



The Global Association of Central Counterparties

PUBLIC QUANTITATIVE DISCLOSURE

PQD QUARTERLY TRENDS REPORT

2022 Q2 DATA



Oct-22

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CCP PQDs

The CCP12 PQD Quarterly Trends Report provides an overview of the risk management provided by CCPs across 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 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.

This CCP12 PQD Quarterly Trends Report helps to inform market participants, authorities, and the general public of key features, the scale and nature of financial market infrastructure risk management. The data is aggregated directly from the CCPs themselves according to the CCP12 standardized template, carrying information stipulated in global regulatory guidance. Further details for individual CCPs can be found in links provided on the [CCP12 website](#) and page 23 of this report.

IN THIS COLLATION FOR 2022 Q2

Data for 52 CCPs across Americas, APAC and EMEA (equivalent to 31 CCP12 members) are included in this quarter's collation[†]:

Americas	16
APAC	20
EMEA	16

6.1.1 Global IM (Required):	USD	1,292 B
4.1.4 Global DF (Required):	USD	125 B
Global Overcollateralization [‡] :	USD	484 B

For any questions, please get in touch: question.pqd@ccp12.org

^{*}All PQD dates are forced to "quarter-end" to reflect the quarter-end exchange rates per currency, i.e., if the PQD date is "2021-06-28", then, this is adjusted to "2021-06-30", and the corresponding FX rate.
[†]CC&G and NCC data is incorporated as non-CCP12 members. CC&G, CCIL, DTCC, NCC, NSE and NZX: 2022 Q1 PQD figures used in this report since these PQDs were not released as of 2022-09-09. CCIL require regulatory approval of their PQD figures due to local regulations.

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

Commentary for the quarter 2022 Q2

Below are a few key market developments which took place in the second quarter of 2022:

- Inflation was yet again highlighted as the prime suspect for investor uncertainty in 2022 Q2. Global central banks, predominantly led by the U.S. Federal Reserve, tightened liquidity conditions, which negatively impacted risky asset prices as money became scarcer and more expensive overall. The typical safe havens expected for stable returns at such periods did not deliver. The high inflation environment made bond coupon payments less attractive while, gold also struggled for returns.¹
- The equity and bond markets were under pressure as investors were privy to further interest rate increases, coupled with the inflationary environment and the prospect of a recession. The Eurozone experienced steep declines in equity markets as the war in Ukraine continued and concerns continued over the potential gas shortages, resulting in higher natural-gas prices. The European Central Bank (ECB) was expected to raise interest rates, which then took place at the beginning of the third quarter of 2022.²
- The Federal Reserve raised benchmark interest rates by 75 basis points to a range of 1.5 – 1.75% in a move that was the most aggressive increase since 1994. The Bank of England (BoE) increased its official rate by a total of 50 basis points with a further two consecutive 25 basis points, ultimately leading to 1.25%. The BoE commented on a continuation of higher inflationary environment which was not showing signs of slowing, and in June raised its estimate for the peak CPI from 10% to 11% for October 2022.²
- The ECB released their Financial Stability Review in May, indicating volatility and uncertainty in interest rate and government bond markets, as well as potential upward pressure on real rates, which could challenge risky asset valuations. Markets became increasingly sensitive to information that could affect the pace of policy normalisation.³
- Global futures and options trading volume grew by 32.6% to 38.3 bn contracts in 2022 H1 compared to 28.9 bn contracts in 2021 H1. June 2022 open interest increased 0.5% compared to June 2021. Equity, currencies and interest rate derivatives contracts saw a 49.5%, 32.1% and 13.2% increase in 2022 H1 compared to 2021 H1.⁴

1 <https://www.morningstar.com/articles/1104265/q2-2022-market-trends-in-6-charts>

2 <https://www.schroders.com/en/insights/economics/quarterly-markets-review--q2-2022/>

3 <https://www.ecb.europa.eu/pub/financial-stability/fsr/html/ecb.fsr202205--f207f46ea0.en.html#toc2>

4 https://www.fia.org/data-resources?utm_source=FIASWeb&utm_medium=Top

Headline Statistics of the Public Quantitative Disclosures

2022 Q2

Global CCP Margin* (USD B)

Global Initial Margin & Default Fund (Required):

Total Global IM Required (6.1.1)	1,293
Total Global DF Required (4.1.4)	125
Total Global CCP Collateral Required (6.1.1 + 4.1.4)	1,418

Global IM & DF Held (PostHaircut):

Total Global IM Held (PostHaircut) (6.2.15)	1,758
Total Global DF Held (PostHaircut) (4.3.15)	142
Total Global CCP Collateral Held (PostHaircut) (6.2.15 + 4.3.15)	1,901

Global Variation Margin (VM)

Sum of Total Global Average Daily VM Paid to the CCP by participants each business day (6.6.1)	46
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Global Overcollateralization (OC)

Total Global IM Overcollateralization	464
Total Global DF Overcollateralization	20
Total Global Overcollateralization	484

Total Global CCP Collateral (Held) (PostHaircut) in form of*:

Cash

At Central Bank

Secured Cash (incl. Reverse Repos) at Commercial Banks

Unsecured Cash at Commercial Banks

Non-Cash

Sovereign Gov Bonds - Domestic

Sovereign Gov Bonds - Foreign

Agency Bonds

State/Municipal Bonds

Corporate Bonds

Equities

Commodities - Gold

Commodities - Other

Mutual Funds/UCITs

Other

	Disclosure	Initial Margin	Disclosure	Default Fund
	(6.2.1 + 6.2.2)	21.0%	(4.3.1 + 4.3.2)	45.1%
	6.2.3	9.9%	4.3.3	11.4%
	6.2.4	4.0%	4.3.4	7.7%
	6.2.5	24.5%	4.3.5	29.6%
	6.2.6	15.9%	4.3.6	2.8%
	6.2.7	0.9%	4.3.7	1.9%
	6.2.8	0.6%	4.3.8	0.2%
	6.2.9	7.1%	4.3.9	0.8%
	6.2.10	10.3%	4.3.10	0.2%
	6.2.11	0.2%	4.3.11	0.0%
	6.2.12	0.0%	4.3.12	0.0%
	6.2.13	0.3%	4.3.13	0.0%
	6.2.14	2.4%	4.3.14	0.3%

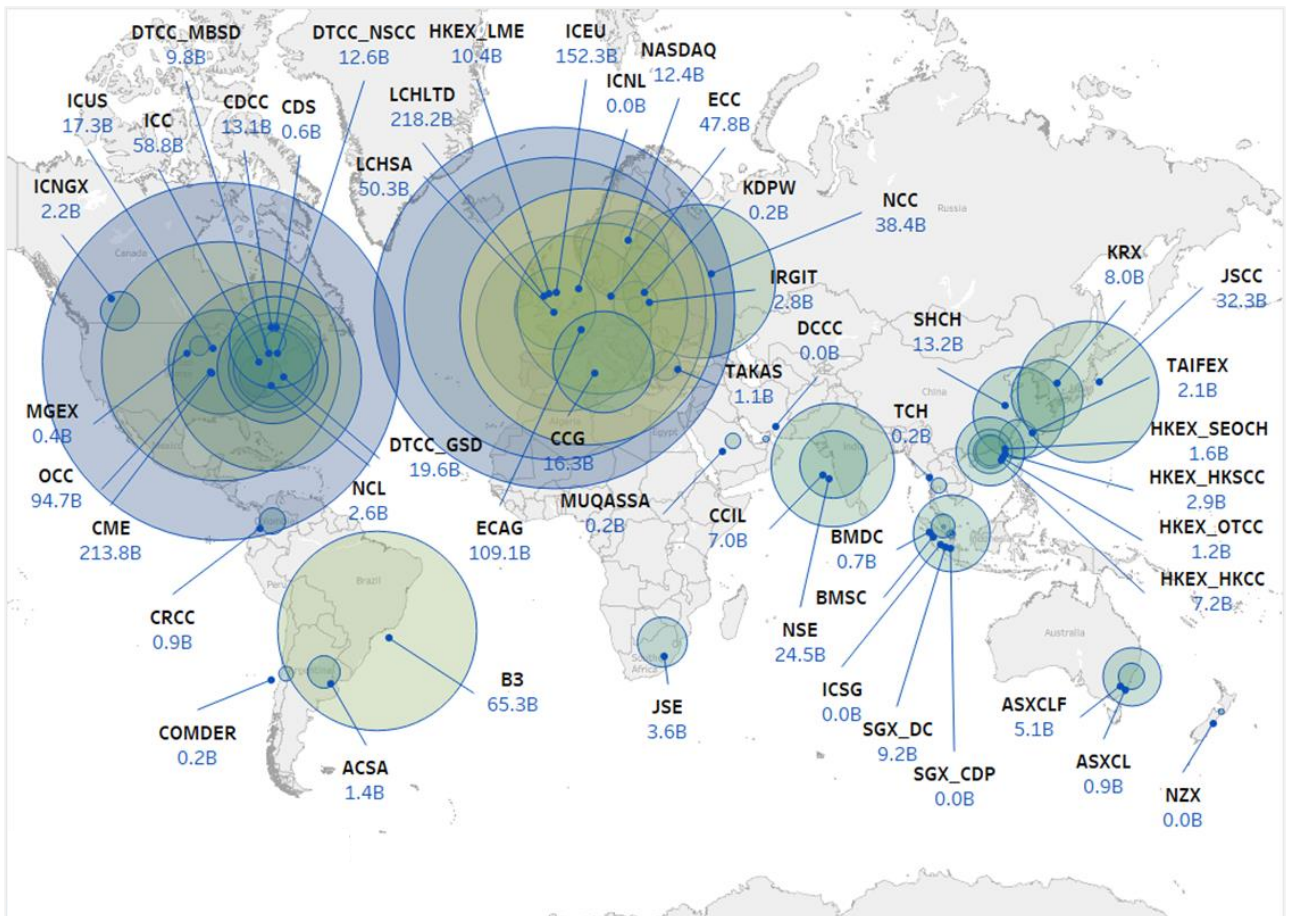
*The sum of the % in the IM column ≠ 100% since: The sum of IM Held across 6.2.1 – 6.2.14 is slightly lower than the Total IM Held Values for 6.2.15, due to DTCC requesting that 6.2.15 figures be equivalent to 4.3.15 figures; and 4 other CCPs providing only totals for their 6.2.15 values.
 OCC 6.2.1 – 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 a conversion from FX rates provided by the ECB. Based on foreign exchange rates at the quarter-end for each PQD quarterly release.

