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COMMODITY FUTURES TRADING COMMISSION

December 11, 2023 Market Risk Advisory Committee Meeting

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Welcome and Opening Remarks

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Section One—CCP Risk and Governance, International Perspective

Opening remarks from

Christopher Hayward, Policy Chairman, City of London Corporation

Klaus Loeber, Chair of the CCP Supervisory Committee, ESMA

Richard Haynes, Deputy Director, CFTC Division of Clearing and Risk

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Section Two—CCP Risk and Governance, Panel One
Legal Entity Identifiers

DISCLAIMER

The following analyses and views are those of the presenters and do not necessarily reflect the views of the Commission, its Commissioners, or CFTC Staff

Benefits of Legal Entity Identifiers

- During the response to the 2008-2009 financial crisis, there was a global regulatory desire to identify risk at the beneficial account owner level.
- The EU response mandated the use of Legal Entity Identifiers (LEIs).
- The US response made the use of LEIs voluntary, primarily related to the unknown operational costs.
- In early 2023, the ION cyber incident highlighted the benefits of using LEI's at the beneficial account owner level and the need to explore implementing the use of LEI's in the US.

NEXT STEPS:

Develop recommendation to propose amending CFTC Reg. 39.19 to bring the US regulatory structure inline with the global standards by mandating the use of Legal Entity Identifiers at the beneficial account owner level.

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Section Two—CCP Risk and Governance, Panel Two
Third-Party Risk

Review of Mission Critical Third Parties

- Currently, there is limited oversight of mission-critical third parties relied upon by CFTC registrants.
- As innovation continues to bring efficiencies to capital markets, all participants are increasing dependencies on third party service providers.
- The Workstream has inventoried several domestic and international regulations including FRB, SEC, Treasury, FSB, Bank of England, and EU and reviewed these regulations for common definitions and themes
- Independent of the regulations, many CFTC registrants have implemented protocols to define and manage these third-party dependencies.

NEXT STEPS

Continue to assess global regulation of third-party service providers, build a consensus and deliver a more comprehensive report at the next MRAC meeting.

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Section Two—CCP Risk and Governance, Panel Two
Third-Party Risk

FIA Cyber Risk Taskforce

- In March 2023, FIA formed an industry Taskforce in response to a ransomware attack on a single third-party service provider, which significantly impacted the processing of trades executed on multiple exchanges and CCPs globally.
- In September 2023, FIA released an After Action Report with recommendations for improving the industry's ability to withstand future attacks.


FIA
FIA TASKFORCE ON CYBER RISK
After Action Report and Findings
September 2023

Report Highlights:

- Exchanges and CCPs play a critical role in the front-to-back trading and clearing ecosystem. In any outage that affects this ecosystem, resiliency and reconnection to exchanges and CCPs are essential steps in the recovery process.
- Recommendations were made for all market participants and service providers, including but not limited to exchanges and CCPs, such as:
  - Encouraging alignment with existing reconnection guidelines.
  - Supporting the sharing of information with connected parties regarding contingency plans in the event of a cyber incident or other type of outage.
  - Improving risk assessment of third-party service providers.

Other Recommendations:

- FIA to form an “Industry Resilience Committee” as a standing industry-wide group that serves as a trusted forum for key stakeholders to discuss cyber incident management and resilience planning and recommend best practices for the industry.
- Engage with sector-wide groups on cyber and operational resilience through FIA.
- Participate in regular cyber preparedness exercises.

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Section Two—CCP Risk and Governance, Panel Three
Recovery and Resolution

Progress Update

Progress Update

- Workstream plans on issuing a report in Q2 2024

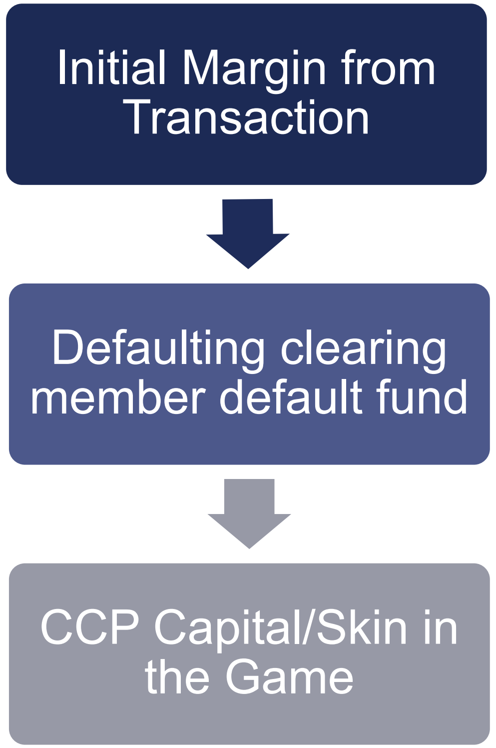
- Intend to address **public comments** received on DCO Recovery and Orderly Wind-Down Plans NPR, and **international developments** (ex. EU Regulations, FSB Financial Resources and Tools for Central Counterparty Resolution Consultation Report)

