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FEATURED INSIGHTS

18 December 2025

PQD PULSE: 2025 Q3

Central Counterparty Public Quantitative Disclosure (PQD) Insights

Altair & Alang Featured Insights are executive-level briefings that provide timely, sector-specific analysis on global market developments. These insights are published to provide high-level insights across the financial services, capital markets, clearing, technology, fintech, cyber, and other sectors.

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REF. AA_PQD_PULSE_2025I218V1

FEATURED INSIGHTS - PQD PULSE: 2025 Q3

CCP PQD Coverage: 63

Date: 2025-12-18

PQD Data for: 2025 Q3

Prepared by: Altair & Alang

All data has been normalized to USD.

PQD PULSE OVERVIEW:
The PQD Pulse report provides analytical insights derived from the CCP Public Quantitative Disclosure (PQD) data.

This analysis is powered by Clearvue – a leading PQD analytics platform. Clearvue transforms raw CCP Public Quantitative Disclosures into actionable intelligence, aggregating insights from over **205+ standardized data points** across global clearinghouses. From **margin requirements** and **held collateral** to **backtesting performance** of **initial margin**, **liquidity** metrics, and **credit risk** metrics, Clearvue delivers a panoramic and granular view of CCP data and systemic risk signals. By converting complex datasets into intuitive dashboards and comparative analytics, Clearvue empowers market participants, regulators, and risk managers to make informed, data-driven decisions with confidence.

The report presents a series of visual disclosures and comparative charts designed to help market participants - including CCPs, central banks, regulators, and financial institutions - interpret key CCP risk metrics and transparency indicators. By transforming raw PQD data into accessible, data-driven insights, this report aims to enhance understanding of CCP resilience, margin dynamics, liquidity resources, and default fund coverage across the global clearing ecosystem.

Source: Clearvue | Clearvue is a cloud-based analytics platform that transforms raw Public Quantitative Disclosures (PQDs) from Central Counterparties (CCPs) into actionable insights. Track and analyse metrics such as Initial Margin, Default Fund contributions, liquidity coverage, and more all in one place.

Powered by:

clearvue

Click here to find out more.

For any questions regarding this report, please contact: info@altairalang.com

This publication is also available online at the Altair & Alang website: www.altairalang.com/featured-insights

1. BACKGROUND: CCP PUBLIC QUANTITATIVE DISCLOSURES

Background:

In April 2012, the Committee on Payments and Market Infrastructures (CPMI), the Bank for International Settlements (BIS) and the International Organization of Securities Commissions (IOSCO) jointly released the **Principles for Financial Market Infrastructures (PFMI)**.

The PFMIs are a comprehensive framework of **24 core principles** designed to bolster the safety, efficiency, and resilience of critical post-trade infrastructures such as central counterparties **(CCPs)**, settlement systems, and payment systems. These principles are part of the international community's key standards for sound financial systems and set expectations for robust risk management, governance, and oversight of systemically important FMIs.

The PFMIs harmonized and consolidated earlier guidance (CPSIPS for payment systems, RSSS for securities settlement systems, and RCCP for central counterparties), creating a unified benchmark to address systemic, credit, liquidity, operational, and legal risks highlighted by the 2008 global financial crisis.

CPMI-IOSCO published **"Resilience of central counterparties (CCPs): Further guidance on the PFMI"** in July 2017. This guidance refined expectations around financial risk management, stress testing, recovery planning, and cyber resilience to help CCPs withstand extreme but plausible market conditions.

Public Quantitative Disclosures (PQDs):

A key implementation outcome of the PFMI is the **Public Quantitative Disclosure (PQD)** initiative, introduced by CPMI-IOSCO in 2015 to complement the qualitative disclosure framework and ensure regularly updated, comparable, and decision-useful data are available to stakeholders.

PQDs require CCPs to publish in a standardized PQD template, **every quarterly**, with a 2-month lag. A consistent set of **205+ data points** are included in the PQDs spanning **credit risk, margin models, collateral, liquidity, default resources, backtesting performance, and operational resilience**.

Why PQDs are important for market participants:

By enabling transparent and comparable insights into CCP financial resources and risk controls—such as **initial/default margin required vs. held, variation margin flows, liquidity buffers, and backtesting outcomes**— PQDs help stakeholders:

- **Compare** CCP risk frameworks and financial resources across jurisdictions;
- **Assess** systemic importance and stress-buffering capacity under volatile or tail-risk conditions;
- **Enhance** supervisory oversight and informed, data-driven decision-making.

Balancing standardization and diversity

The PQD framework strikes a balance between **global standardization** - via CPMI-IOSCO standards and PQD template - and **necessary flexibility**, as each CCP's disclosures reflect its market structure, product mix, and risk philosophy. This pairing enables meaningful cross-CCP comparisons without undermining legitimate differences in clearing models and risk practices.

Over a decade on, the **PFMIs** and, by extension, the **PQDs** have become cornerstones of CCP transparency and market discipline, supporting confidence, informed oversight, and the resilience of global financial markets. The result is a clearer, data-driven dialogue among market participants, CCPs, and authorities, anchored in consistent, comparable disclosures and robust international standards.

2. CLEARVUE PQD SNAPSHOTS: 2025 Q3

The following PQD Snapshots provide a visual summary of key CCP risk metrics drawn from the Public Quantitative Disclosures (PQDs) in Clearvue. These charts highlight critical indicators such as Initial Margin (IM) required versus held, Default Fund (DF) resources, and average daily Variation Margin (VM) flows. Together, they offer market participants a quick, data-driven view of collateralization levels, across global clearinghouses enabling informed comparisons and trend analysis at a glance.

2.1 Disclosure 4.1.1 | Total Value of Default Fund Resources (Required). Prefunded Aggregate Participant Contributions.
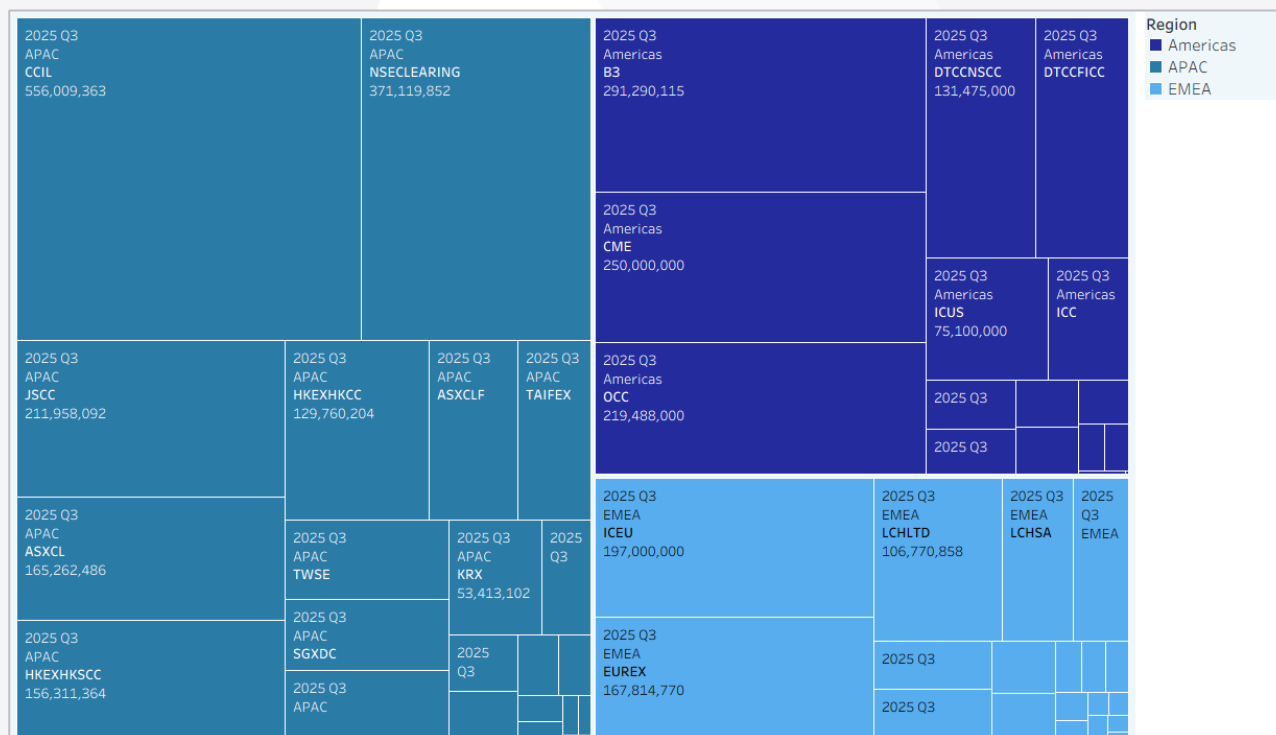