Collateral View

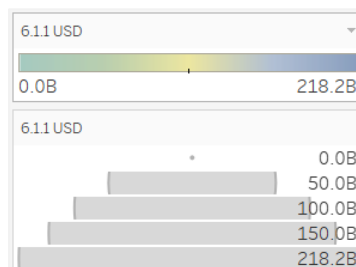
A collection of maps each quarter providing an overview of the global distribution of Initial Margin, Default Fund and Variation Margin from a global perspective.

2022 Q2

6.1.1: Global IM (Required) Per CCP*



The coloured disks indicate the size of the IM (Required) (according to the key, opposite), from a geographical perspective.



*Based on the CCP's city location. For CCPs that are from the same city location, they are hidden behind the larger transparent disk. Muqassa: IM = 0 for certain quarters, since at those reporting dates, there were no open contracts and hence no IM requirement for any members.

6.1.1 IM values (not seen from map):

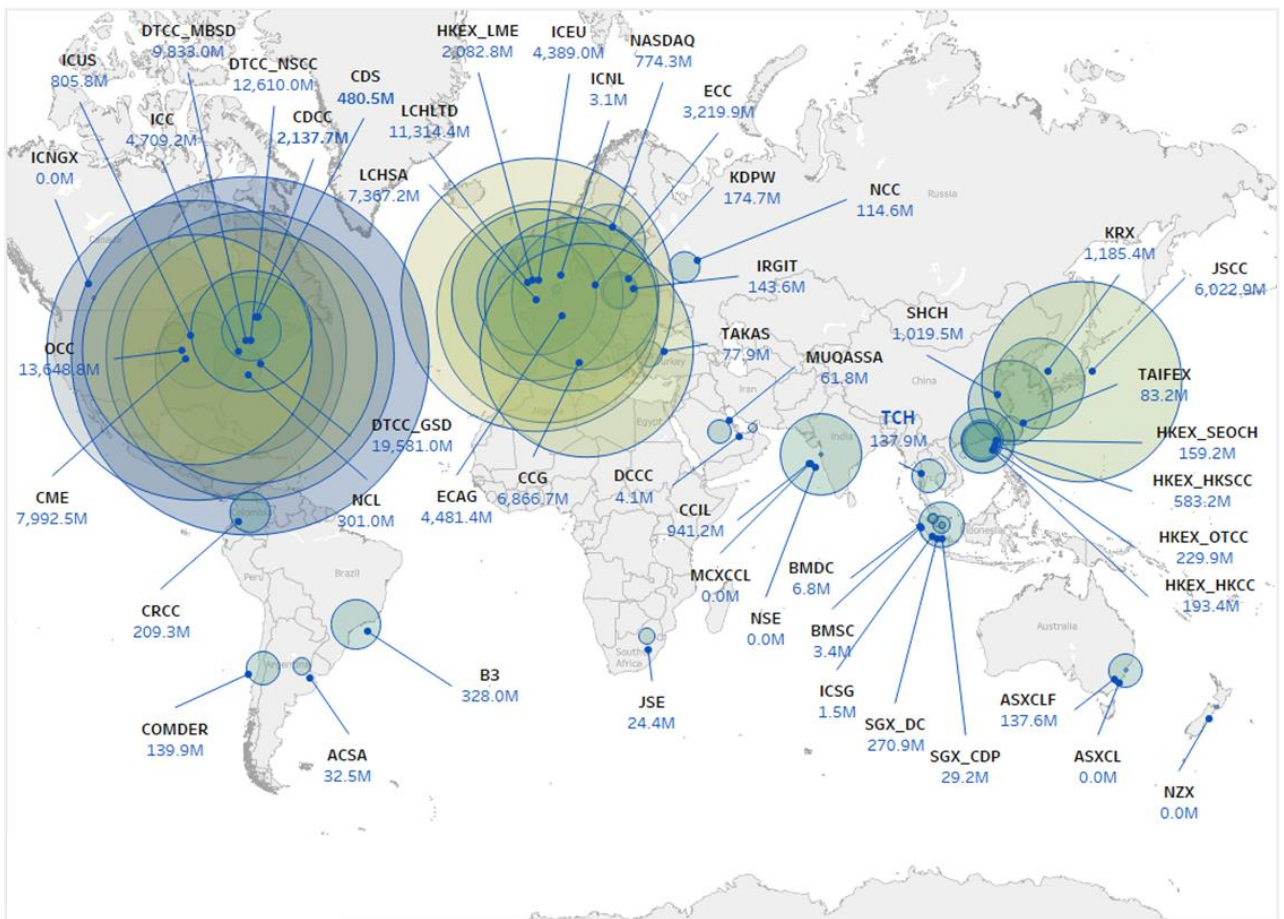
CCP	6.1.1 USD
CCP	6.11 USD
ICNL	0.00
ICSG	1,186,779
NZX	9,525,302.65
DCCC	12,448,111.00
SGX_CDP	38,678,024.92

Collateral View

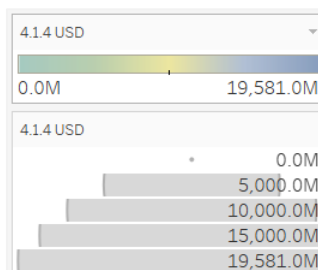
A collection of maps each quarter providing an overview of the global distribution of Initial Margin, Default Fund and Variation Margin from a global perspective.

2022 Q2

4.1.4: Global DF (Required) Per CCP*



The coloured disks indicate the size of the DF fund (Required) per CCP (according to the key, opposite), from a geographical perspective.



*Based on the CCP's city location. For CCPs that are from the same city location, they are hidden/overlaid behind the larger transparent disk. 4.1.4 DF (Required) is zero for ASXCL, ICNGX, MCXCLL, NSE, NZX. For further details, please see the respective CCP's PQD.

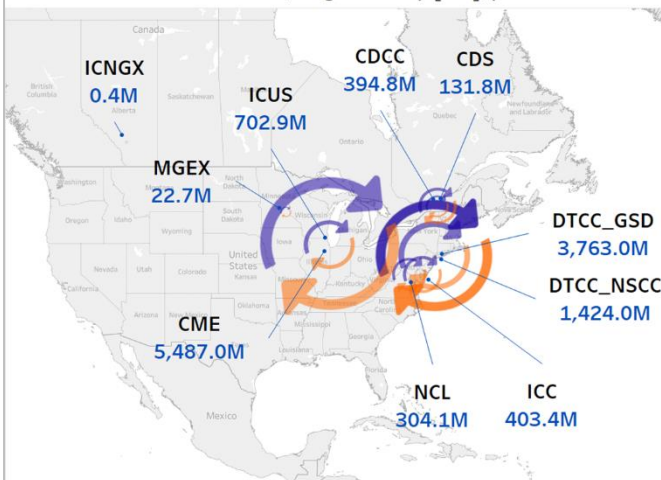
Collateral View

A collection of maps each quarter providing an overview of the global distribution of Initial Margin, Default Fund and Variation Margin from a global perspective.

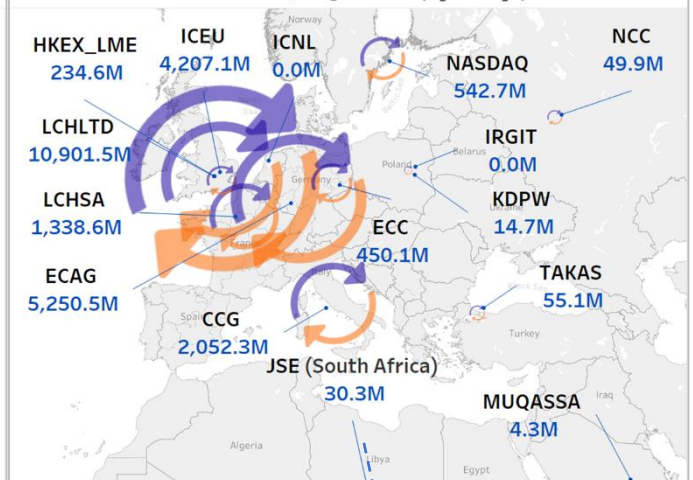
2022 Q2

6.6.1: Total VM Paid to the CCP by participants each business day*

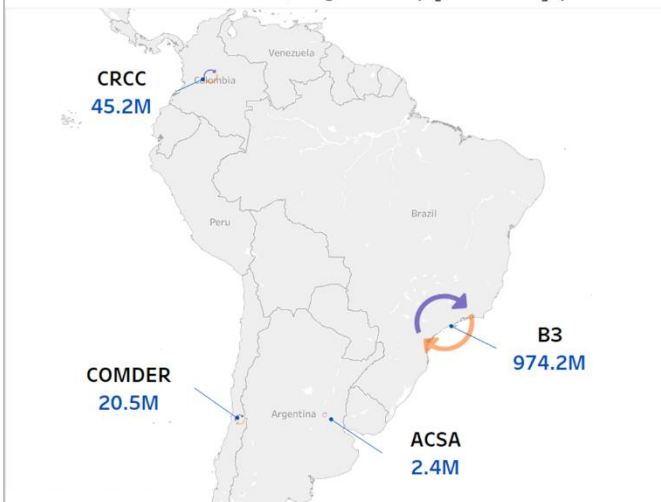
6.6.1: Sum of Total Global VM, Regional Map [U.S.], per CCP