Resilience as First Line of Defense

Resilience is the first line of defense

- Well structured Central Counterparty Clearinghouse (CCP) default waterfall: robust margin from top tranches of the waterfall with appropriately sized initial margin and defaulting member default fund contribution (See Figure)
- CCP skin in the game as risk management incentive - see prior MRAC work on this topic: DCO Capital and Skin in the game, Report of the Central Counterparty Risk and Governance Subcommittee
- Resilience of Systemically Important Derivative Clearing Organizations (SIDCOs): Regulations require SIDCOs to allocate losses and restore a matched book through cash or variation margin haircuts

First Three Tranches of CCP Default Waterfall



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Resilience as First Line of Defense - Continued

Resilience of DCOs, FCMs, clients

- Recovery tools put in place because of regulatory requirements decrease the likelihood of a resolution and require SIDCOs to allocate losses and restore a matched book
- Given the loss mutualization feature of CCPs, the ability of the SIDCO to recover from losses depends on the SIDCO's risk management, as well as ability of FCMs and clients to cover losses if needed

Choice of recovery tools has policy implications

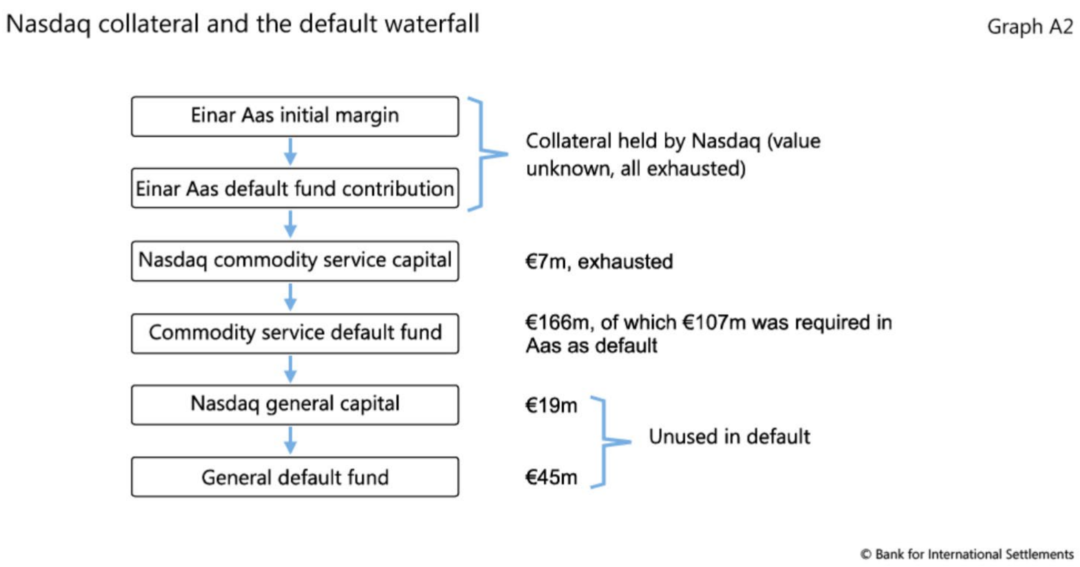
- CCPs mutualize risk between clearing members. CCP shareholders have limited exposure through skin in the game
- Guarantee fund replenishment means losses are allocated to FCM, ultimately flowing to Bank shareholders
- VM haircutting and tear ups means losses are allocated to hedgers, institutional investors and other end users

Liquidity and CCP Recovery

CCP recovery is dependent on liquidity supply/demand

- Recovery depends exposure type: synthetic (cash-based movement) versus actual exchange of the security
- Liquidity depends on factors like volatility, concentration, market specific liquidity, and central bank access
- Consider the 2018 Nordic/German Power futures default: CCP tapped into the waterfall (see Figure) due to an undiversified, large position in a small market
  - Moral of the story: liquidity of members (membership standards) and market liquidity are very important, particularly when clearing cash market securities