Figure 1: Source – Clearvue, PQD Snapshots, disclosure 4.1.1

2.2 Disclosure 6.1.1 | Total Initial Margin (Required)
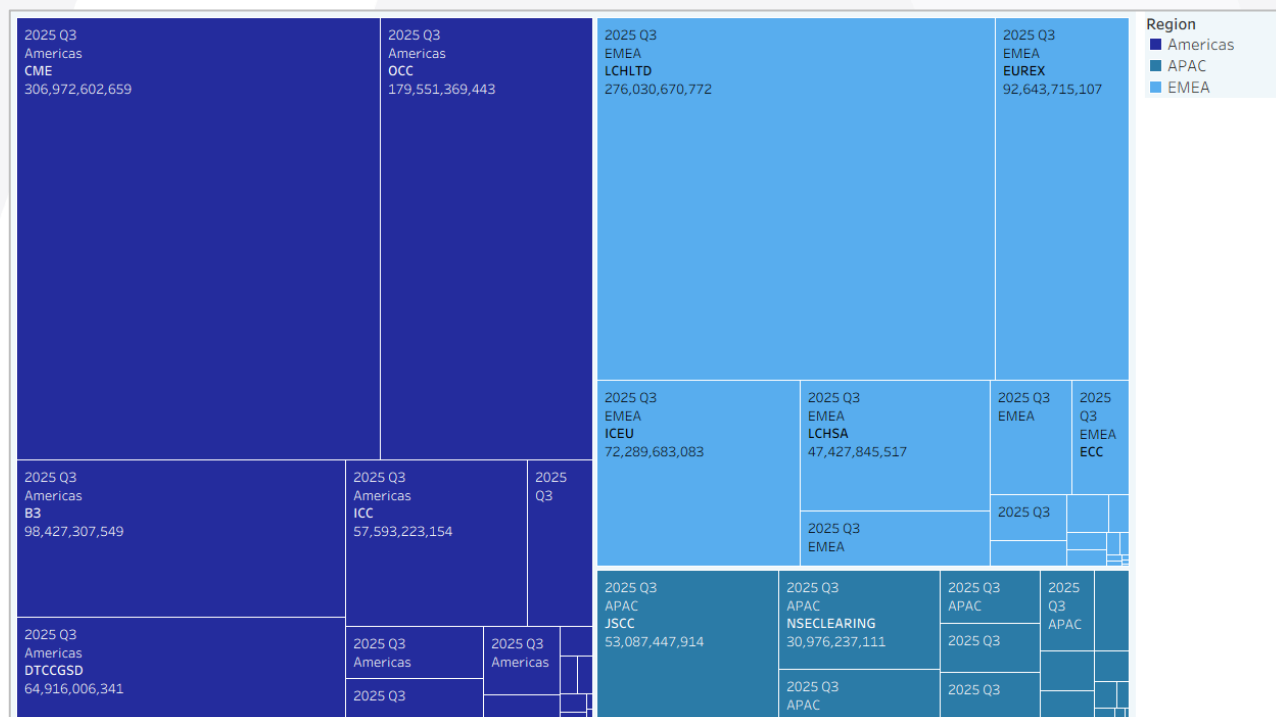

Figure 2: Source - Clearvue, PQD Snapshots, disclosure 6.1.1

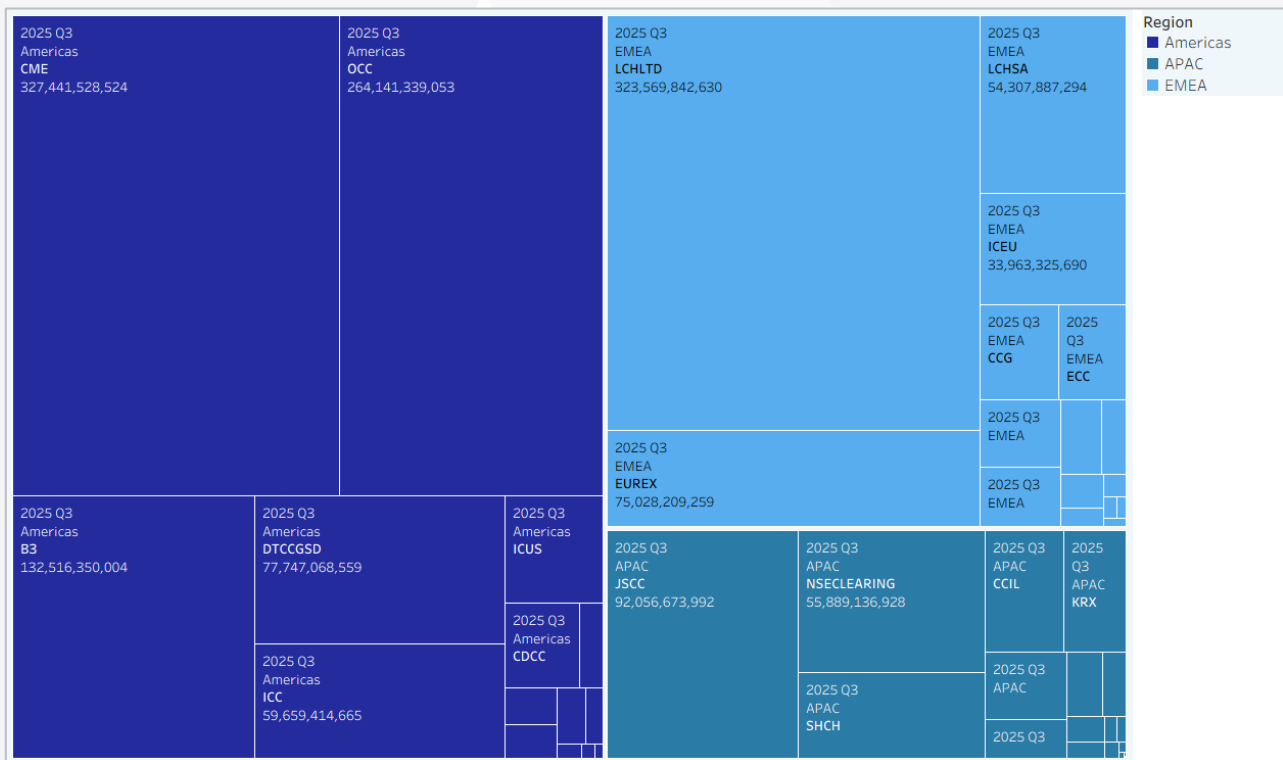## 2.3   Disclosure 6.2.15 | Total Initial Margin (Held)

Figure 3: Source - Clearvue, PQD Snaphots, disclosure 6.2.15

2.4   Disclosure 6.6.1 | Average Total Variation Margin Paid to the CCP by Participants Each Business Day
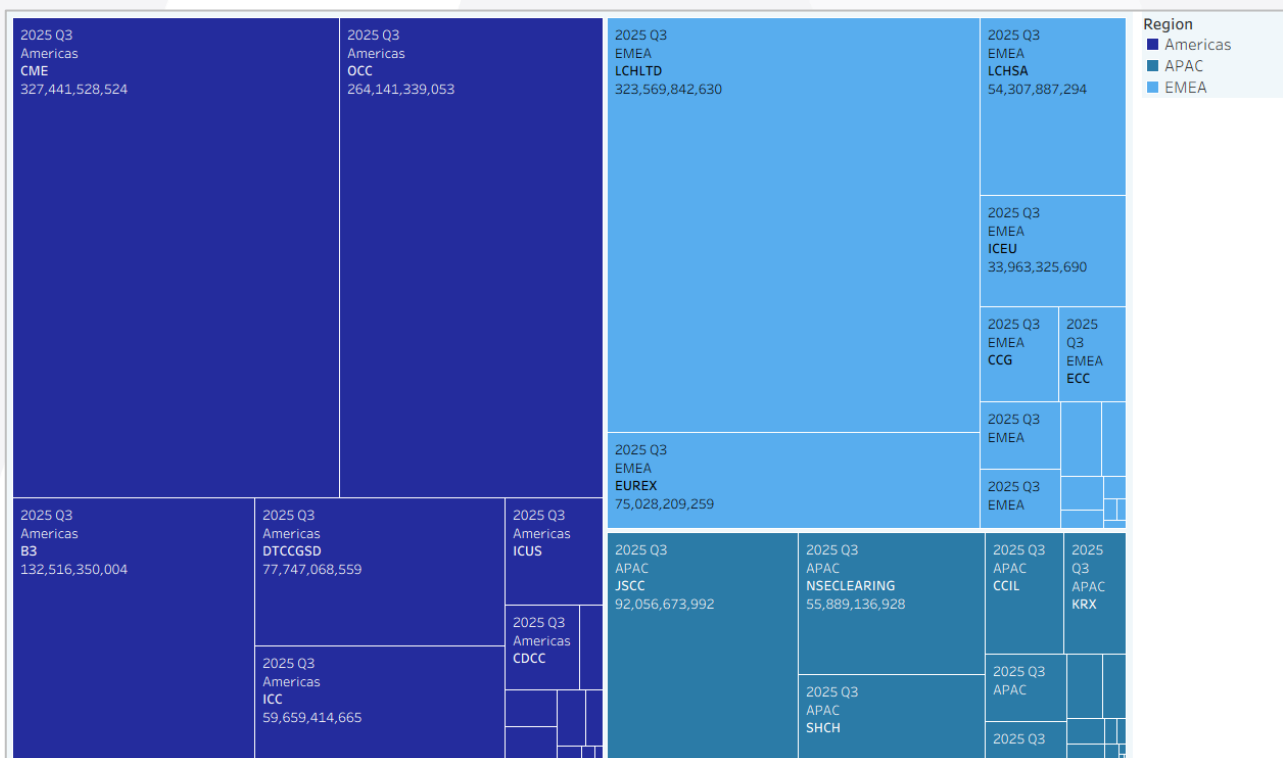