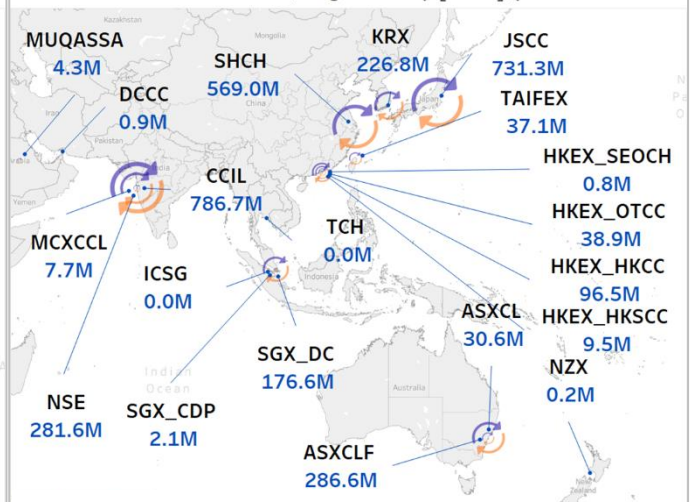
6.6.1: Sum of Total Global VM, Regional Map [EMEA], per CCP



6.6.1: Sum of Total Global VM, Regional Map [S. America], per CCP



6.6.1: Sum of Total Global VM, Regional Map [APAC], per CCP



Maps not to scale relative to each other.



The double arrows indicate the size of the variation margin (VM) flow from a geographical perspective*. Please see the footnote below and page 15 for details about VM.

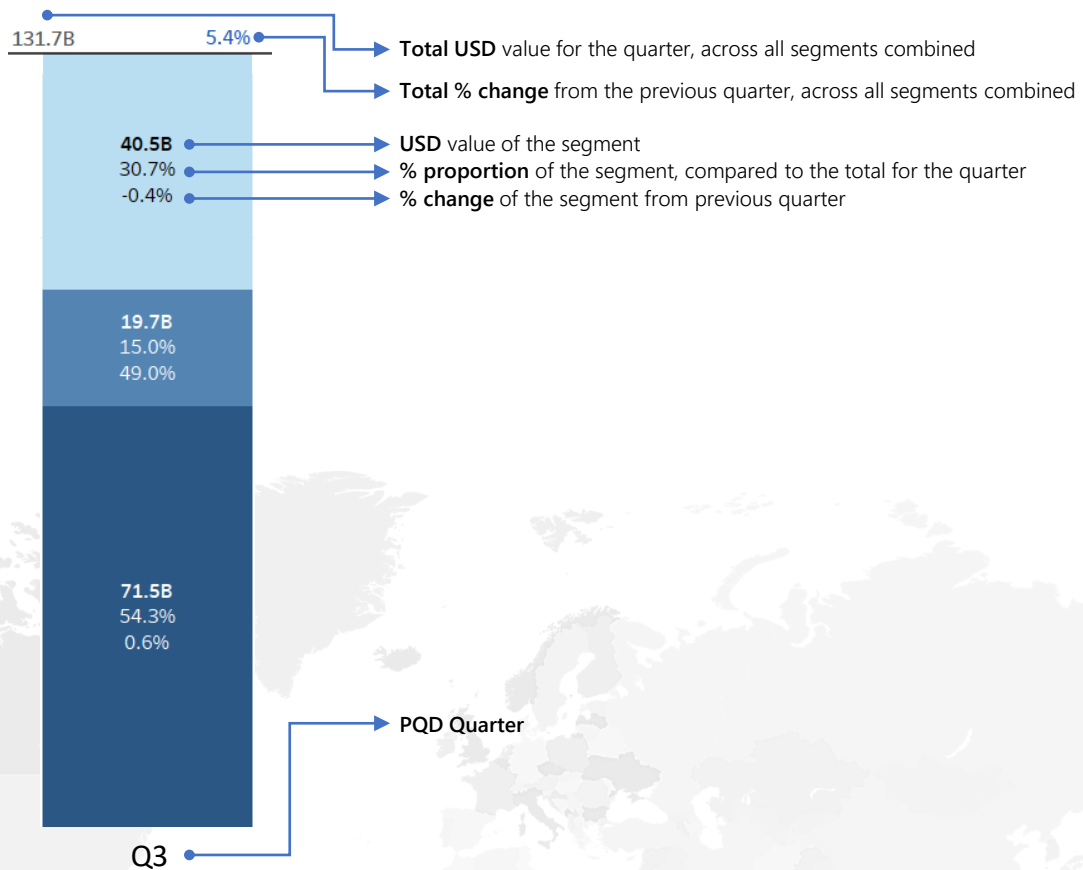
*CCPs collect VM from clearing members for losses on positions and pay the gains with finality to those clearing members with positions that have a net increase in value based on marked-to-market prices. VM is not paid directly from any specific clearing member or customer counterparty to another as a pass-through transfer, VM is a netted cash flow from a clearing member to (or from) the CCP.

6.6.1: OCC – See PQD explanatory notes. ICNL, IRGIT, TCH values are zero, based on their respective PQDs.

PQD Statistics Key

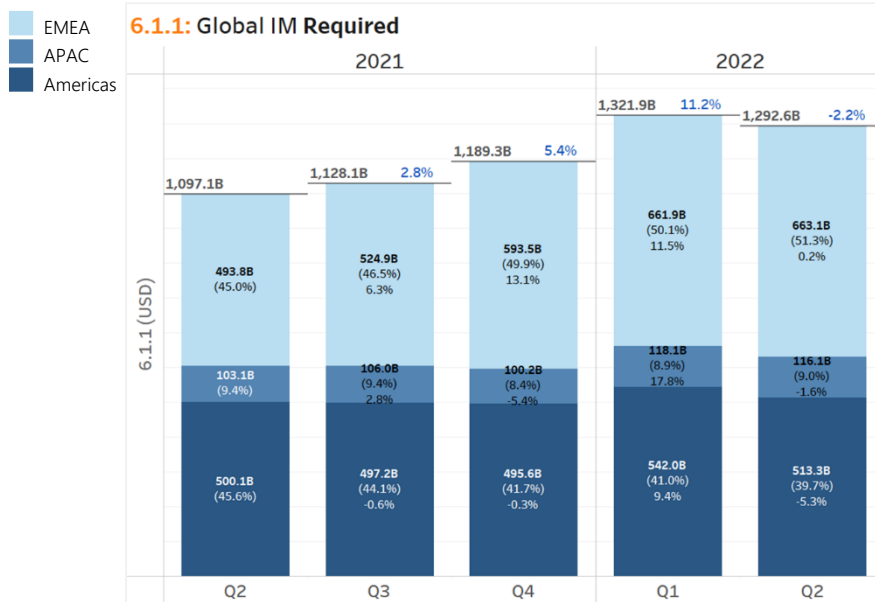
Bar Chart Key:

The key below provides details on how to interpret statistics in the subsequent charts of this report. The key is used for only charts where there are three data points per segment, as shown below:



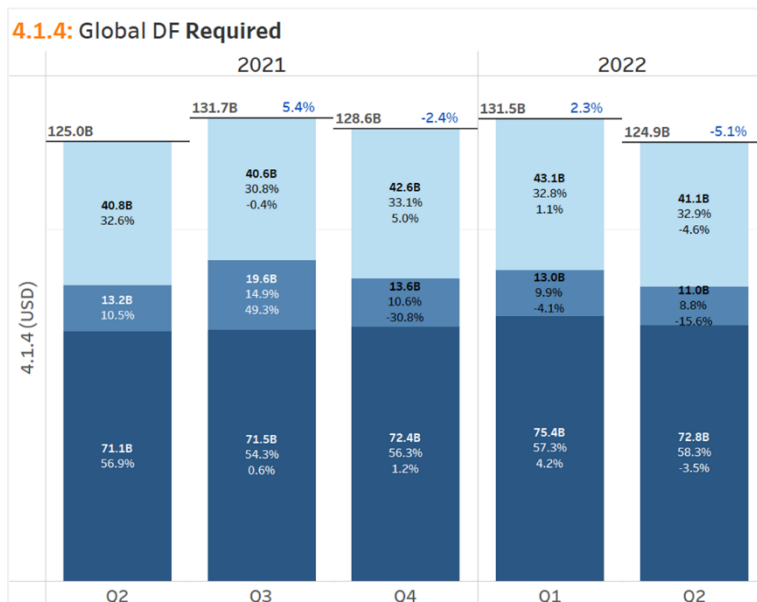
Across the CCPs, we observe a lower level of Total IM Required. Total DF Required decreased for 2022 Q2. Proportion across each region has remained steady.

Global CCP Collateral (Required) - Grand Total
2021 Q2 to 2022 Q2 (USD B, %)



The chart opposite (6.1.1: *Global IM Required*) indicates the total amount of initial margin in total for the CCPs by their clearing members across the respective regions which is reported at the quarter-end under disclosure 6.1.1 in the CCP Public Quantitative Disclosures.

The initial margin collateral posted by clearing members functions as one of the initial lines of defence to cover the potential losses incurred if that clearing member was to default. CCPs are therefore able to have a very high level of resilience in the form of liquidity and low risk exposure.