Figure 3. Einar Aas variation margin default tap into default waterfall



International Harmonization

Bankruptcy laws are specific to each legal jurisdiction.
As a result:

- clearing may have different outcomes in a default/resolution in different jurisdictions
- the cost of compliance for buy-side clients is increased
- increased barrier to entry for FCMs due to higher compliance costs from asymmetric regional/national rules

- Some CCPs have separate entities serving different clients in different jurisdictions
- Consequence of harmonization may be that there are fewer FCMs
- Consider harmonizing CCPs rules to the point that is feasible, while recognizing the specifics of each legal jurisdiction

Transparency

Goal of identifying areas where increased transparency is desired:

- A level playing field for all CCPs in terms of risk management disclosures (ex. public quantitative disclosures)
- Are there additional items which should be included in PQDs? (noting that there is ongoing work in this area being conducted by FIA/SIFMA/CCP Global)
- Beyond PQDs, areas of further discussion include:
  - default waterfall,
  - depth of backstop facilities and central bank access,
  - Need for greater margin model transparency (margin calls and anti-pro cyclical measures)

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Section Two—CCP Risk and Governance, Panel Four
Margin and Collateral

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Section Three—Market Structure, Panel One

Futures Commission Merchant Capacity

Top Observations

- **Futures industry has experienced significant FCM consolidation over the period 2002 to 2023**
  - All FCMs (Highest = 195, Lowest = 61; 69% decline); Non-Carrying (Highest = 94, Lowest = 8; 91% decline); Carrying (Highest = 111, Lowest = 47; 58% decline)
  - Decline is attributable to not only the departure of many “shell” FCMs (FCMs conducting only retail forex business) as well as “non-carrying” FCMs (FCMs that hold no customer funds), but also to the shrinkage of the important group of FCMs who hold customer funds intended for futures trading (“carrying” FCMs”).
    - Exits/ Downsizing by some notable banks in recent years including BNY Mellon (2014), State Street (2016) and Credit Suisse, which had begun exiting even prior to the sale
  - Decline led by the exit of many independent FCMs who are neither dually-registered as broker-dealers nor affiliated with banks or bank holding companies.
- **Two essential primary safeguards: (i) maintenance of minimum capital and (ii) segregation of customer funds from proprietary funds and trading activities of FCM.** Capital provides an added layer of protection to an FCM’s customer base from losses incurred by fellow customers.
- There is a large decline in the number of FCMs, but at the same time **a large increase in their holdings of customer funds**
  - Decline in FCMs providing client clearing in swaps, even as the swap clearing requirement has gone into effect - i.e., the contrast of rising demand for clearing, combined with shrinking capacity.
- **Remaining FCMs are dominated by the larger FCM-BDs**
  - FCM-BDs now hold all top ten industry positions in terms of holdings of customer funds, and these ten FCMs account for 80+% of all customer funds.
  - Leading FCMs appear to possess levels of both scope and scale in services provided to enable them to meet the rising costs stemming from regulatory requirements and technological advances.
  - Significant levels of excess capital important for maintaining financial solvency and reducing systemic risk (FCMs hold excess levels of capital relative to CFTC minimum requirements in order to adhere to more stringent requirements).
- **Few New Entrants, suggesting barriers to entry**
  - Providing FCM services has become an increasingly high fixed cost business, with the costs of infrastructure, and regulatory compliance climbing materially post Dodd Frank.
  - Smaller FCMs may not have the scale critical to running a successful FCM and justify costs of infrastructure and regulatory compliance.
  - Increased capital requirements has resulted in FCMs becoming more restrictive on their offering because products became disproportionately expensive.
    - Some FCMs took hedges OTC and in some cases FCMs took the hedges off altogether.
    - Tying up too much capital has the effect of reducing the headroom for when the market stresses occur.
- **FCM concentration coupled with the new capital rules may make the possibility of porting more challenging**