Figure 4: Source - Clearvue, PQD Snaphots, disclosure 6.6.1

REF. AA_PQD_PULSE_2025121BV1

3. GLOBAL MARGIN MAP

The Margin Maps below provide a general overview of key disclosures, such as IM and DF amounts required and held, across major clearing houses. The purpose is to provide readers a sense of the geographical distribution and relative size of collateralization levels globally. To gain deeper insights, including granular breakdowns and values by individual CCP, historical trends, and comparative analytics, these maps can be explored in detail through Clearvue.

3.1 Disclosure 4.1.4 | Default Fund (Required)

DF Required is the total level of prefunded financial resources that the CCP requires its clearing members to contribute to the mutualised default fund, based on the CCP's "cover" standard (typically Cover-2 for systemically important CCPs). It represents the aggregate amount needed to withstand the default of the largest (or two largest) clearing members under extreme but plausible market conditions, as prescribed by the CPMI–IOSCO PFMIs.
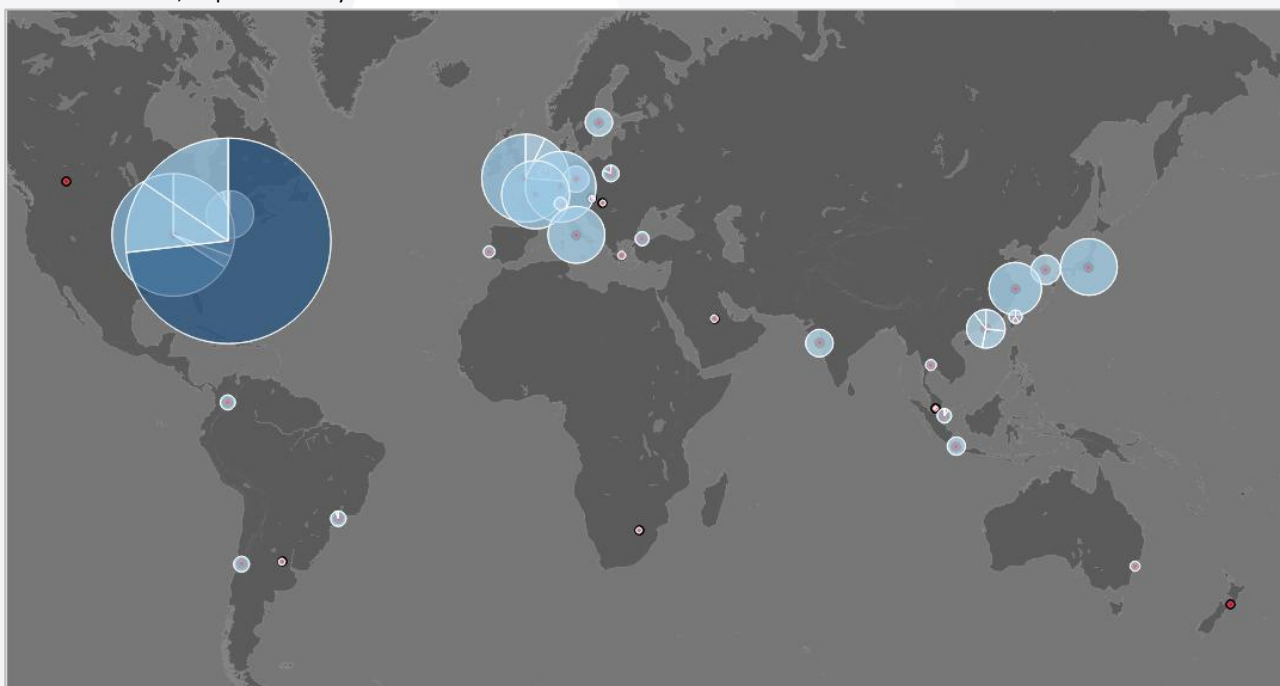
Figure 5: Source - Clearvue, PQD Margin Map, disclosure 4.1.4

3.2 Disclosure 4.3.15 | Default Fund (Held)

DF held represents the actual prefunded default fund contributions and CCP-owned capital currently available to absorb losses that exceed a defaulter's margin. This includes member contributions, the CCP's own "skin-in-the-game," and any additional prefunded layers of the waterfall. DF held can differ from the "required" amount due to timing, excess contributions, or interim adjustments.