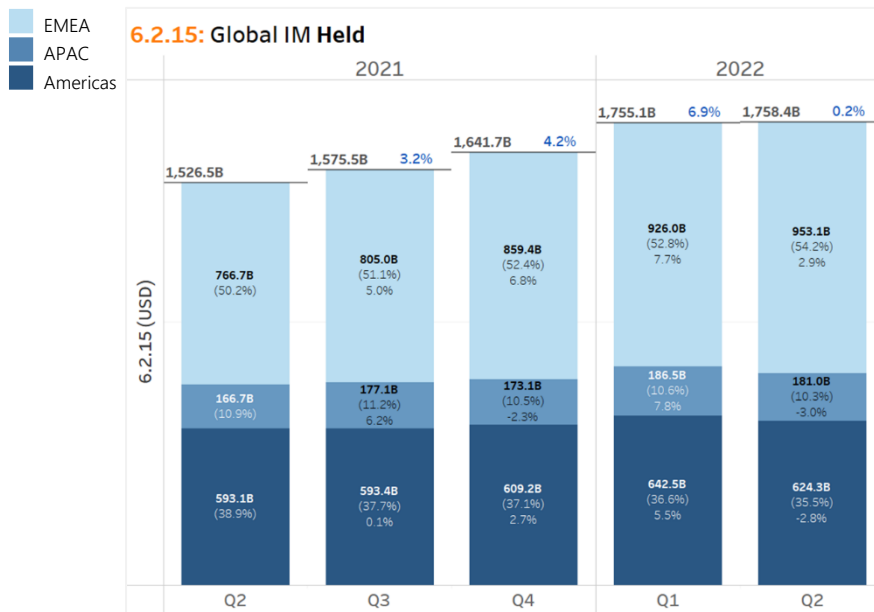
The chart opposite (4.1.4: *Global DF Required*) indicates the total amount of default fund contributions in total for the CCPs by their clearing members across the respective regions which is reported at the quarter-end under disclosure 4.1.4 in the CCP Public Quantitative Disclosures.

The purpose of the mutualized CCP default fund is aimed at providing the necessary funds in case the losses from a clearing member's default exceeds the clearing member's margin collateral and individual default fund contributions.

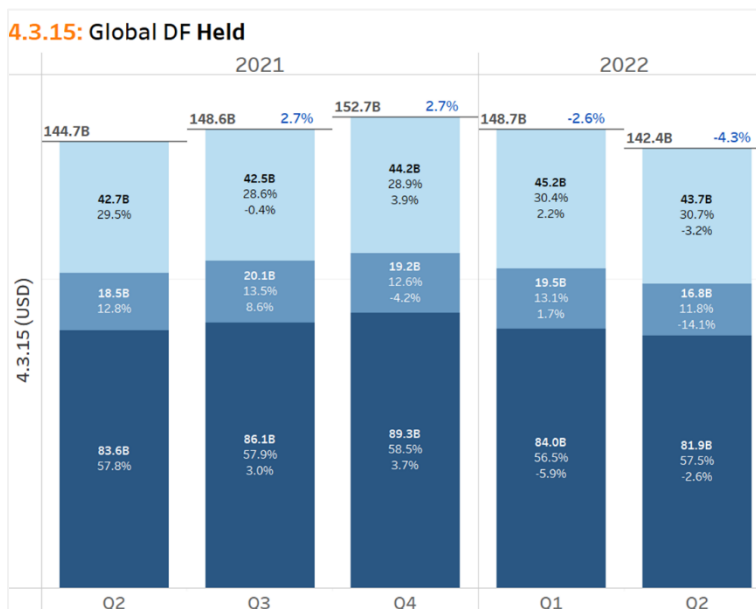
More information regarding the CCP lines of defence can be found on the CCP12 website [here](#).

Total IM Held remained flat for 2022 Q2 with a **+0.2%** increase, compared to DF Held decreasing by **-4.3%**. Distribution of IM Held is consistently the largest for EMEA, followed by Americas & APAC.

Global CCP Collateral Held (PostHaircut) - Grand Total
2021 Q2 to 2022 Q2 (USD B, %)



The chart opposite (6.2.15: *Global IM Held*) indicates the total amount of initial margin in total for the CCPs by their clearing members across the respective regions which is reported at the quarter-end under disclosure 6.2.15 in the CCP Public Quantitative Disclosures..



The chart opposite (4.3.15: *Global DF Held*) indicates the total amount of default fund contributions in total for the CCPs by their clearing members across the respective regions which is reported at the quarter-end under disclosure 4.3.15 in the CCP Public Quantitative Disclosures.

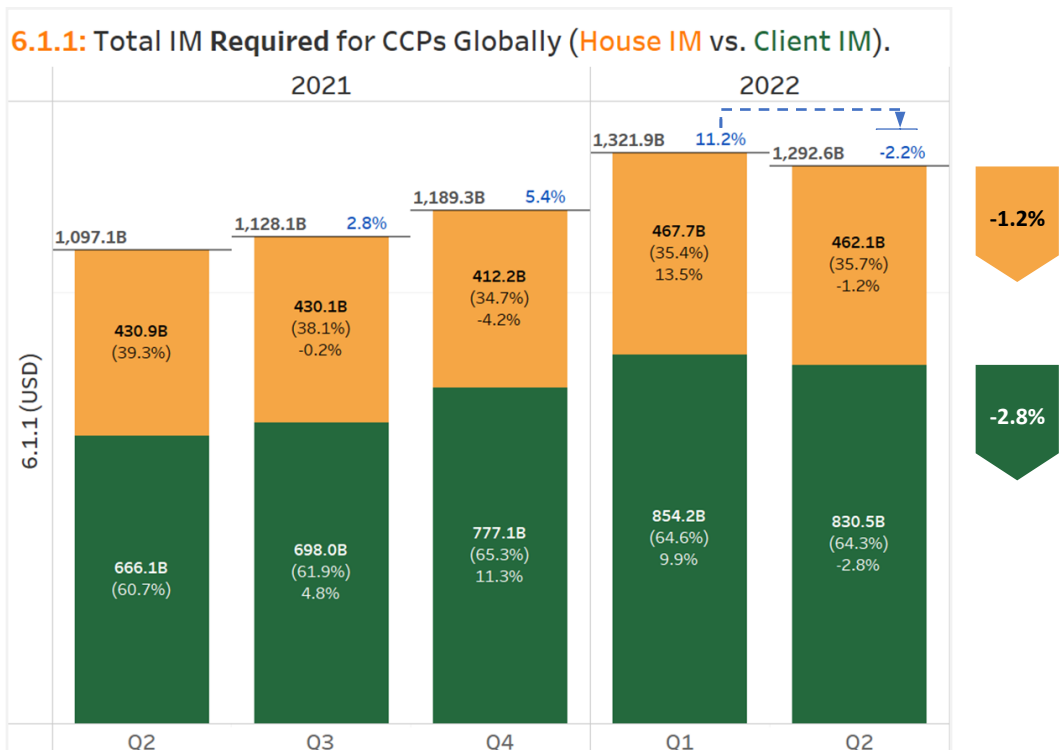
House and Client IM Required decreased for 2022 Q2. House IM observed the lower decrease with **-1.2%**, compared to Client IM decreasing by **-2.8%**. QoQ proportion between both has remained constant.

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

Disclosure (6.1.1):
2021 Q2 to 2022 Q2 (USD B, %)

- House IM
- Client IM

Total (House + Client) IM (Required), Change QoQ
2022 Q1 – 2022 Q2



The chart above (6.1.1: Total IM required for CCPs Globally (House IM vs. Client IM)) indicates split between House and Client IM which is reported at the quarter-end under disclosure 6.1.1.

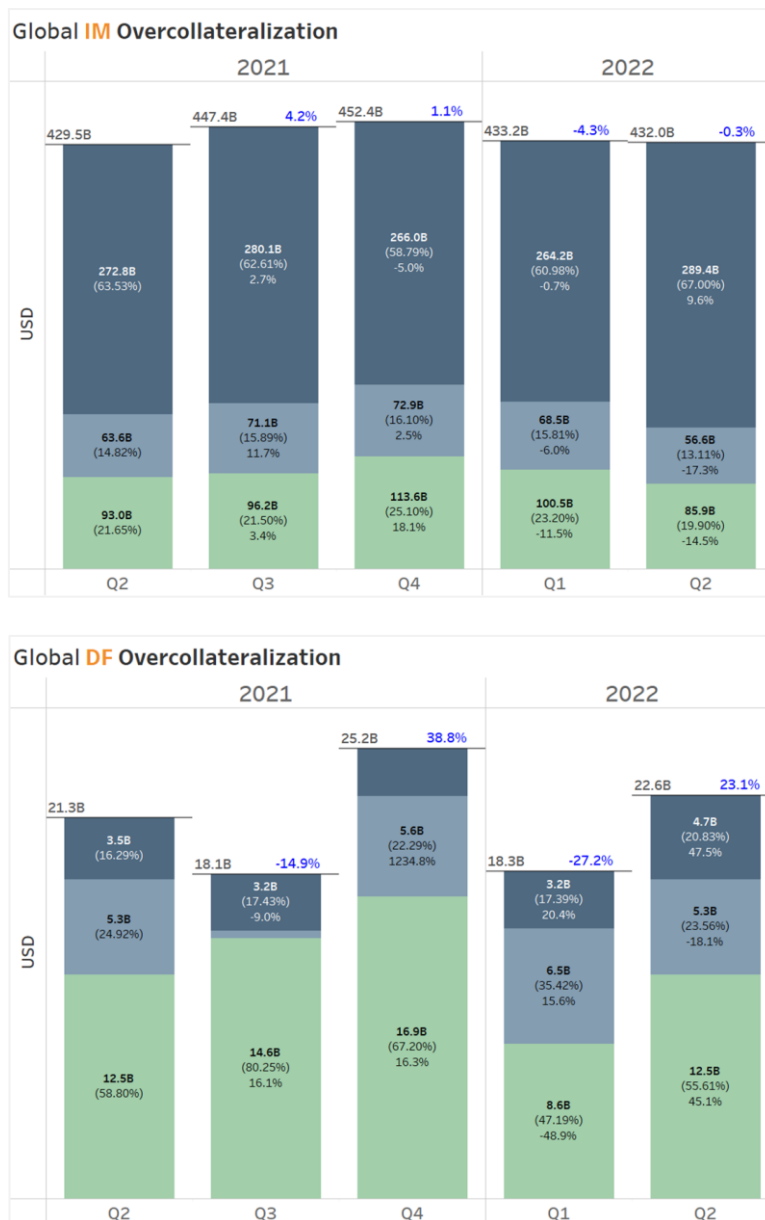
The House IM segment is the initial margin requirement for positions held by clearing members for their own portfolios, as opposed to the initial margin requirement for the clearing member’s clients. House Gross/Net and Client Gross/Net are grouped together for the purpose of analysis.