Top Observations

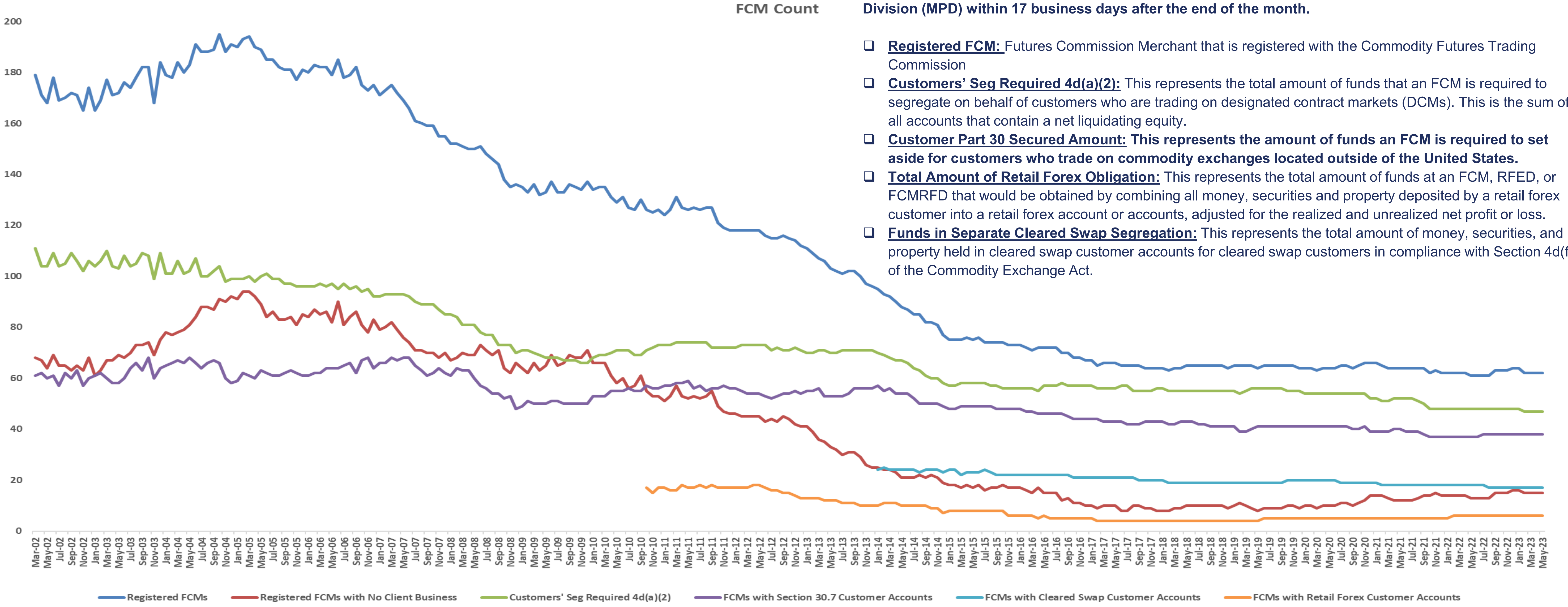
More recently Proposed Capital Rules like the GSIB Surcharge and Basel III Endgame can impact client clearing and have the potential to further reduce Capacity in Cleared Markets

- ❑ **GSIB Surcharge Proposal (Fed Only Proposal)**
  - ❑ The proposal would add OTC client cleared leg under the agency model to the Complexity and Interconnectedness Indicators of the GSIB Surcharge.
    - This proposal would significantly increase capital requirements for the OTC client clearing activities of US GSIBs.
    - Since the inception of the GSIB Surcharge in the US, its Complexity and Interconnectedness indicators have been excluded.

- ❑ **Basel III Endgame Proposal (Joint Fed/FDIC/OCC Proposal)**
  - ❑ **Credit Valuation Adjustment**
    - Inclusion of client clearing in the CVA framework is unnecessary as the only client-related credit risk that the clearing member faces is risk of client default, which is already captured in existing counterparty credit risk framework.
  - ❑ **Operational Risk**
    - The Endgame Proposal's approach to calculating the services component of operational risk would serve as a tax on clearing; doesn't distinguish risk and is based on gross fees.
  - ❑ **Counterparty Credit Risk**
    - The requirement for an investment grade company to be publicly traded to get a lower risk weight harms end-users, many of which are not publicly traded and will receive higher risk weight.
    - SA-CCR should be revised to permit netting of STM/CTM client cleared transactions.
    - The inability to decompose non-linear trades under SA-CCR is problematic for listed options.
    - The proposed increased risk weights for exposures to foreign banks could make it more difficult for banks, or their foreign affiliates, to offer client clearing services outside the US.