Figure 6: Source - Clearvue, PQD Margin Map, disclosure 4.3.15

3.3 Disclosure 6.1.1 | Initial Margin (Required)

IM Required represents the total margin that a CCP calculates and calls from its clearing members to cover potential future exposure arising from possible changes in market value of open positions. It reflects the CCP's risk-based margin model output and is determined using parameters such as volatility, correlation, product type, and confidence intervals. This figure represents the theoretical exposure that must be collateralised to maintain coverage at the targeted confidence level (e.g., 99% or 99.7%).
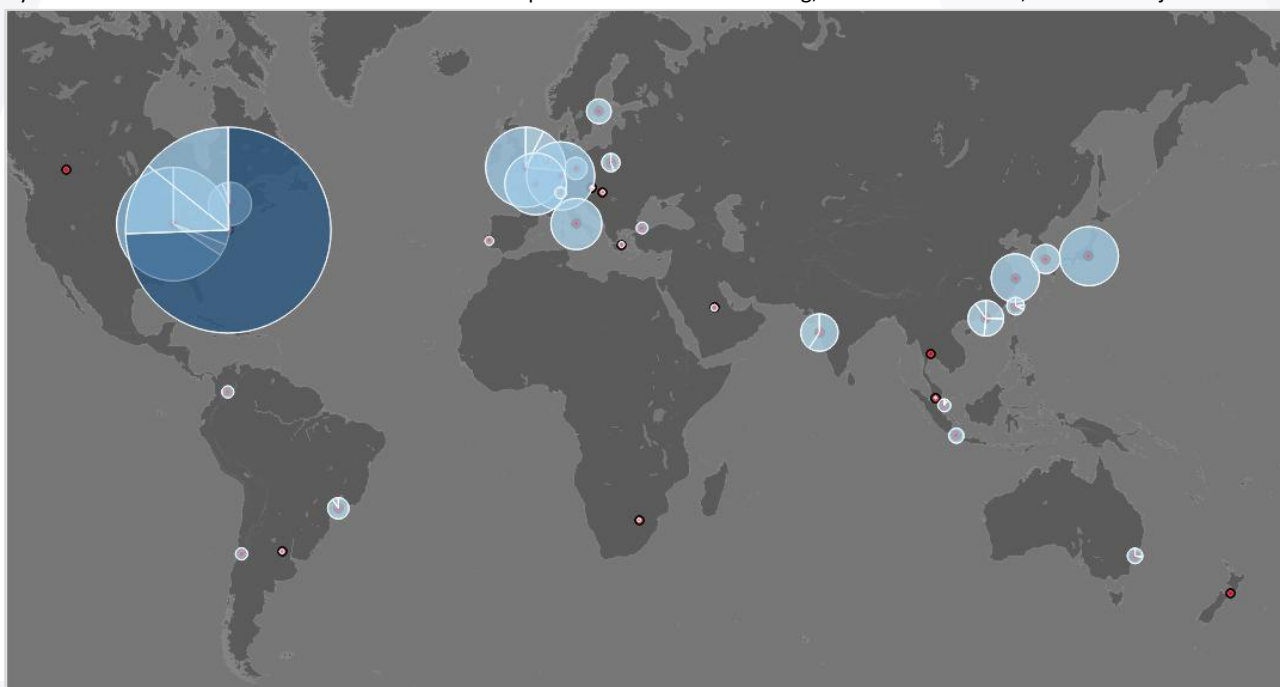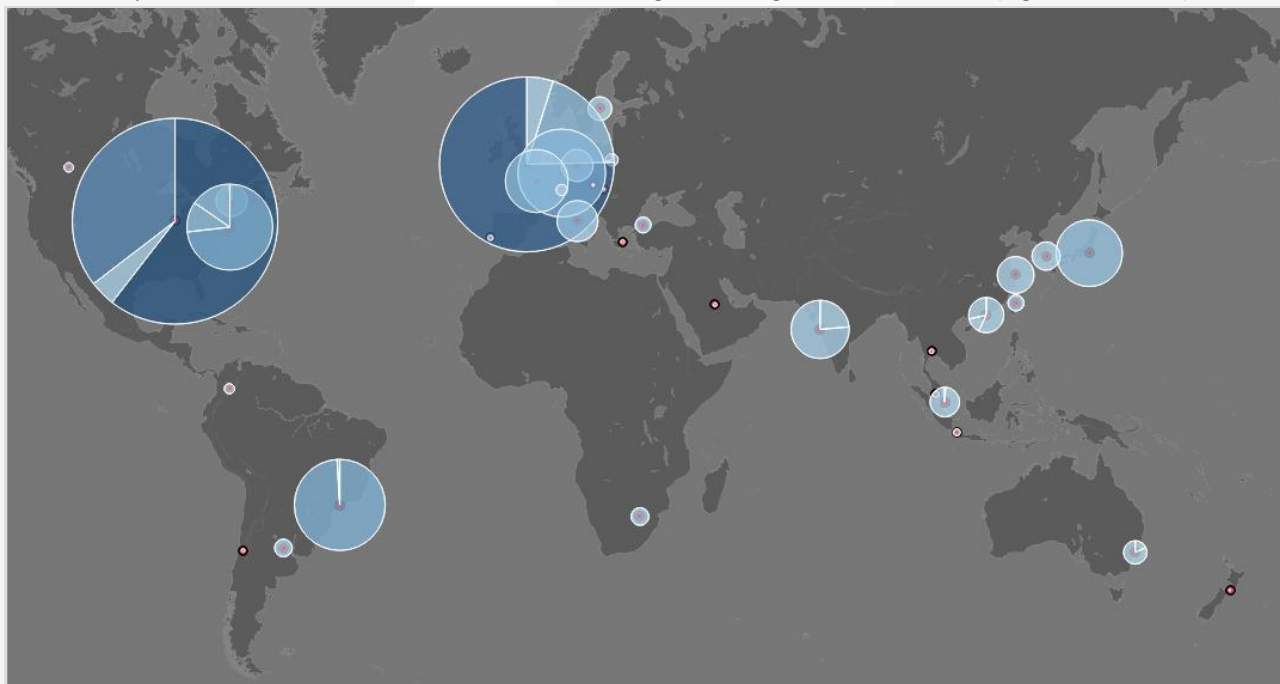

Figure 7: Source - Clearvue, PQD Margin Map, disclosure 6.1.1

3.4 Disclosure 6.2.15 | Initial Margin (Held)

IM Held represents the **actual amount of margin collateral received and held** by the CCP from its participants. This may differ from the "required" amount due to timing differences in margin calls, excess collateral posted by members, or conservative margining practices. It reflects the realised funding position and the CCP's immediate resources available to absorb future exposure losses before tapping the default fund.

Figure 8: Source - Clearvue, PQD Margin Map, disclosure 6.2.15

4. GLOBAL INITIAL MARGIN (IM) ANALYSIS

4.1 Disclosure 6.1.1 | IM Required | 2024 Q3 – 2025 Q3

Figure 9: Source - Clearvue, disclosure 6.1.1

4.2 Disclosure 6.1.1 | IM Required | House/Client Split | 2024 Q3 – 2025 Q3
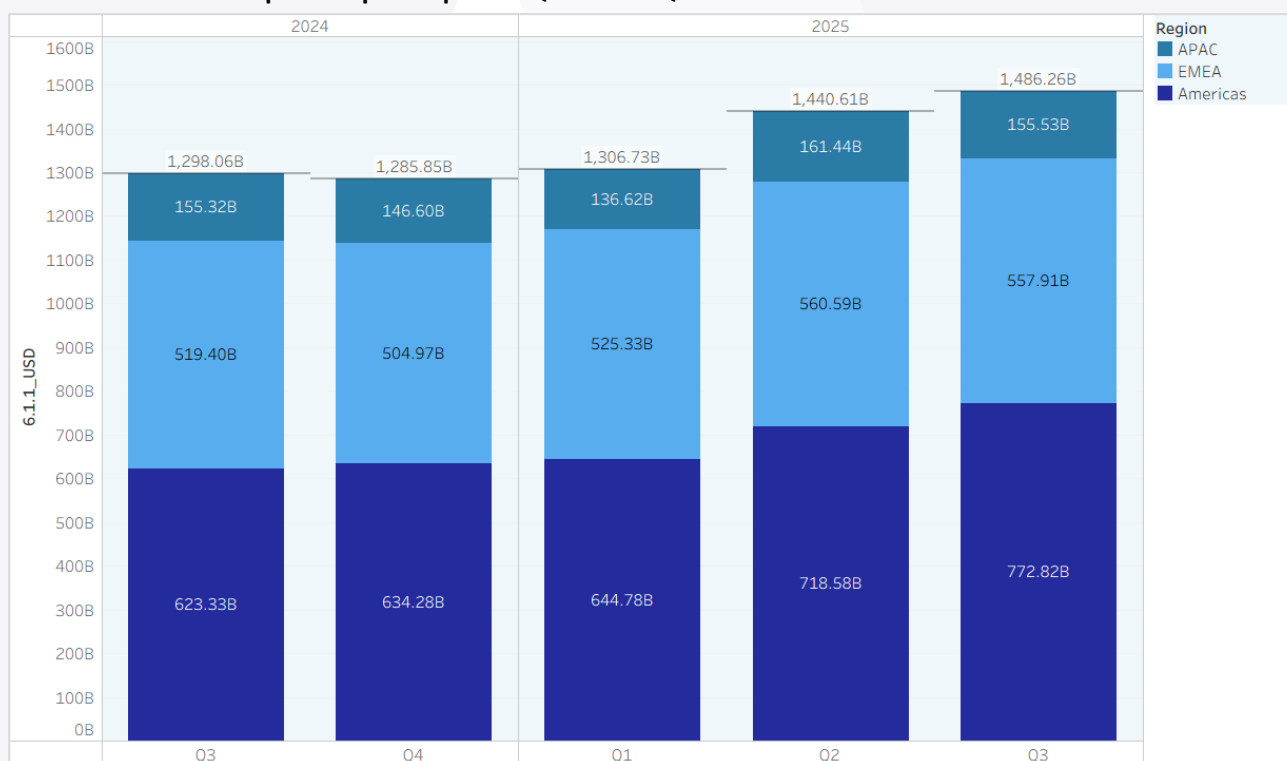
Initial Margin (IM) Required: House and Client Split

The IM required by a CCP is typically broken down into two main components: **House IM** and **Client IM**. **Total House IM** represents the margin required for a clearing member's proprietary positions and is calculated by combining **House Net** (netted positions across accounts) and **House Gross** (gross positions without offsets) from the PQDs. **Total Client IM** covers margin for client positions cleared through the clearing member and is derived from **Client Net** and **Client Gross** exposures. This split helps market participants understand how margin requirements are distributed between a clearing member's own trading activity and its client clearing obligations, providing transparency into risk concentration and collateralization across both segments.

