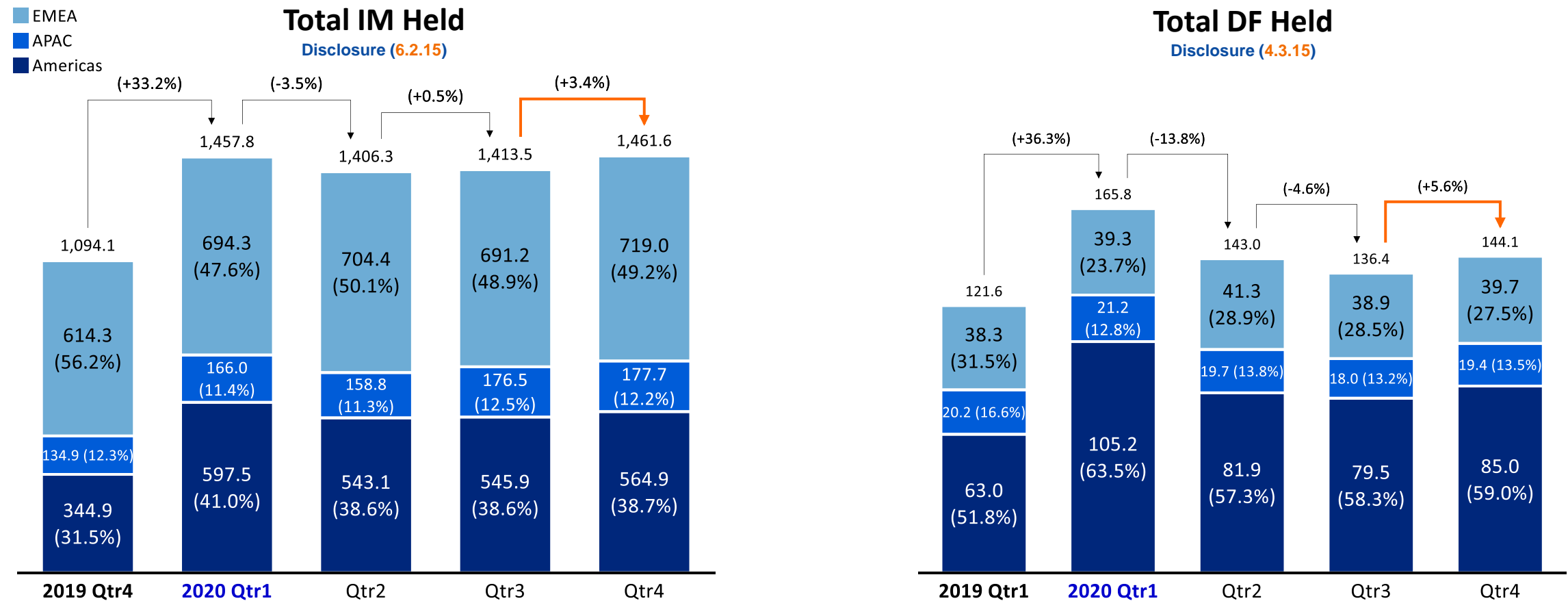
- EMEA
- APAC
- Americas



Distribution of IM held is consistently the largest for EMEA, followed by Americas and APAC. IM held for 2020 Q4 remains flat with a 3.4% increase, while the DF held increased by 5.6%



Global CCP Collateral Held (PostHaircut) - Grand Total
2019 Q4 to 2020 Q4 (USD B and %)