FCM Data

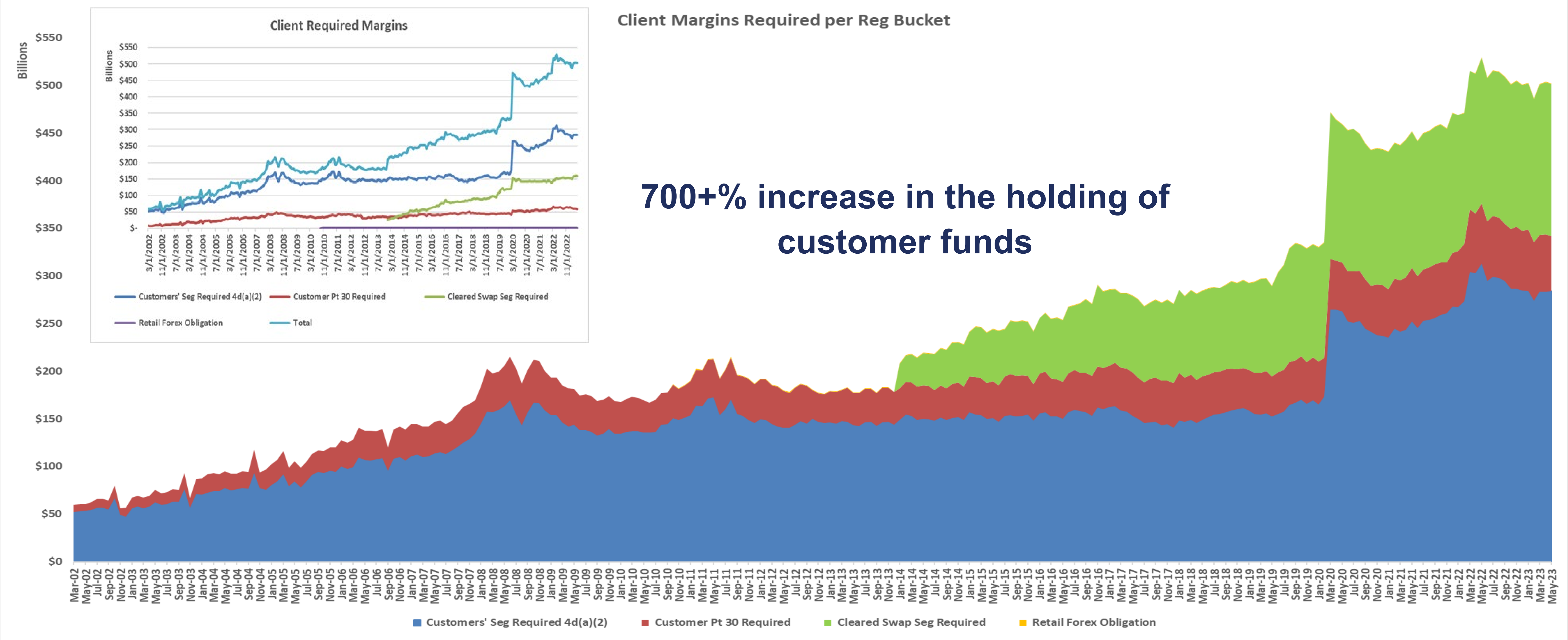
70% decline in the total number of FCMs



The Source of the FCM data is based on the monthly financial reports that are filed by Futures commission merchants (FCMs) and retail foreign exchange dealers (RFEDs) with the CFTC's Market Participants Division (MPD) within 17 business days after the end of the month.

- **Registered FCM:** Futures Commission Merchant that is registered with the Commodity Futures Trading Commission
- **Customers' Seg Required 4d(a)(2):** This represents the total amount of funds that an FCM is required to segregate on behalf of customers who are trading on designated contract markets (DCMs). This is the sum of all accounts that contain a net liquidating equity.
- **Customer Part 30 Secured Amount: This represents the amount of funds an FCM is required to set aside for customers who trade on commodity exchanges located outside of the United States.**
- **Total Amount of Retail Forex Obligation:** This represents the total amount of funds at an FCM, RFED, or FCMRFD that would be obtained by combining all money, securities and property deposited by a retail forex customer into a retail forex account or accounts, adjusted for the realized and unrealized net profit or loss.
- **Funds in Separate Cleared Swap Segregation:** This represents the total amount of money, securities, and property held in cleared swap customer accounts for cleared swap customers in compliance with Section 4d(f) of the Commodity Exchange Act.