Figure 10: Source - Clearvue, disclosure 6.1.1

REF: AA_PQD_PULSE_2025218V1

4.3   Disclosure 6.2.15 | IM Held | PostHaircut | 2024 Q3 – 2025 Q3

Figure 11: Source - Clearvue, disclosure 6.1.1

5. GLOBAL DEFAULT FUND ANALYSIS

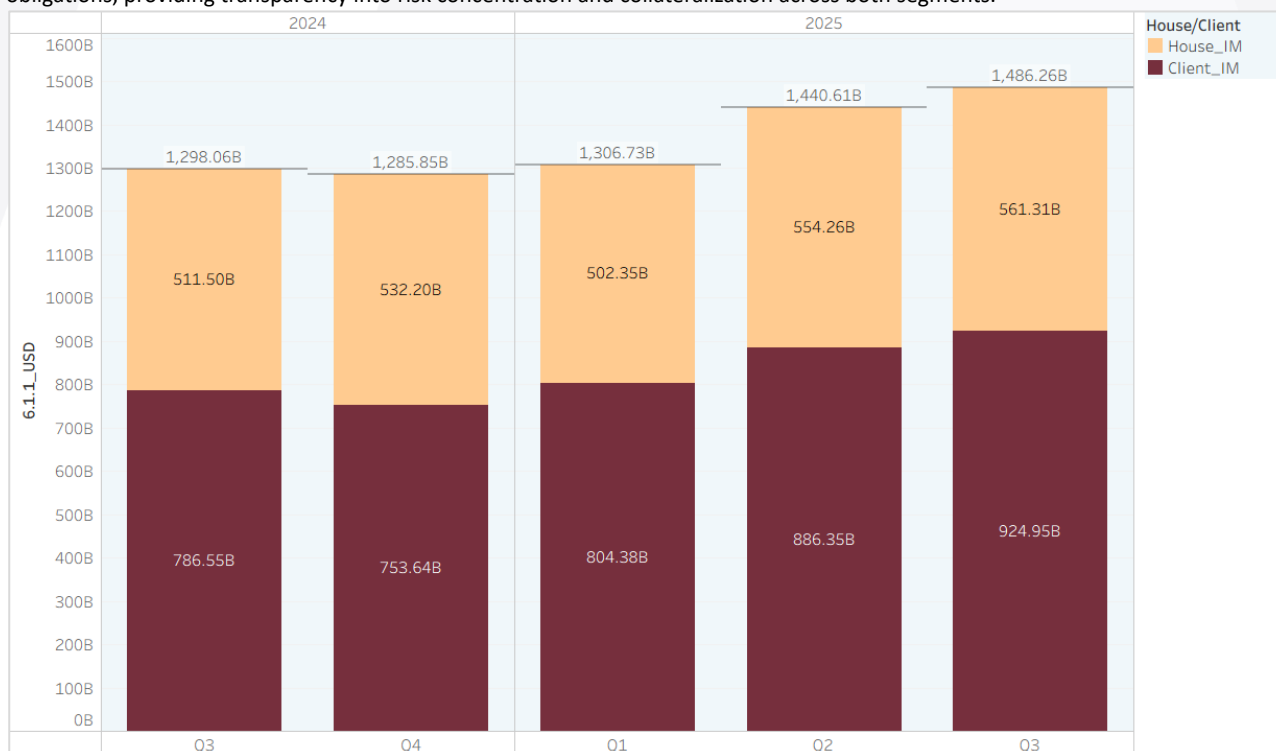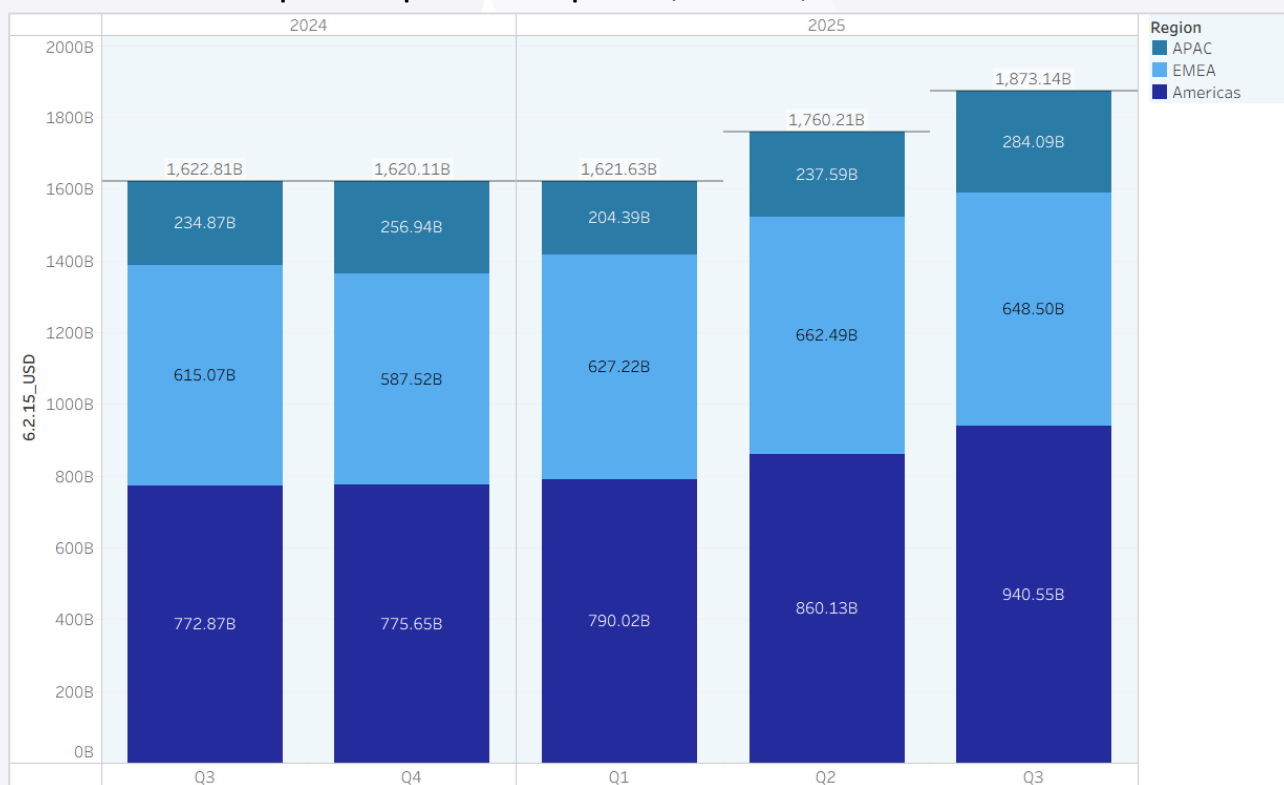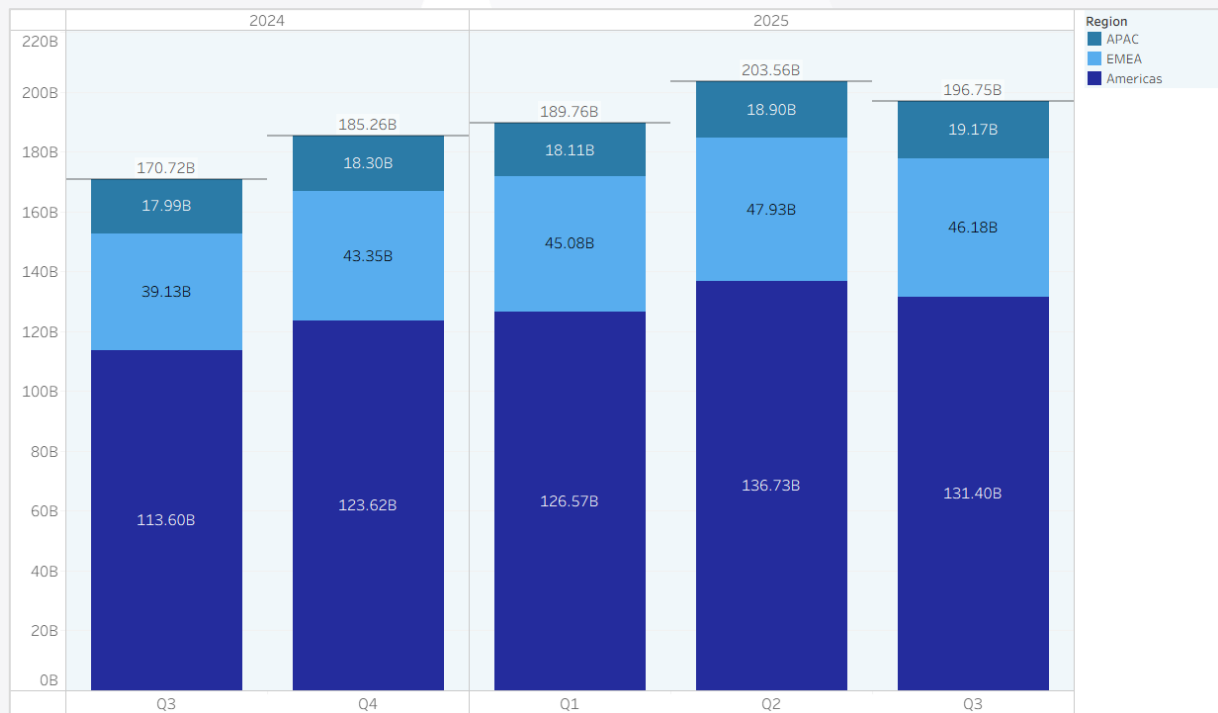## 5.1 Disclosure 4.1.4 | DF Required | 2024 Q3 – 2025 Q3