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

Global IM Overcollateralization was USD 464.4B for 2022 Q2, representing an increase of **+7.3%** from 2022 Q1.
Global DF Overcollateralization was USD 19.6B for 2022 Q2, representing an increase of **+6.9%** from 2022 Q1.

Global CCP IM and DF Overcollateralization*
Disclosures [(6.2.15) – (6.1.1)] and [(4.3.15) – (4.1.4)]
2021 Q2 to 2022 Q2 (USD B, %)

- EMEA
- APAC
- Americas



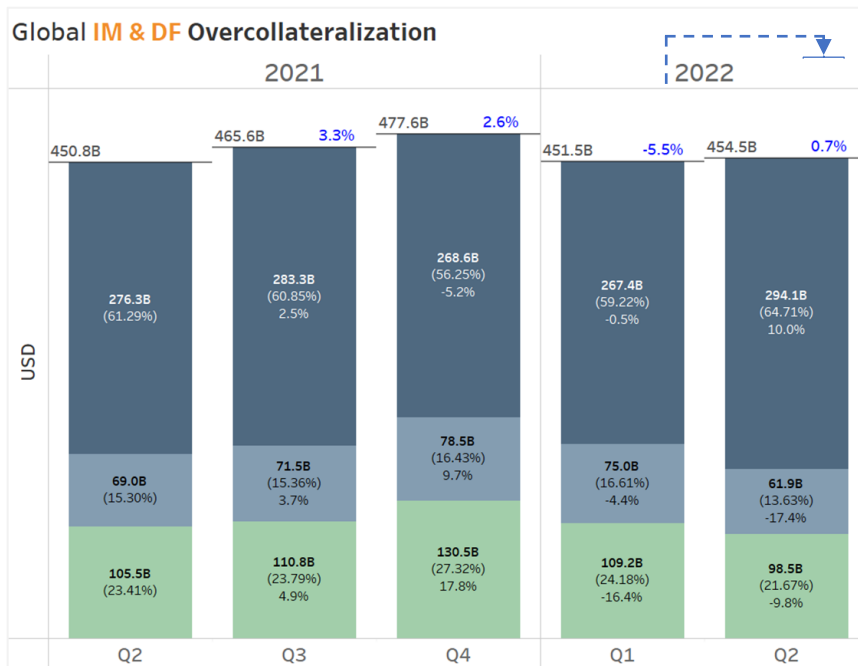
*IM OC calculated as (6.2.15 Held PostHaircut) - (6.1.1 Required). DF OC calculated as (4.3.15 Held PostHaircut) - (4.1.4 Required). (Only Post-Haircut values used for Held values).

Total Overcollateralization* was USD 484.0B for 2022 Q2, representing an increase of +7.3% from 2022 Q1.

Global CCP Overcollateralization (IM & DF Held (PostHaircut) – IM & DF Required) Disclosures (6.2.15 + 4.3.15) – (6.1.1 + 4.1.4) 2021 Q2 to 2022 Q2 (USD B, %)

- EMEA
- APAC
- Americas

Total Global (IM & DF) Overcollateralization Change 2022 Q1 – 2022 Q2



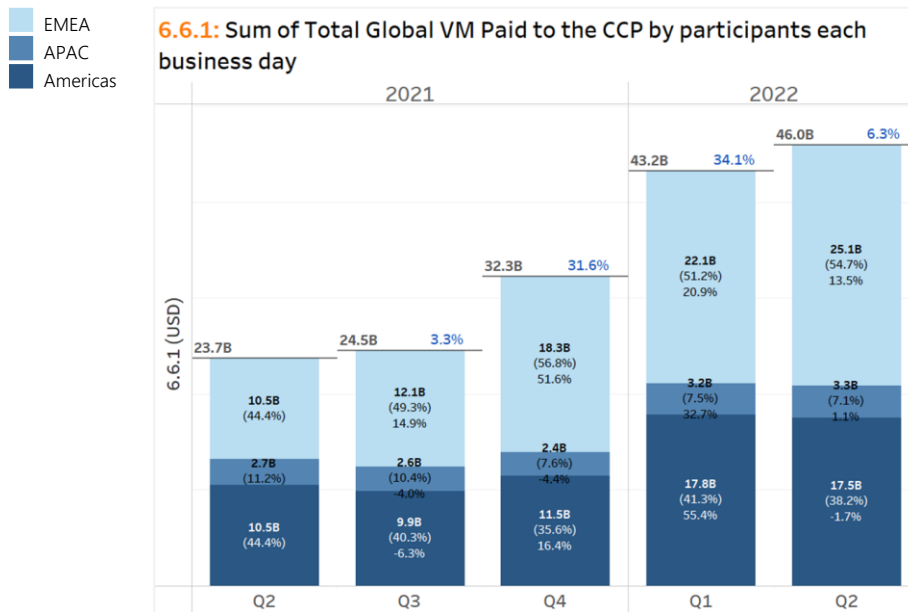
The chart above (*Global CCP Overcollateralization (IM and DF Held PostHaircut)*) indicates an overview of the IM and DF overcollateralization per region, reported at the quarter-end.

Global CCP Overcollateralization provides a sense of how a CCP is collateralized when comparing the held amounts against the required amounts. The Total Global CCP Overcollateralization calculation is equivalent to PQD disclosures (6.2.15+4.3.15) – (6.1.1+4.1.4).

*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
OC: Overcollateralization

Sum of the Average Total VM Paid to the CCP by participants each business day increased +6.3% in 2022 Q2, similar to the previous quarter. Representative of the geopolitical turmoil and shocks from the first quarter.

Sum of Average Total Global VM Paid to the CCP by participants each business day[†] Disclosure (6.6.1) 2021 Q2 to 2022 Q2 (USD B, %)

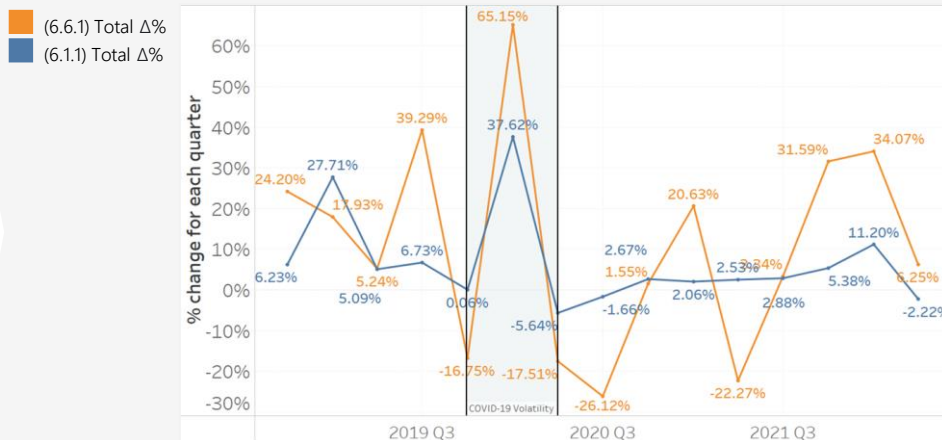


The chart opposite, (6.6.1: Sum of Average Total Global VM Paid to the CCP by Participants Each Business Day) indicates the sum total flow of the average variation margin through global CCPs split by region.

Variation margin payments are usually made daily (in cash) or intra day from the party whose position has reduced in value to the party which has increased in value.

These daily mark-to-market payments prevent the unnecessary build up of large losses over time and are just one of the many different aspects of a CCP's lines of defence.

6.6.1 vs. 6.1.1: Sum of Total Global VM Paid to the CCP by participants each business day vs. Total IM (Required), % Change QoQ 2018 Q2 to 2022 Q2 (% change)



The chart opposite, 6.6.1 vs. 6.1.1: % Difference QoQ, provides a summary of the % change of the Total Global VM Paid to the CCP by participants each business day and the Total IM (Required).

It is important to note that during extreme volatility periods such as the CC or 2022 Q1 geopolitical turmoil, global volatility indices (e.g., VIX, VSTOXX and NIKKEI VI), have seen much higher increases in comparison. [Please see the CCP12 Annual Markets Review 2020 and 2021.](#)

VM: Variation Margin

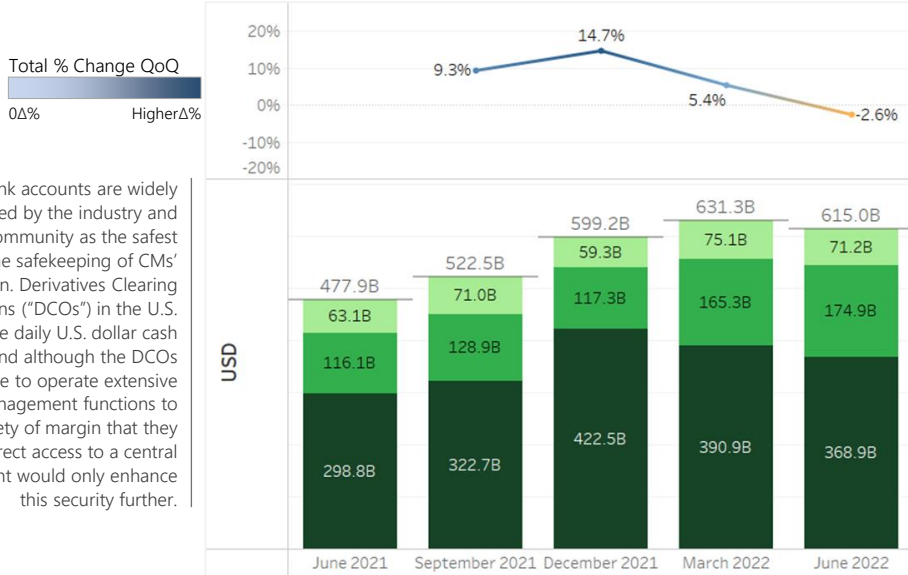
*CC: COVID-19 crisis in 2020 Q1. Global VM 6.6.1 increased 65.15%, represented by USD 40.9 B – please see the [CCP12 2020 Q1 PQD Newsflash](#).