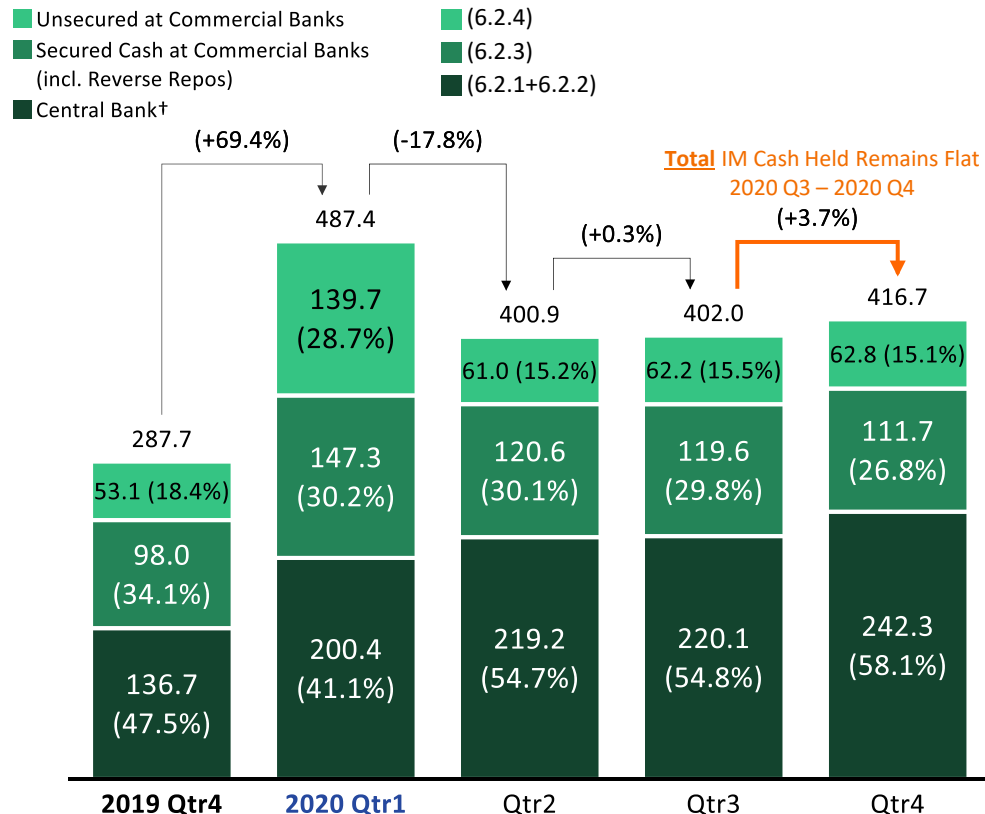
IM: Initial Margin

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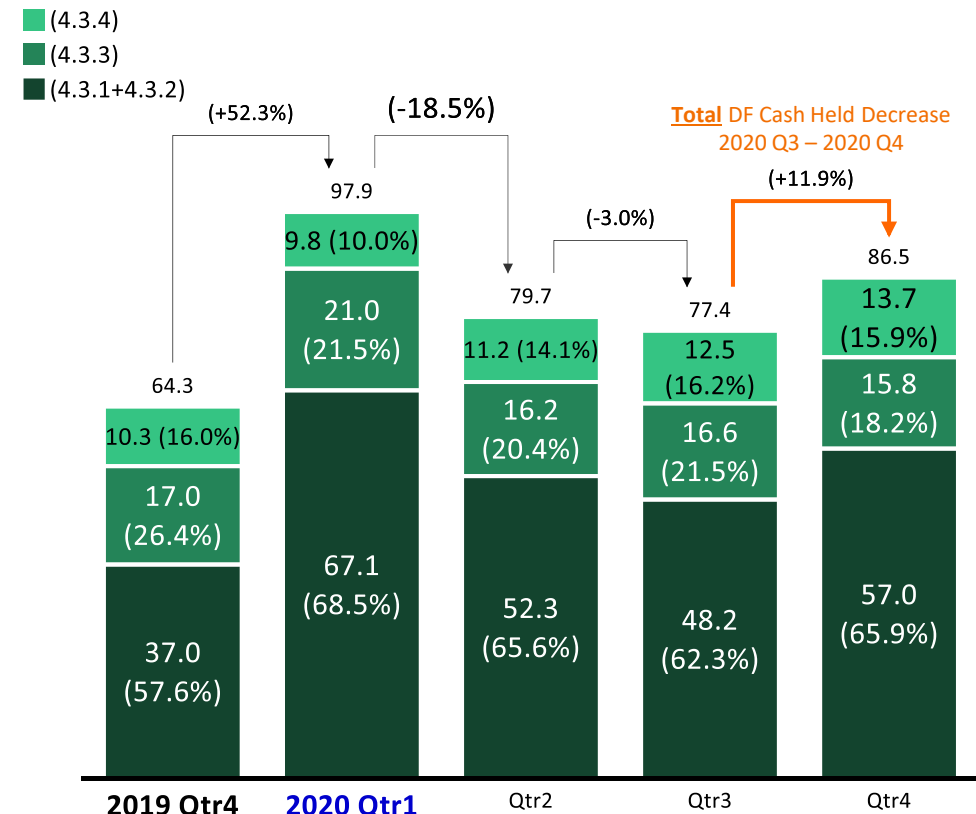
Total Cash held is constant for IM with a 3.7% increase. DF increases 11.9%, driven by an increase in Central Bank Deposits. Majority of all cash resources continue to be deposited at the Central Bank[†]