Figure 12: Source - Clearvue, disclosure 4.1.4

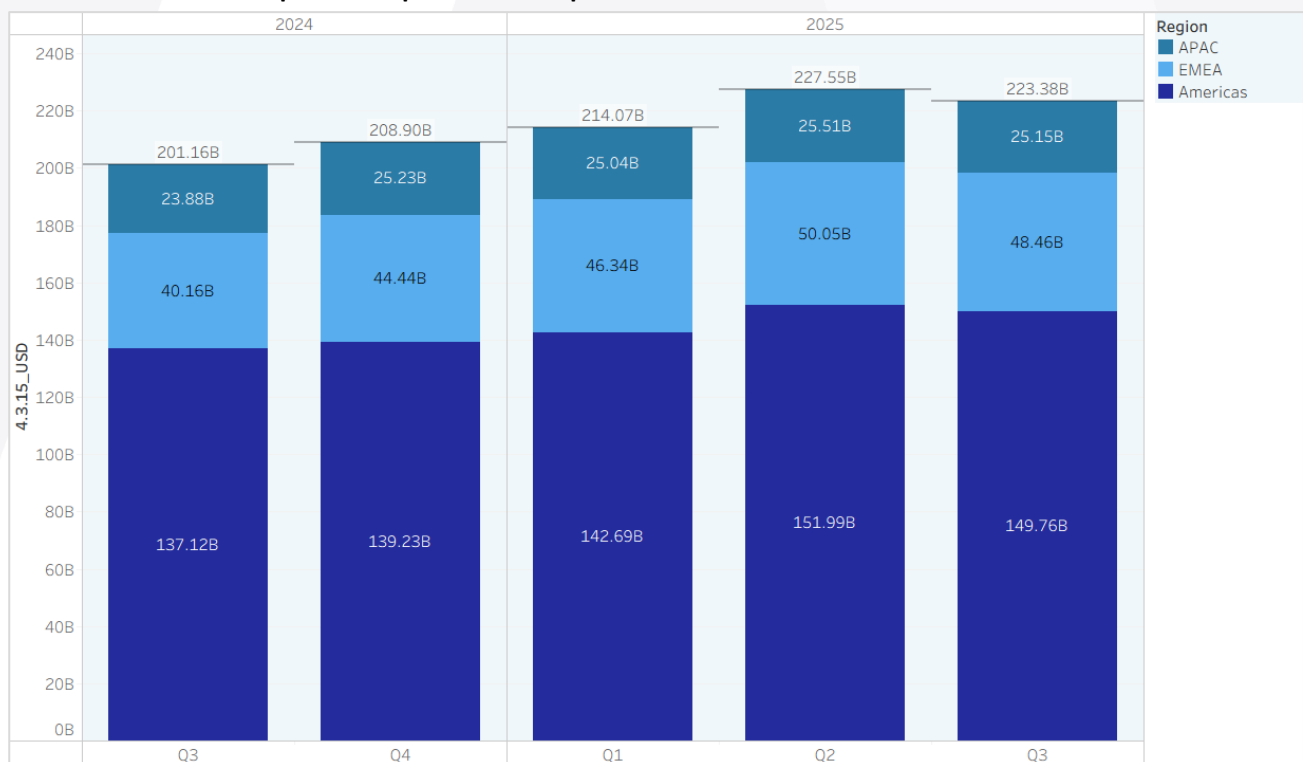## 5.2 Disclosure 4.3.15 | DF Held | PostHaircut | 2024 Q3 – 2025 Q3

Figure 13: Source - Clearvue, disclosure 4.3.15

REF. AA_PQD_PULSE_2025121BV1

6. GLOBAL VARIATION MARGIN (VM) ANALYSIS

6.1 Disclosure 6.6.1 | Average Total Variation Margin Paid to the CCP by participants each business day | 2024 Q3 – 2025 Q3

Average Total Variation Margin (VM) represents the mean amount of variation margin paid by clearing members to the CCP each business day over the quarter. It reflects the typical daily cash flows required to settle mark-to-market changes in positions, giving insight into the ongoing liquidity demands of the clearing system.

Figure 14: Source - Clearvue, disclosure 6.6.1

6.2 Disclosure 6.7.1 | Maximum Total Variation Margin Paid to the CCP by participants on any given business day over the quarter | 2024 Q3 – 2025 Q3

Maximum Variation Margin captures the single highest daily VM payment observed during the quarter on a single day. This metric highlights peak liquidity stress scenarios, showing how much cash participants had to mobilize on the most volatile day. Both are important metrics and help market participants and regulators assess liquidity risk, funding preparedness, and the CCP's ability to manage large intraday exposures.
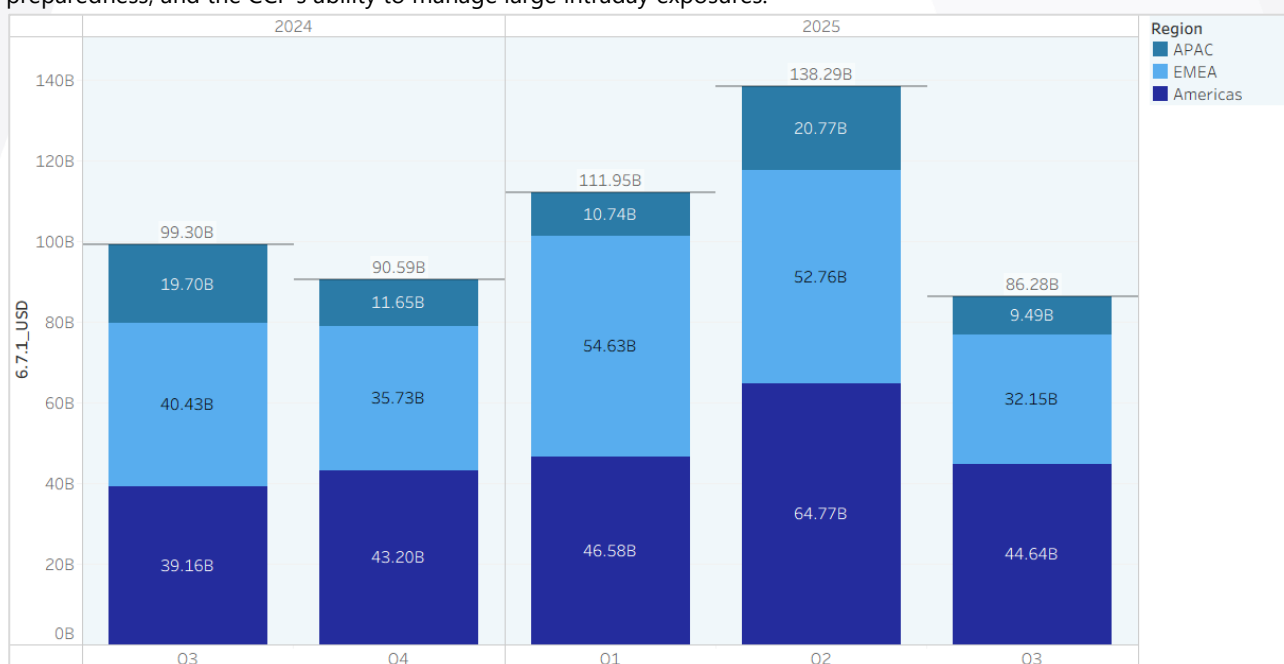

Figure 15: Source - Clearvue, disclosure 6.7.1

REF. AA_PQD_PULSE_2025128V1

7. GLOBAL OVERCOLLATERALIZATION ANALYSIS

Overcollateralization analysis measures the extent to which actual collateral posted by clearing members exceeds the amount required by a CCP. It provides insight into the additional financial buffer available to absorb losses beyond minimum requirements. For **Initial Margin (IM)**, overcollateralization is calculated as IM Held minus IM Required; for the **Default Fund (DF)**, it is DF Held minus DF Required.