FCM Data



700+% increase in the holding of customer funds

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Top Firms With Client Margins Greater Than 1 USD Billion

December 2003

Rank	FirmName	Cumulative %	Cumulative Total	Firm Total	Seg	Part 30	Swaps	Retail Forex
1	GOLDMAN SACHS & CO	14.25%	$ 12,320,190,557	$ 12,320,190,557	$ 8,321,318,995	$ 3,998,871,562		
2	JP MORGAN FUTURES INC	21.93%	$ 18,964,463,868	$ 6,644,273,311	$ 5,952,690,183	$ 691,583,128		
3	CITIGROUP GLOBAL MARKETS INC.	29.07%	$ 25,131,923,539	$ 6,167,459,671	$ 6,045,421,262	$ 122,038,409		
4	MERRILL LYNCH PIERCE FENNER & SMITH	35.78%	$ 30,933,157,329	$ 5,801,233,790	$ 5,097,388,514	$ 703,845,276		
5	UBS SECURITIES LLC	42.00%	$ 36,318,789,604	$ 5,385,632,275	$ 4,202,463,802	$ 1,183,168,473		
6	CARR FUTURES INC	47.88%	$ 41,395,456,912	$ 5,076,667,308	$ 3,412,784,244	$ 1,663,883,064		
7	MORGAN STANLEY & CO INCORPORATED	52.93%	$ 45,762,895,923	$ 4,367,439,011	$ 3,047,081,696	$ 1,320,357,315		
8	MAN FINANCIAL INC	57.75%	$ 49,935,476,450	$ 4,172,580,527	$ 3,440,162,150	$ 732,418,377		
9	FIMAT USA INC	62.57%	$ 54,096,779,211	$ 4,161,302,761	$ 3,389,899,422	$ 771,403,339		
10	REFCO LLC	66.53%	$ 57,521,200,955	$ 3,424,421,744	$ 3,341,528,198	$ 82,893,546		
11	MORGAN STANLEY DW INC	69.41%	$ 60,012,549,820	$ 2,491,348,865	$ 898,433,188	$ 1,592,915,677		
12	CREDIT SUISSE FIRST BOSTON LLC	72.03%	$ 62,283,888,104	$ 2,271,338,284	$ 1,723,599,368	$ 547,738,916		
13	DEUTSCHE BANK SECURITIES INC	74.64%	$ 64,533,588,237	$ 2,249,700,133	$ 1,759,746,908	$ 489,953,225		
14	BARCLAYS CAPITAL INC	77.16%	$ 66,720,549,643	$ 2,186,961,406	$ 1,930,969,332	$ 255,992,074		
15	BEAR STEARNS SECURITIES CORP	79.68%	$ 68,894,687,049	$ 2,174,137,406	$ 1,820,188,536	$ 353,948,870		
16	ABN AMRO INCORPORATED	81.99%	$ 70,890,336,859	$ 1,995,649,810	$ 1,904,493,644	$ 91,156,166		
17	LEHMAN BROTHERS INC	84.28%	$ 72,871,370,859	$ 1,981,034,000	$ 1,864,189,000	$ 116,845,000		
18	CARGILL INVESTOR SERVICES INC	85.89%	$ 74,267,694,386	$ 1,396,323,527	$ 1,317,912,177	$ 78,411,350		
19	PRUDENTIAL EQUITY GROUP INC	87.48%	$ 75,635,167,386	$ 1,367,473,000	$ 1,219,652,000	$ 147,821,000		
20	UBS FINANCIAL SERVICES INC.	89.02%	$ 76,974,927,377	$ 1,339,759,991	$ 1,264,415,339	$ 75,344,652		
	Total across all FCMs : December 2003			$ 86,464,870,875	$ 71,164,652,838	$ 15,300,218,037	$ -	$ -