Global CCP Collateral (Held) (PostHaircut) – Cash Total
2019 Q4 to 2020 Q4 (USD B and %)

Total IM Held



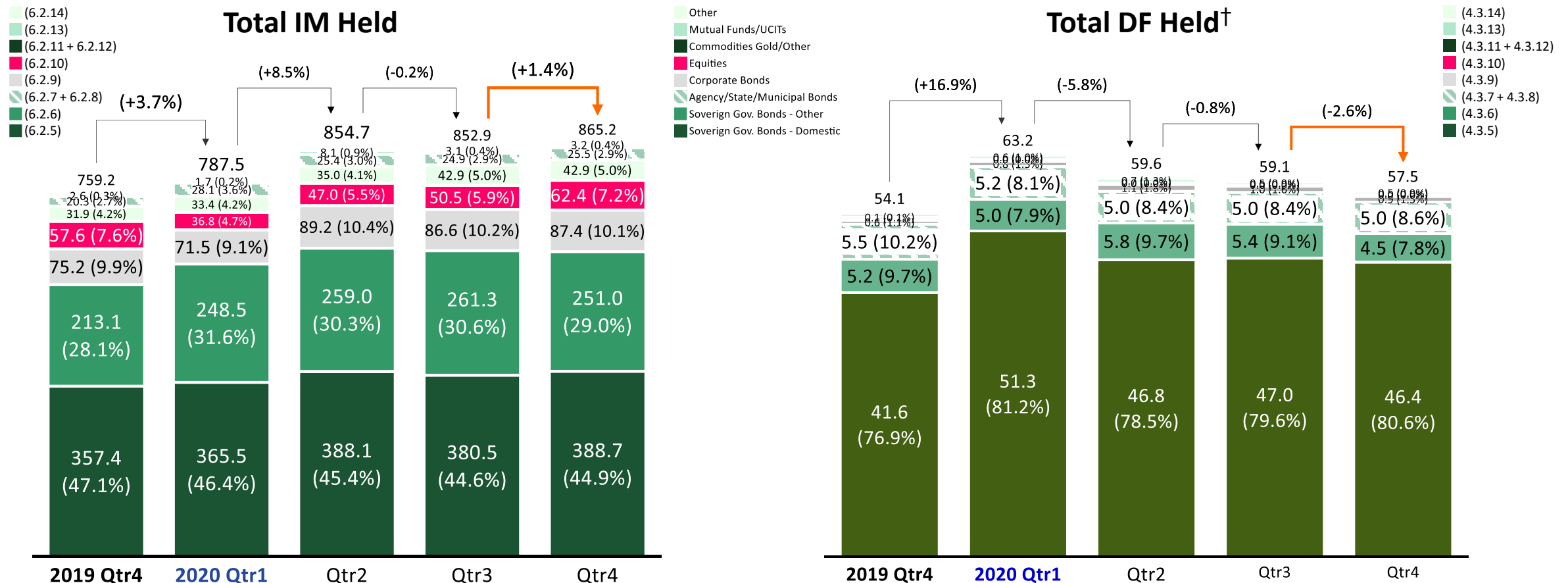
Total DF Held



*Figures as of quarter end. Sum of IM Held across 6.2.1 – 6.2.14 is slightly lower than the Total IM Held Values for 6.2.15, due to 1), DTCC have requested that 6.2.15 figures be equivalent to 4.3.15 figures, and 2), OCC 6.2.15 total > sum of 6.2.1 – 6.2.14. TCH provide the full breakdown of 6.2.15 split across 6.2.1 – 6.2.14 as of 2020 Q2.
[†]Cash deposited at "Other Central Bank of Issue" (IM: 6.2.2, DF: 4.3.2) makes up <0.5% of the total cash collateral for IM and <0.5% for the DF. Therefore, "Central Bank of Issue" and "Other Central Bank" Cash deposits grouped together within charts.
 CC: COVID-19 Crisis