The **total overcollateralization** combines both components, disclosures (6.2.15 + 4.3.15) – (6.1.1 + 4.1.4):

$$\left(IM_{Held} + DF_{Held}\right) - \left(IM_{Required} + DF_{Required}\right)$$

Only post-haircut values are used for "Held" amounts to reflect the effective collateral after risk adjustments. This metric helps assess CCP resilience and participant conservatism in collateral posting.

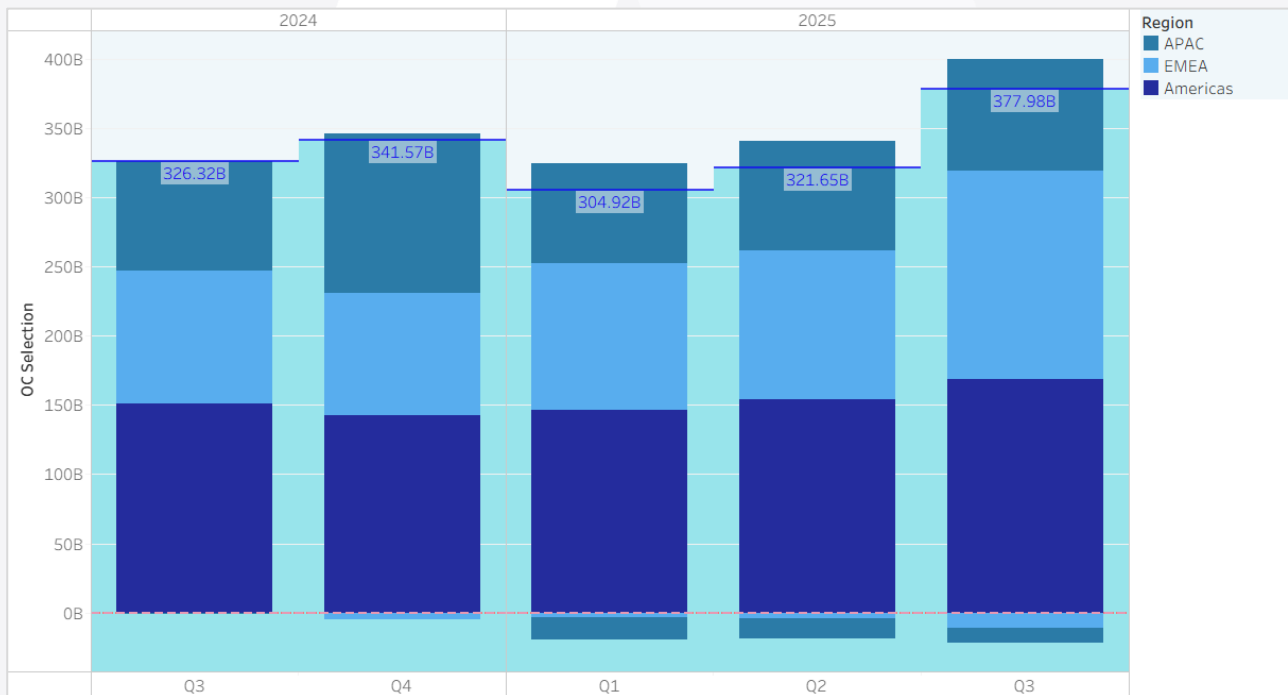## 7.1 Initial Margin Overcollateralization

Figure 16: Source - Clearvue, disclosure 6.2.15 minus 6.1.1
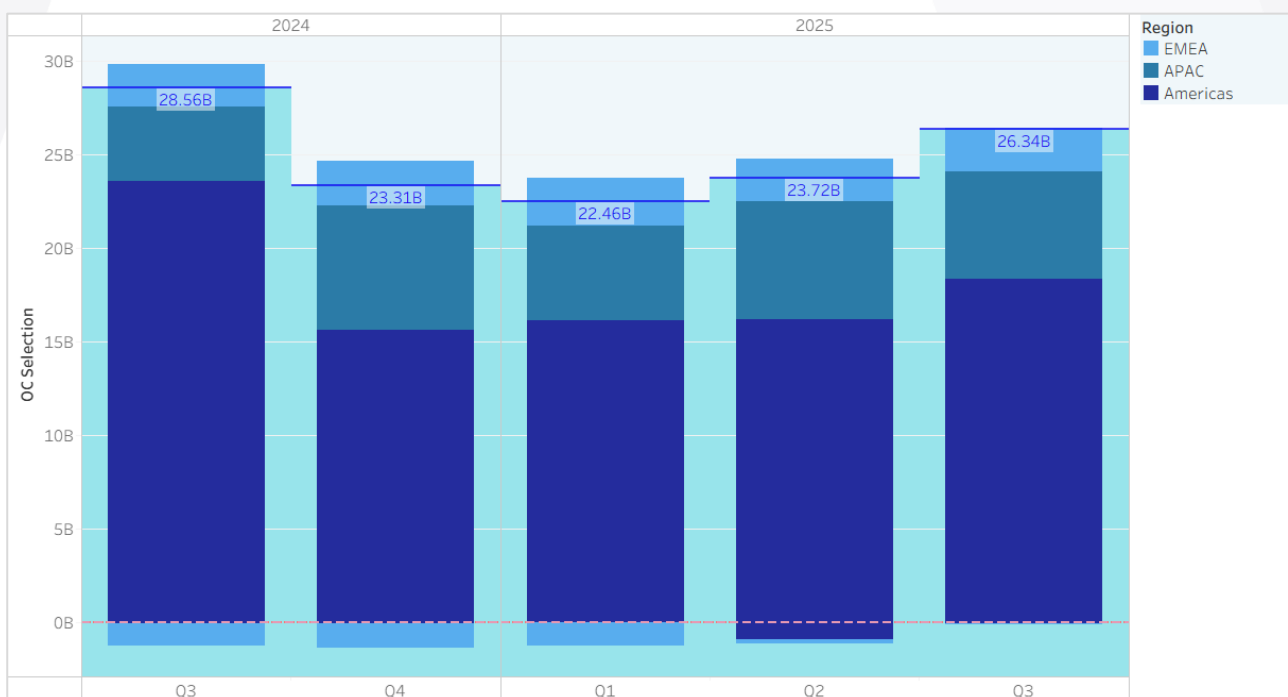
7.2 Default Fund Overcollateralization

Figure 17: Source - Clearvue, disclosure 4.3.15 minus 4.1.4

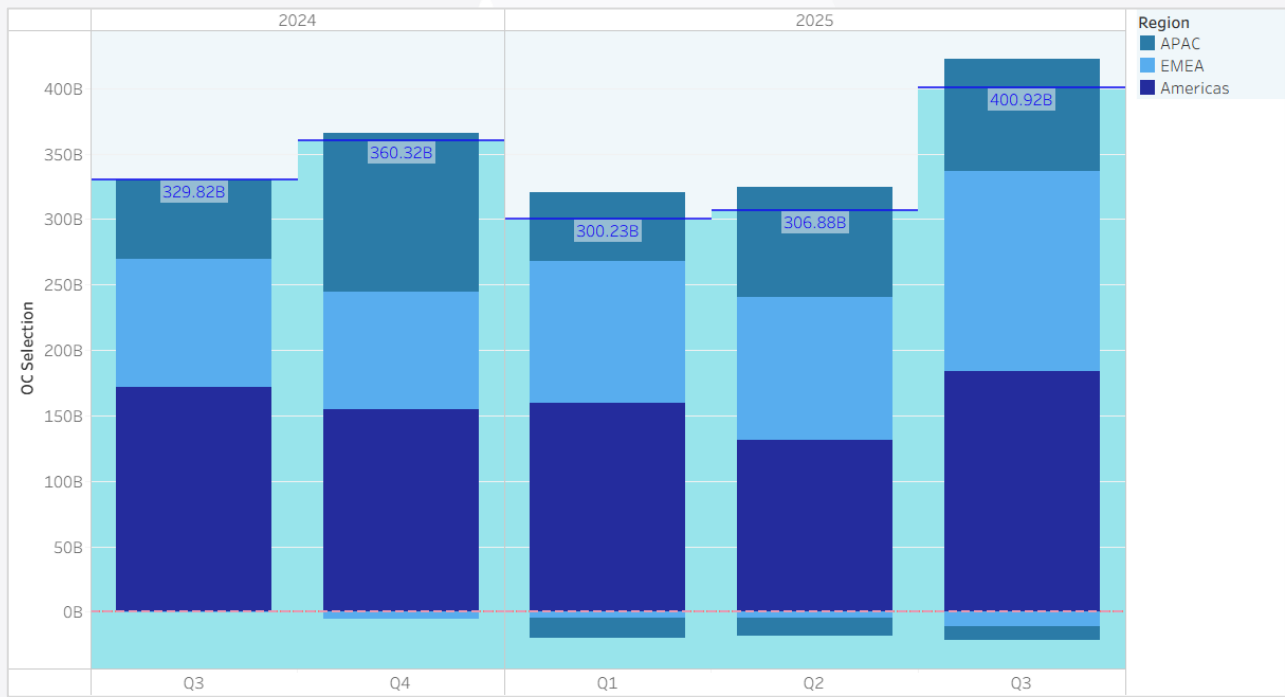### 7.3 Total IM and DF Fund Overcollateralization