†Note: This is the sum total of the average VM paid out to the CCP by participants each business day across the respective regions. Not the average per CCP per region.

Total Cash Held* for IM decreased by **-2.6%**, representing the first marginal decrease since the onset of the CC. Majority of all cash resources have continued to be deposited at Central Banks[†] representing a **+23.5%** increase YoY.

6.2.1 – 6.2.4: Global CCP IM (Held) (PostHaircut), Cash Total 2021 Q2 to 2022 Q2 (USD B, % change QoQ)

- (6.2.4) Unsecured at Commercial Banks
- (6.2.3) Secured Cash at Commercial Banks (Incl. Reverse Repos)
- (6.2.1 + 6.2.2) Central Bank



The chart opposite, (6.2.1 – 6.2.4: Global CCP IM (Held) (PostHaircut), Cash Total) provides an overview of the split of IM held deposits at central banks and commercial banks under disclosures 6.2.1 – 6.2.4.

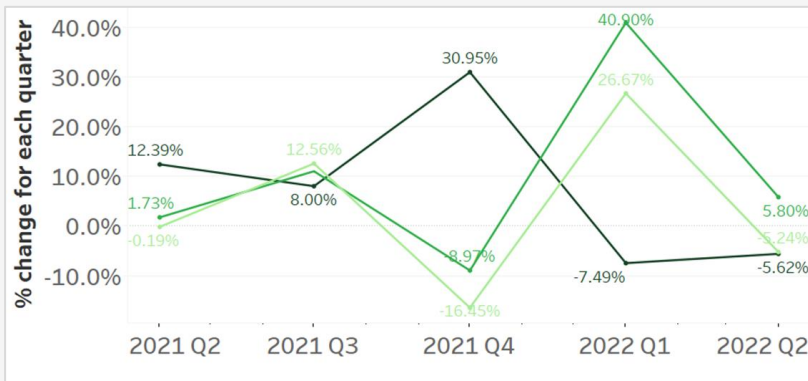
A significant proportion of IM held cash deposits have been placed in central banks and has continued to rise faster than other deposits.

**+23.5%
YoY**
IM Cash resources have continued to be deposited at Central Banks[†]

Central Bank accounts are widely agreed by the industry and regulatory community as the safest option for the safekeeping of CMs' margin. Derivatives Clearing Organizations ("DCOs") in the U.S. maintain large daily U.S. dollar cash balances and although the DCOs continue to operate extensive collateral management functions to ensure safety of margin that they receive, direct access to a central bank account would only enhance this security further.

6.2.1 – 6.2.4: Global Cash IM (Held) (PostHaircut), % Difference QoQ per segment 2021 Q2 to 2022 Q2 (% change)

- (6.2.4) Δ%
- (6.2.3) Δ%
- (6.2.1) Δ%



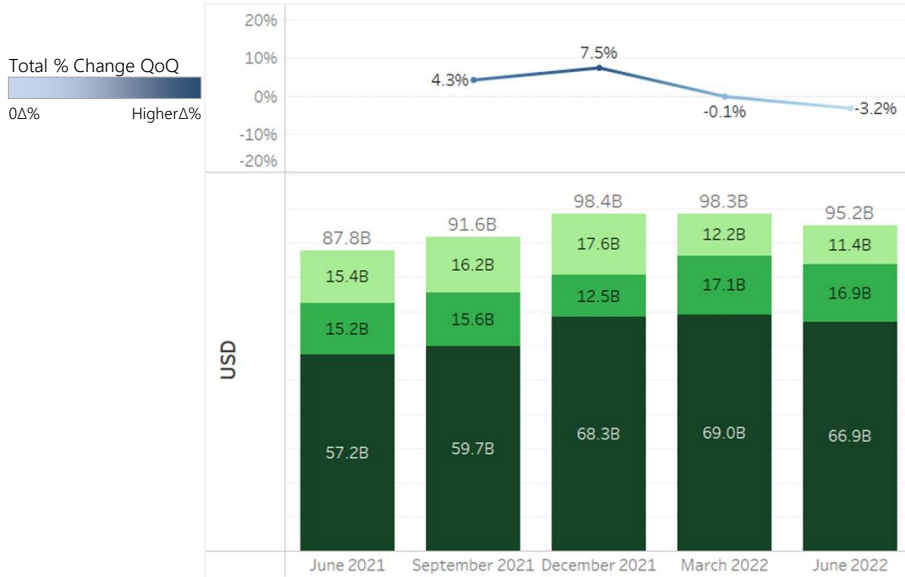
The chart opposite (6.2.1 – 6.2.4: Global Cash IM (Held) (PostHaircut), % Difference QoQ per segment) provides an overview of the quarterly change of IM (held) deposits.

*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, (2). For 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

Total Cash Held* for DF **Held** remained flat with a **-3.2%** decrease from the previous quarter. Majority of all cash resources have continued to be deposited at Central Banks[†] representing a **+17.0%** increase YoY.

4.3.1 – 4.3.4: Global CCP DF (Held) (PostHaircut), Cash Total 2021 Q2 to 2022 Q2 (USD B, % change QoQ)

- (4.3.4) Unsecured at Commercial Banks
- (4.3.2) Secured Cash at Commercial Banks (Incl. Reverse Repos)
- (4.3.1 + 4.3.2) Central Bank[†]

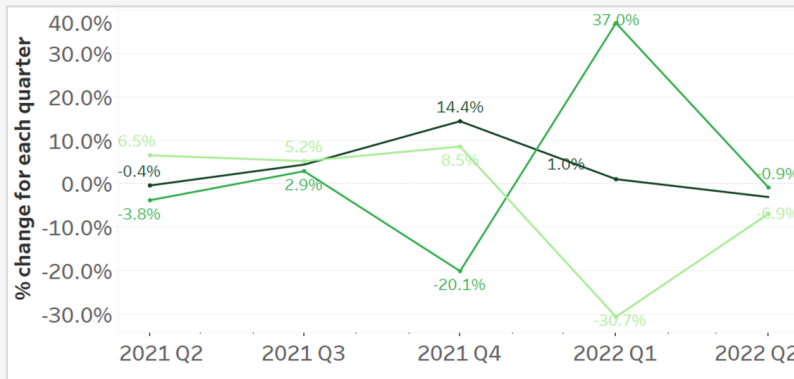


The chart opposite, (4.3.1 – 4.3.4: Global CCP DF (Held) (PostHaircut), Cash Total) provides an overview of the split of DF (Held) deposits at central banks and commercial banks under disclosures 4.3.1 – 4.3.4.

+17.0%, YoY
DF Cash resources have continued to be deposited at Central Banks[†]

4.3.1 – 4.3.4: Global Cash DF (Held), % Difference QoQ per segment 2021 Q2 to 2022 Q2 (% change)

- (4.3.4) Δ%
- (4.3.3) Δ%
- (4.3.1)+ Δ%

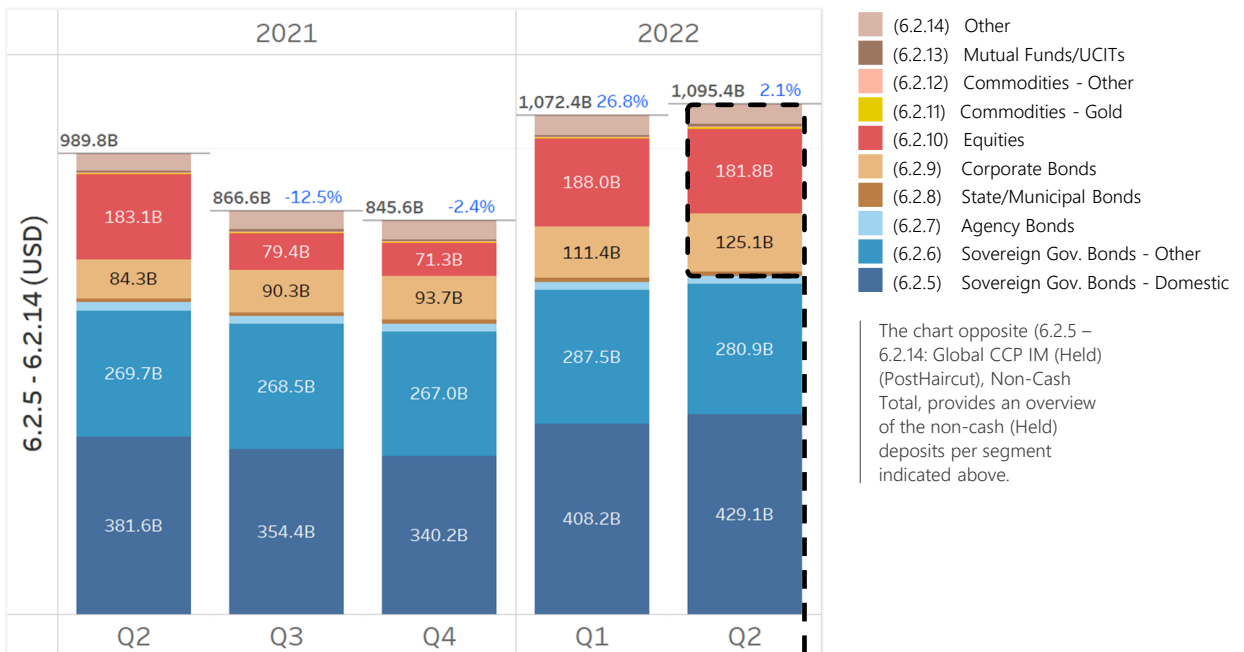


The chart opposite (4.3.1 – 4.3.4: Global Cash DF (Held), % Difference QoQ per segment) provides an overview of the quarterly change of DF (held) deposits.