During 2020 Q4, global Non-Cash held IM remains similar to the previous quarter with a 1.4% increase. DF decreases 2.6% driven primarily by the decrease across Sov' Gov' Bonds (Foreign & Domestic)

Global CCP Collateral Held (PostHaircut) - Non-Cash Total
2019 Q4 to 2020 Q4 (USD B and %)



*Figures as of quarter end. Sum of IM Held across 6.2.1 – 6.2.14 is slightly lower than the Total IM Held Values for 6.2.15, due to 1). DTCC have requested that 6.2.15 figures be equivalent to 4.3.15 figures, and 2). OCC 6.2.15 total > sum of 6.2.1 – 6.2.14. TCH provide the full breakdown of 6.2.15 split across 6.2.1 - 6.2.14 as of 2020 Q2.

†Disclosures 4.3.8 – 4.3.14 constitute on average <1.5% of total non-cash collateral per quarter from 2020 Q2 – 2020 Q3.

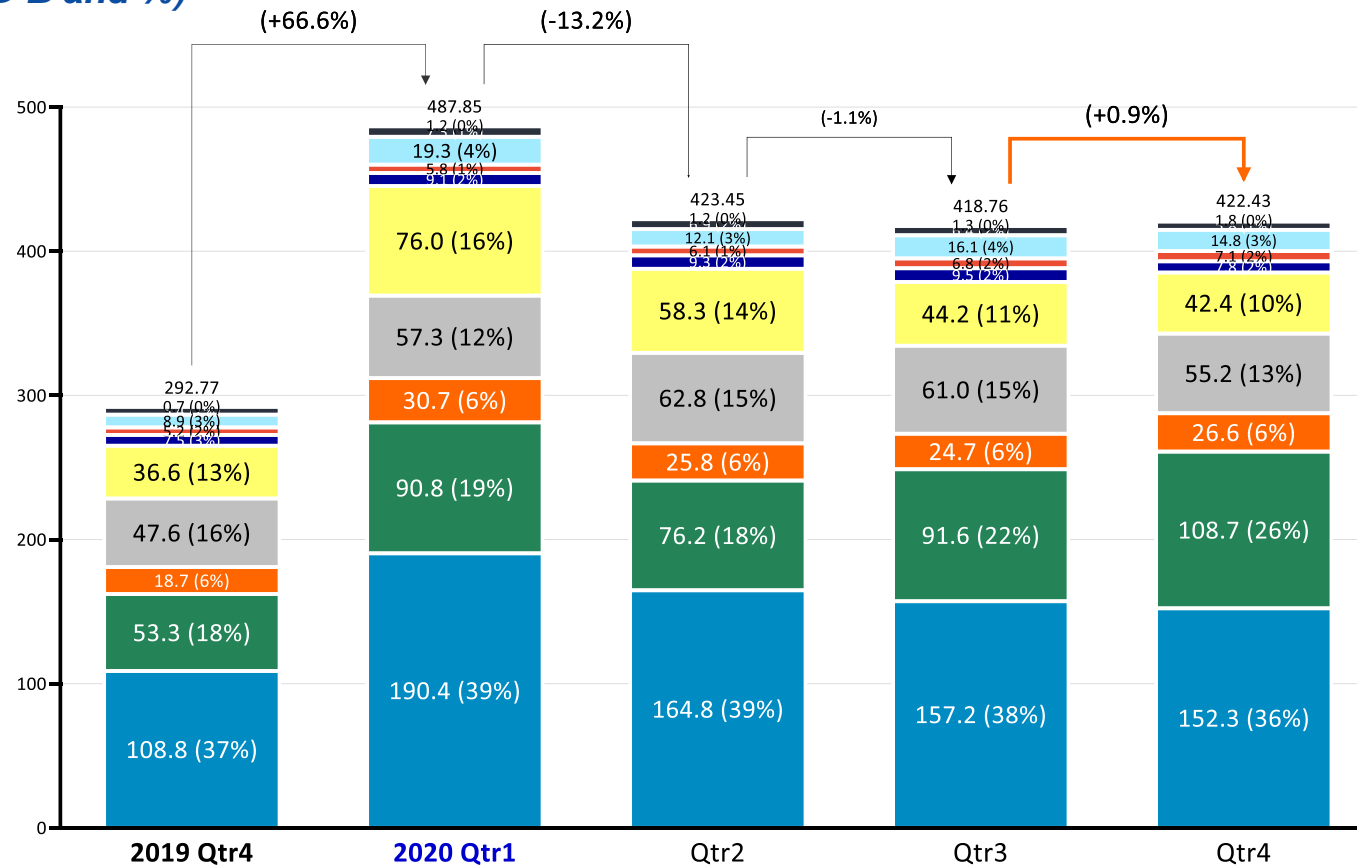
For 2020 Q4 the IM required for ETDs across the following 10 CCPs increased by 0.9%. Proportion across each CCP remains fairly consistent.