Figure 18: Source - Clearvue, disclosures (6.2.15 + 4.3.15) − (6.1.1 + 4.1.4):

8. APPENDIX 1 – PQD DATA INCLUDED IN CLEARVUE

No.	CCPName	CCPGroup
1	ABAXX - Abaxx Exchange Pte Ltd	ABAXX
2	ACYRSA - Argentina Clearing y Registro S.A.	ACYRSA
3	ASXCL - Australia Securities Exchange Clear	ASX
4	ASXCLF - Australia Securities Exchange Clear Futures	ASX
5	ATHEXC - Athens Exchange Clearing House	ATHEXGROUP
6	B3 - Brasil, Bolsa, Balcão (BM&FBOVESPA Clearinghouse)	B3
7	B3FX - Brasil, Bolsa, Balcão (Foreign Exchange Clearinghouse)	B3
8	BMDC - Bursa Malaysia Derivatives Clearing	BMAL
9	BMEC - BME Clearing S.A. (a SIX company)	SIX
10	BMSC - Bursa Malaysia Securities Clearing	BMAL
11	CCE - Cboe Clear Europe N.V. (Cboe Clear)	CBOECLEAR
12	CCG - Cassa di Compensazione e Garanzia S.p.A.	EURONEXT
13	CCIL - The Clearing Corporation of India Ltd.	CCIL
14	CCPA - Central Counterparty Austria Abwicklungsstelle für Börsengeschäfte GmbH	CCPA
15	CDCC - Canadian Derivatives Clearing Corporation (CDCC)	TMX
16	CDS - Canadian Depository for Securities Limited (CDS Ltd.)	TMX
17	CME - Chicago Mercantile Exchange	CME
18	COMDER - ComDer Contraparte Central S.A.	COMDER
19	CRCC - Cámara de Riesgo Central de Contraparte S.A.	CRCC
20	CSDC - China Securities Depository and Clearing Corporation Limited	CSDC
21	DCCC - The Dubai Commodities Clearing Corporation	DCCC
22	DTCCFICC - Depository Trust and Clearing Corporation - Fixed Income Clearing Corporation	DTCC
23	DTCCGSD - Depository Trust and Clearing Corporation - Government Securities Division Solutions	DTCC
24	DTCCMBSD - Depository Trust and Clearing Corporation - Mortgage-Backed Securities Division	DTCC
25	DTCCNSCC - Depository Trust and Clearing Corporation - National Securities Clearing Corporation	DTCC
26	DUBAICLEAR - Dubai Clear	DUBAICLEAR
27	ECC - European Commodity Clearing	ECAG
28	EUREX - Eurex	ECAG
29	FMDQC - FMDQ Clear	FMDQCLEAR
30	HKEXHKCC - HKFE Clearing Corporation Limited	HKEX
31	HKEXHKSCC - Hong Kong Securities Clearing Company Limited	HKEX
32	HKEXLMEC - The London Metal Exchange	HKEX
33	HKEXOTCC - OTC Clearing Hong Kong Limited	HKEX
34	HKEXSEOCH - The SEHK Options Clearing House Limited	HKEX
35	ICC - ICE Clear Credit	ICE
36	ICEU - ICE Clear Europe	ICE
37	ICNGX - ICE Clear Canada	ICE
38	ICNL - ICE Clear Netherlands	ICE
39	ICSG - ICE Clear Singapore	ICE
40	ICUS - ICE Clear US	ICE
41	IDCLEAR - PT Kliring Penjaminan Efek Indonesia	IDCLEAR
42	IRGIT - Izba Rozliczeniowa Gie?d Towarowych S.A. (IRGiT, Clearing House)	IRGIT
43	JSCC - Japan Securities Clearing Corporation	JSCC
44	JSEC - Johannesburg Stock Exchange	JSEC
45	KACC - Kazakhstan Stock Exchange	KACC
46	KDPWCCP - KDPW_CCP	KDPWCCP
47	KELERCCP - KELER CCP	KELERCCP
48	KRX - Korea Exchange	KRX
49	LCHLTD - London Clearing House Ltd.	LSEG
50	LCHSA - London Clearing House S.A.	LSEG
51	MCXCCL - Multi Commodity Exchange Clearing Corporation Limited	MCXCCL
52	MIAXFUTURES - MIAX Futures Exchange (Miami International Holdings, Inc.)	MIAXGLOBAL
53	MUQASSA - Securities Clearing Center Company (Muqassa)	MUQASSA
54	NASDAQ - Nasdaq Clearing	NASDAQ
55	NCC - Central Counterparty National Clearing Centre	NCC
56	NCL - Nodal Clear	ECAG
57	NGC - NG Clearing Limited	NGCLEARING
58	NSECLEARING - National Securities Clearing Corporation Limited (NSE Clearing)	NSE
59	NZX - New Zealand Exchange	NZX
60	OCC - The Options Clearing Corporation	OCC
61	OMIC - OMIClear, C.C., S.A.	OMIC
62	SGXCDP - Singapore Exchange (Central Depository (Pte) Limited)	SGX
63	SGXDC - Singapore Exchange (Derivatives Clearing)	SGX
64	SHCH - Shanghai Clearing House	SHCH
65	SIXCLEAR - SIX Group Ltd	SIX
66	TAIFEX - Taiwan Futures Exchange (Taifex)	TAIFEX
67	TAKASBANK - Takasbank	TAKASBANK
68	TASE - Tel Aviv Stock Exchange	TASE
69	TCH - Thailand Clearing House Co. Ltd.	TCH
70	TPEX - Taipei Exchange	TPEX
71	TWSE - Taiwan Stock Exchange	TWSE
72	VSDC - Vietnam Securities Depository and Clearing Corporation	VSD

Clearvue delivers global PQD coverage:

This report aggregates insights from **all CCP Public Quantitative Disclosures (PQDs)** listed above*, providing a unified, data-driven view of global clearing risk metrics. With over **205+ standardized disclosure data points**, Clearvue transforms raw PQD data into actionable intelligence - empowering market participants, regulators, and risk managers to make informed decisions with confidence.

*For CCPs that do not currently publish PQDs, our team actively engages with them to encourage transparency and adoption of international standards. This commitment ensures that market discipline and resilience continue to strengthen globally.

What you see in this report is just a **fraction of the depth Clearvue offers**, behind every chart lies a comprehensive dataset that can be explored for granular insights, historical trends, and comparative analytics across jurisdictions. Clearvue is more than a reporting tool; it's your gateway to **global CCP transparency, systemic risk monitoring, and strategic decision-making**.

9. ABOUT US

Altair & Alang is a boutique management consulting firm with a global footprint, serving clients across EMEA, APAC, and the Americas. We specialise in business intelligence, financial strategy, and actionable insights tailored to our client's needs. We partner with clients to uncover data-driven opportunities, optimise financial performance, and empower strategic decision-making.

We have worked with over 60 central counterparties (CCPs) worldwide, supporting them on a diverse range of initiatives. Our team has been directly involved in enhancing market transparency standards, advising both CCPs and global regulators. This unique experience positions us as a trusted partner to FMI's seeking to meet international standards while delivering meaningful improvements to governance, resilience, strategies, and stakeholder confidence in the global financial markets.

While our roots are in the financial services and capital markets, our strength lies in data and analytics that translate across all industries. We bring deep functional expertise to a wide range of sectors, including fintech, insurance and cybersecurity. Whether optimising operating models, designing scalable data strategies, or enhancing regulatory insight, we help clients make smarter decisions and deliver measurable results in dynamic environments.

Our deliverables combine deep industry knowledge with advanced analytics to deliver impactful solutions that drive measurable results and long-term success for our clients.

For more information, please contact us: info@altairalang.com

Our website: www.altairalang.com

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