*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, (2). For 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 2022 Q2, total global **Non-Cash Held IM** increased by **+2.1%**. The split across each segment has remained similar from the previous quarter.

6.2.5 – 6.2.14: Global CCP IM (Held) (PostHaircut), Non-Cash Total 2021 Q2 to 2022 Q2 (USD B, % change QoQ)



The chart opposite (6.2.5 – 6.2.14: Global CCP IM (Held) (PostHaircut), Non-Cash Total, provides an overview of the non-cash (Held) deposits per segment indicated above.

6.2.8 – 6.2.14: Global CCP IM (Held) (PostHaircut), Non-Cash Total 2021 Q2 to 2022 Q2 (USD B, % change QoQ)

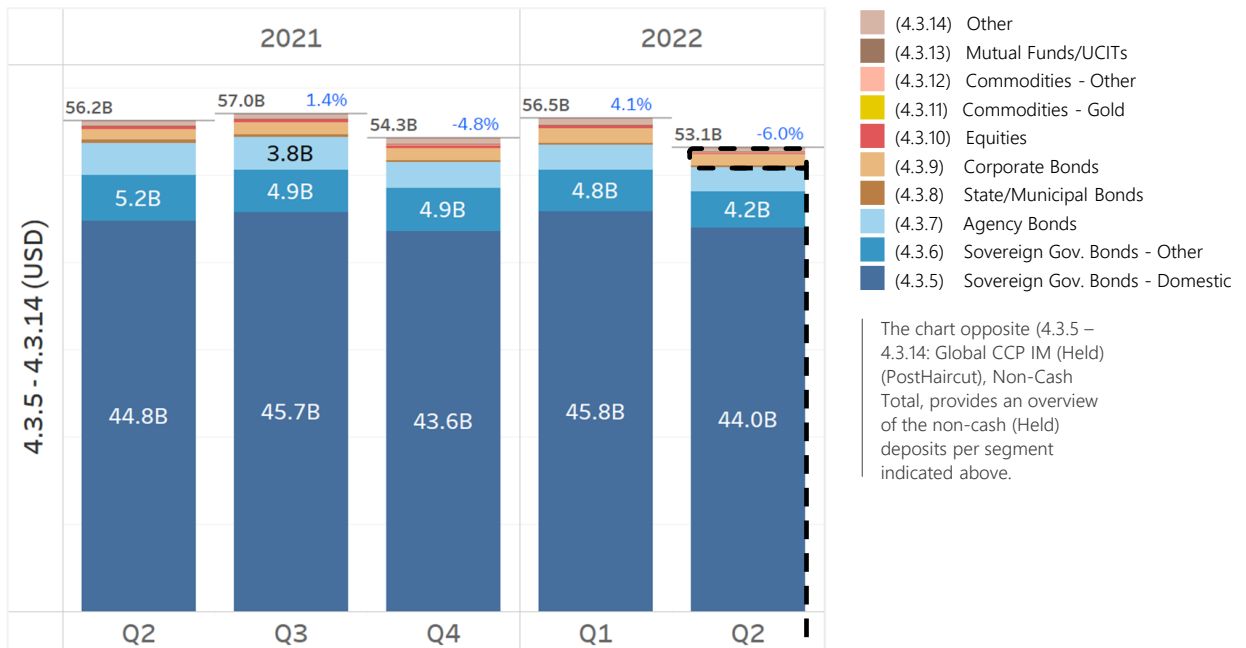


The chart opposite (6.2.8 – 6.2.14: Global CCP IM (Held) (PostHaircut), Non-Cash Total, provides a detailed view of the non-cash (Held) deposits for segments between 6.2.8 and 6.2.14.

*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.

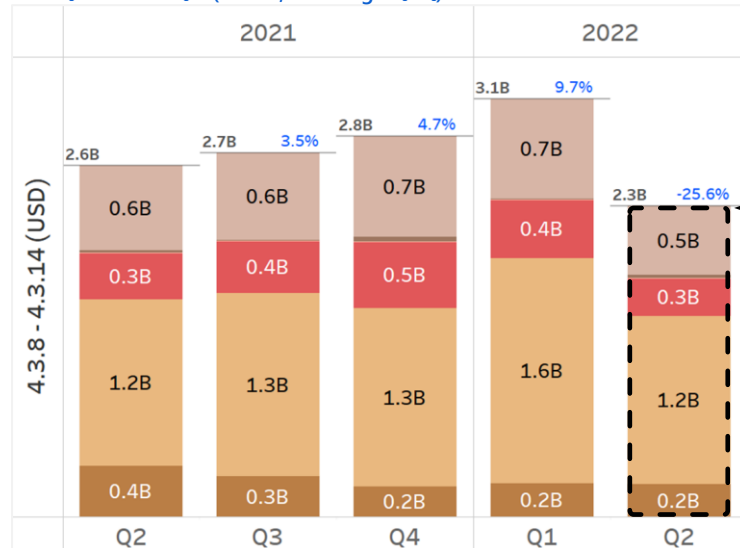
During 2022 Q2, total global **Non-Cash Held DF** decreased by **-6.0%** primarily driven by a decrease across **Sov' Gov' Bonds (Domestic)**. Corporate Bonds saw a noticeable decrease for the quarter.

4.3.5 – 4.3.14: Global CCP DF (Held) (PostHaircut), Non-Cash Total 2021 Q2 to 2022 Q2 (USD B, % change QoQ)



The chart opposite (4.3.5 – 4.3.14: Global CCP IM (Held) (PostHaircut), Non-Cash Total, provides an overview of the non-cash (Held) deposits per segment indicated above.

4.3.8 – 4.3.14: Global CCP DF (Held) (PostHaircut), Non-Cash Total 2021 Q2 to 2022 Q2 (USD B, % change QoQ)



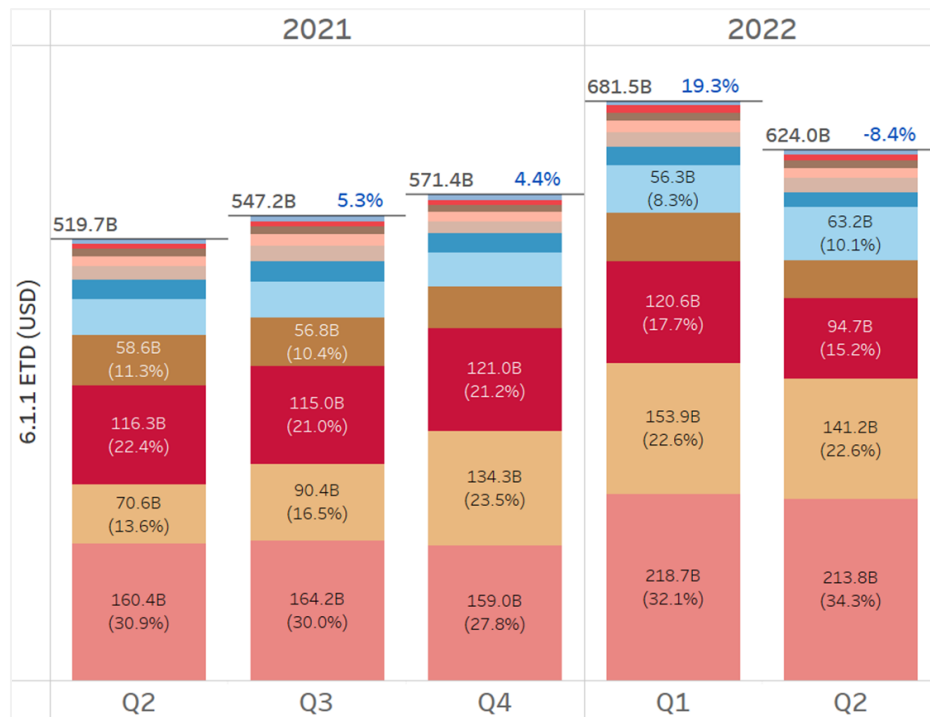
The chart opposite (4.3.8 – 4.3.14: Global CCP IM (Held) (PostHaircut), Non-Cash Total, provides a detailed view of the non-cash (Held) deposits for segments between 6.2.8 and 6.2.14.

*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 2022 Q2 the IM required for ETDs across the following selected 12 CCPs decreased by **-8.4%**. Proportion of IM across each CCP has remained relatively consistent QoQ.