Global CCP IM (Required) Collateral for ETDs across selected CCPs

Disclosure (6.1.1)

2019 Q4 to 2020 Q4 (USD B and %)

- HKEX_SEOCH
- HKEX_HKCC
- JSCC
- ASXCLF
- SGX_DC
- ECAG
- ICEU
- ICUS
- OCC
- CME



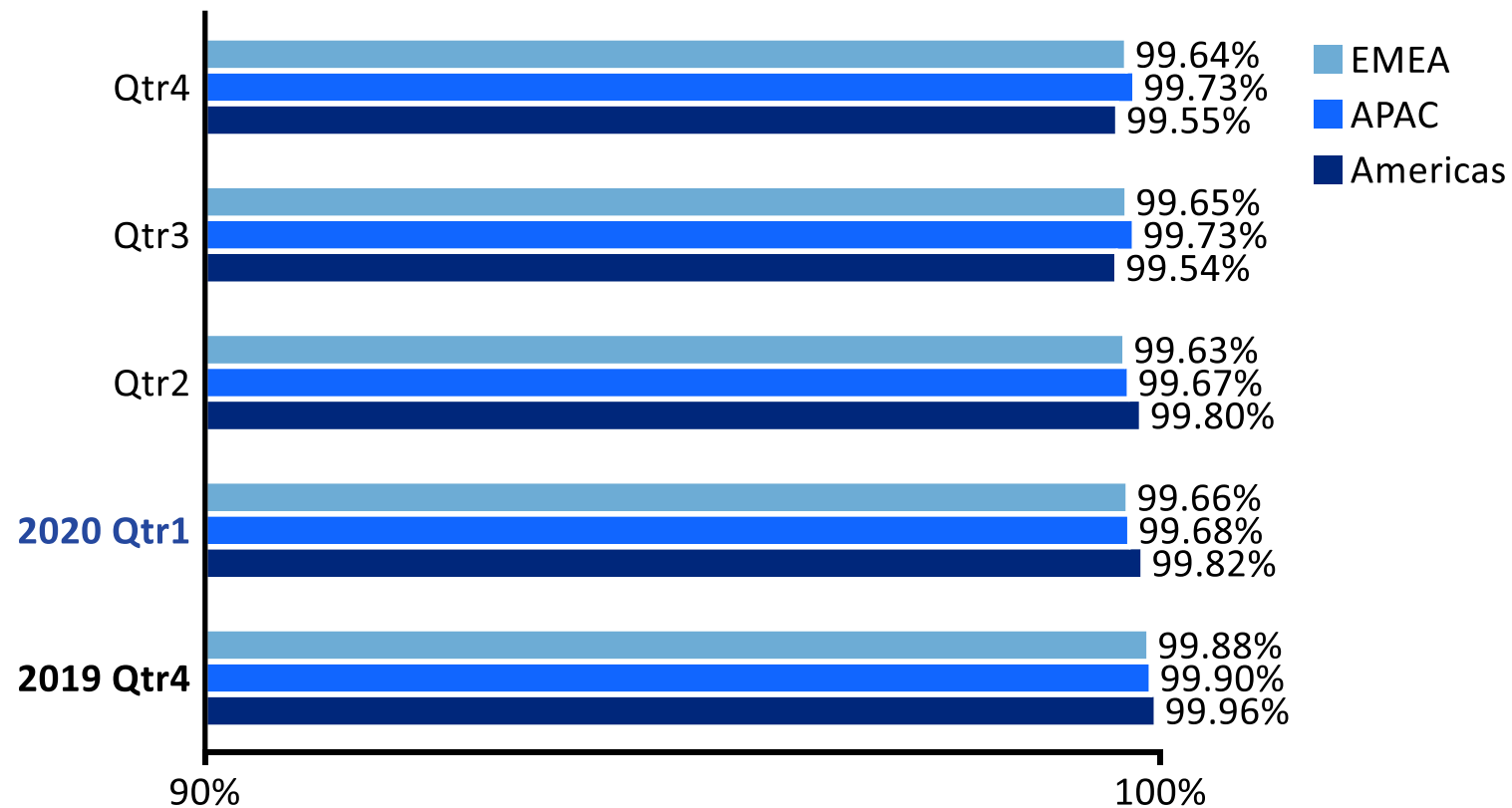
Results of back-testing of initial margin (Achieved Coverage Level) has remained above 99.5% (on average) across all regions since 2019 Q4



Results of back-testing of initial margin – Achieved coverage level*

Disclosure (6.5.3)

2019 Q4 to 2020 Q4 (%)



*Average has been taken across each respective region

CCPs reported a higher availability to core clearing systems over the previous 12-month period*



Availability, Failures and Recovery Time Objectives

2020 Q4

- CCPs report the **quantity** and **duration** of operational failures affecting their **core clearing systems over the previous 12-months** on a quarterly basis:
 - **Core Systems:** Within clearing, systems enable the acceptance and novation of trades, and provide the calculation of margin and settlement obligations;
 - **Loss of Availability:** An incident that results in an interruption to the CCP's ability to perform its own functions in relation to trade acceptance and novation, or calculation of margin and settlement obligations. An incident that compromises the CCP's ability to correctly perform the aforementioned functions is also considered a 'loss of availability', even if there is no actual outage. Failure to a back-up site without interruption to services would not count as a loss of availability.

Disclosure (17.2):

- The average actual core clearing system availability over the previous twelve month period (January 1, 2020 through December 31, 2020) across all 43 CCP PQDs was: **99.99%**

Disclosure (17.4):

Out of 43 CCP PQDs

2 observe a target recovery time of:	1 hour	1 observes a target recovery time of:	20 Minutes
36 observe the standard target recovery time of:	2 hours		
1 observes a target recovery time of:	2.5 hours		
3 observe a target recovery time of:	4 hours		

*For 2020 Q3, the average availability of core clearing systems over the period (October 1, 2019 through September 30, 2020) across all CCPs was 99.98%.

†Based on their respective regulatory requirements

CCP12 Members



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