Global CCP IM (Required) Collateral for ETDs across selected CCPs
Disclosure (6.1.1)
2021 Q2 to 2022 Q2 (USD B, % change QoQ)

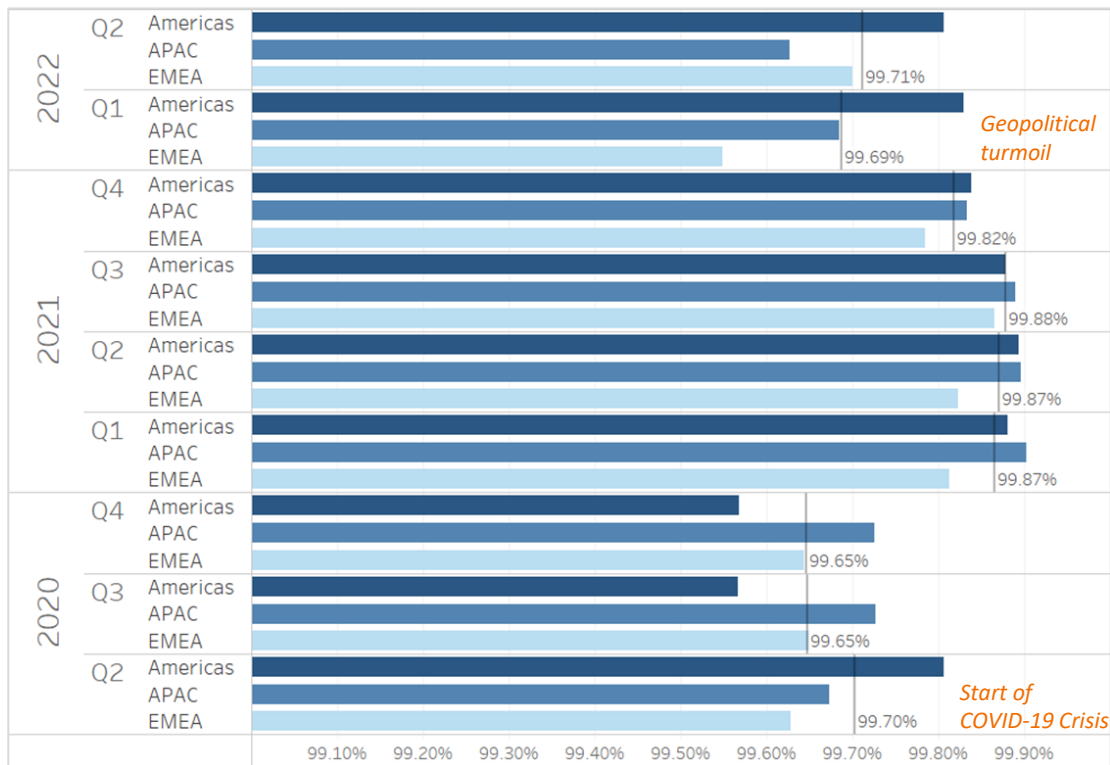
- HKEX_SEOCH
- ASXCLF
- HKEX_HKCC
- JSCC
- SGX_DC
- LCHLTD
- ICUS
- ECAG
- LCHSA
- ICEU
- OCC
- CME



The chart above (6.1.1: Global CCP IM (Required) Collateral for ETDs across selected CCPs) provides a summary of the IM required for ETDs across a selected number of CCPs chosen for a global geographical representation.

Results of backtesting of initial margin (ACL - Achieved Coverage Level) remained resilient for the first two quarters of 2022. ACL reached 99.71% (on average) across all regions for 2022 Q2.

Results of backtesting of initial margin – ACL* Disclosure (6.5.3) 2020 Q1 to 2022 Q2 (%)



The chart above (Results of backtesting of Initial Margin – Achieved Coverage Level). Backtesting is an important technique that a CCP utilizes to ensure that its initial margin model is performing as expected and that the assumptions within the model are valid. A CCP should assess its initial margin coverage by performing an ex-post comparison of observed profit and loss moves of a given portfolio against the initial margin collected.

According to the [Principles for Financial Market Infrastructures](#), a 99.00% coverage of backtesting is used as a benchmark to assess the efficiency of the initial margin model, however, a CCP may use a higher (percentile) benchmark. As can be seen from the above metrics, global CCPs on average have achieved above 99.00% in all instances from recent years.

For further information, please see the [CCP12 White Paper – Primer on Initial Margin](#).

*Average has been taken across each CCP in each respective region.

CCPs reported a 99.93% availability to core clearing systems over the previous 12-month period.*

Availability, Failures and Recovery Time Objectives 2022 Q2

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 CCP clearing system availability over the previous twelve-month period (July 1, 2021, through June 30, 2022) across all 52 CCP PQDs was: **99.93%**

Disclosure (17.4):

52 CCP PQDs representing 31 CCP12 Members & 2 Non-Members[†]

1 CCP observes a target recovery time of within:	20 mins
2 CCPs observe a target recovery time of within:	45 mins
1 CCP observes a target recovery time of within:	54 mins
2 CCP observe a target recovery time of within:	1 hr
44 CCPs observe the standard target recovery time of within:	2 hrs
2 CCPs observe a target recovery time of within:	4 hrs

According to the [Principles for Financial Market Infrastructures](#), the objectives of a CCP’s business continuity plan should detail the system’s target recovery time (“TRT”) and recovery point information. Based on the PFMI’s, a CCP should aim to be able to resume operations within two hours following a disruptive event(s); however, backup systems should preferably commence processing immediately upon such a disruption.

As seen from the above table, over 94% of global CCPs have a target recovery time set as two hours or shorter; with only 3 CCPs observing a slightly longer TRT based on their respective regulatory requirements.

*For 2022 Q1, the average availability of core clearing systems over the period (April 1, 2021, through March 31, 2022) across all CCPs was 99.96%.

†All figures are based on the respective CCP’s regulatory requirements in their local jurisdiction. CC&G and NCC data is incorporated as non-CCP12 members.

CCP12 Member List

CCP Mnemonic	CCP12-Member	Region	Country	CCP Name
ACSA	ACSA	Americas	Argentina	Argentina Clearing y Registro S.A.
ASXCL	ASX	APAC	Australia	Australia Securities Exchange Clear
ASXCLF	ASX	APAC	Australia	Australia Securities Exchange Clear Futures
B3	B3	Americas	Brazil	Brasil, Bolsa, Balcão
BMDC	BMAL	APAC	Malaysia	Bursa Malaysia Derivatives Clearing
BMSC	BMAL	APAC	Malaysia	Bursa Malaysia Securities Clearing
CCIL	CCIL	APAC	India	The Clearing Corporation of India Ltd.
CME	CME	Americas	United States of America	Chicago Mercantile Exchange
ComDer	ComDer	Americas	Chile	ComDer Contraparte Central S.A.
CRCC	CRCC	Americas	Colombia	Cámara de Riesgo Central de Contraparte S.A.
DCCC	DCCC	EMEA	United Arab Emirates	The Dubai Commodities Clearing Corporation
DTCC_GSD	DTCC	Americas	United States of America	Depository Trust and Clearing Corporation – Government Securities Division Solutions
DTCC_MBSD	DTCC	Americas	United States of America	Depository Trust and Clearing Corporation – Mortgage-Backed Securities Division
DTCC_NSCC	DTCC	Americas	United States of America	Depository Trust and Clearing Corporation – National Securities Clearing Corporation
ECAG	ECAG	EMEA	Germany	Eurex Clearing Group
ECC	ECAG	EMEA	Germany	European Commodity Clearing
NCL	ECAG	Americas	United States of America	Nodal Clear
HKEX_HKCC	HKEX	APAC	Hong Kong	HKFE Clearing Corporation Limited
HKEX_HKSCC	HKEX	APAC	Hong Kong	Hong Kong Securities Clearing Company Limited
HKEX_LME	HKEX	EMEA	United Kingdom	The London Metal Exchange
HKEX_OTCC	HKEX	APAC	Hong Kong	OTC Clearing Hong Kong Limited
HKEX_SEOCH	HKEX	APAC	Hong Kong	The SEHK Options Clearing House Limited
ICC	ICE	Americas	United States of America	ICE Clear Credit
ICEU	ICE	EMEA	United Kingdom	ICE Clear Europe
ICNGX	ICE	Americas	Canada	ICE Clear Canada
ICNL	ICE	EMEA	Netherlands	ICE Clear Netherlands
ICSG	ICE	APAC	Singapore	ICE Clear Singapore
ICUS	ICE	Americas	United States of America	ICE Clear US
IRGIT	IRGIT	EMEA	Poland	Izba Rozliczeniowa Gield Towarowych S.A. (IRGIT, Clearing House)
JSCC	JSCC	APAC	Japan	Japan Securities Clearing Corporation
JSE	JSE	EMEA	South Africa	Johannesburg Stock Exchange
KDPW	KDPW	EMEA	Poland	KDPW CCP
KRX	KRX	APAC	South Korea	Korea Exchange
LCHLTD	LSEG	EMEA	United Kingdom	London Clearing House Ltd.
LCHSA	LSEG	EMEA	France	London Clearing House S.A.
MCXCCL	MCXCCL	APAC	India	Multi Commodity Exchange Clearing Corporation Limited
MGEX	MGEX	Americas	United States of America	Minneapolis Grain Exchange
MUQASSA	MUQASSA	EMEA	Saudi Arabia	Securities Clearing Center Company (Muqassa)
NASDAQ	NASDAQ	EMEA	Sweden	Nasdaq Clearing
NCC	NON-MEMBER	EMEA	Russia	Central Counterparty National Clearing Centre
CCG	NON-MEMBER	EMEA	Italy	Cassa di Compensazione e Garanzia S.p.A.
NSE	NSE	APAC	India	NSE Clearing Limited
NZX	NZX	APAC	New Zealand	New Zealand Exchange
OCC	OCC	Americas	United States of America	The Options Clearing Corporation
SGX_CDP	SGX	APAC	Singapore	Singapore Exchange (Central Depository (Pte) Limited)
SGX_DC	SGX	APAC	Singapore	Singapore Exchange (Derivatives Clearing)
SHCH	SHCH	APAC	China	Shanghai Clearing House
TAIFEX	TAIFEX	APAC	Taiwan	Taiwan Futures Exchange (Taifex)
TAKAS	TAKAS	EMEA	Turkey	Takasbank
TCH	TCH	APAC	Thailand	Thailand Clearing House Co. Ltd.
CDS	TMX	Americas	Canada	TMX Group - Canadian Depository for Securities Limited (CDS Ltd.)
CDCC	TMX	Americas	Canada	TMX Group - Canadian Derivatives Clearing Corporation (CDCC)

About CCP12

CCP12 is the global association for CCPs, representing 40 members who operate over 60 individual central counterparties (CCPs) globally across the Americas, EMEA and the Asia-Pacific region. CCP12 promotes 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.

For more information, please contact the office by e-mail at office@ccp12.org or through our website by visiting www.ccp12.org.



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CCP12 Members



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