Top Firms With Client Margins Greater Than 1 USD Billion

December 2008

Rank	FirmName	Cumulative %	Cumulative Total	Firm Total	Seg	Part 30	Swaps	Retail Forex
1	GOLDMAN SACHS & CO	16.03%	$ 32,130,575,446	$ 32,130,575,446	$ 22,594,034,044	$ 9,536,541,402		
2	NEWEDGE USA LLC.	29.89%	$ 59,920,201,501	$ 27,789,626,055	$ 20,363,888,012	$ 7,425,738,043		
3	JP MORGAN FUTURES INC	41.25%	$ 82,682,609,137	$ 22,762,407,636	$ 19,870,559,358	$ 2,891,848,278		
4	UBS SECURITIES LLC	51.64%	$ 103,516,168,799	$ 20,833,559,662	$ 15,420,748,125	$ 5,412,811,537		
5	CITIGROUP GLOBAL MARKETS INC	60.31%	$ 120,892,033,184	$ 17,375,864,385	$ 15,736,421,042	$ 1,639,443,343		
6	MERRILL LYNCH PIERCE FENNER & SMITH	66.24%	$ 132,766,534,568	$ 11,874,501,384	$ 10,429,695,890	$ 1,444,805,494		
7	MORGAN STANLEY & CO INCORPORATED	70.83%	$ 141,980,366,777	$ 9,213,832,209	$ 4,982,674,544	$ 4,231,157,665		
8	BARCLAYS CAPITAL INC	75.31%	$ 150,950,276,094	$ 8,969,909,317	$ 5,993,650,575	$ 2,976,258,742		
9	MF GLOBAL INC.	79.26%	$ 158,872,106,909	$ 7,921,830,815	$ 7,429,554,145	$ 492,276,670		
10	DEUTSCHE BANK SECURITIES INC	82.93%	$ 166,227,717,158	$ 7,355,610,249	$ 6,282,995,014	$ 1,072,615,235		
11	CREDIT SUISSE SECURITIES (USA) LLC	85.29%	$ 170,956,011,220	$ 4,728,294,062	$ 3,107,519,933	$ 1,620,774,129		
12	PRUDENTIAL BACHE COMMODITIES LLC	87.05%	$ 174,490,184,220	$ 3,534,173,000	$ 3,101,633,000	$ 432,540,000		
13	BNP PARIBAS COMMODITY FUTURES INC	88.61%	$ 177,604,510,358	$ 3,114,326,138	$ 2,668,759,643	$ 445,566,495		
14	RBC CAPITAL MARKETS CORPORATION	89.58%	$ 179,561,061,518	$ 1,956,551,160	$ 1,067,694,053	$ 888,857,107		
15	ADM INVESTOR SERVICES INC	90.55%	$ 181,497,460,220	$ 1,936,398,702	$ 1,864,327,056	$ 72,071,646		
16	RJ OBRIEN & ASSOCIATES LLC	91.49%	$ 183,384,998,447	$ 1,887,538,227	$ 1,854,991,988	$ 32,546,239		
17	RBS GREENWICH CAPITAL INC	92.39%	$ 185,181,816,447	$ 1,796,818,000	$ 1,714,234,000	$ 82,584,000		
18	GOLDMAN SACHS EXECUTION & CLEARING LP	93.23%	$ 186,875,036,544	$ 1,693,220,097	$ 1,674,320,331	$ 18,899,766		
19	JP MORGAN CLEARING CORP	93.94%	$ 188,292,803,719	$ 1,417,767,175	$ 1,020,408,180	$ 397,358,995		
20	HSBC SECURITIES USA INC	94.62%	$ 189,662,355,038	$ 1,369,551,319	$ 1,311,779,397	$ 57,771,922		
21	FORTIS CLEARING AMERICAS LLC	95.14%	$ 190,706,040,370	$ 1,043,685,332	$ 883,423,029	$ 160,262,303		
22	BANC OF AMERICA SECURITIES LLC	95.65%	$ 191,730,855,865	$ 1,024,815,495	$ 1,007,978,026	$ 16,837,469		
23	ROSENTHAL COLLINS GROUP LLC	96.16%	$ 192,734,588,056	$ 1,003,732,191	$ 976,326,801	$ 27,405,390		
	Total across all FCMs : December 2008			$ 200,441,092,738	$ 158,534,030,594	$ 41,907,062,144	$ -	$ -

Top Firms With Client Margins Greater Than 1 USD Billion

December 2013

Rank	FirmName	Cumulative %	Cumulative Total	Firm Total	Seg	Part 30	Swaps	Retail Forex
1	GOLDMAN SACHS & CO	15.28%	$ 27,285,187,152	$ 27,285,187,152	$ 19,505,062,033	$ 7,780,125,119		
2	JP MORGAN SECURITIES LLC	26.08%	$ 46,562,276,665	$ 19,277,089,513	$ 16,068,072,825	$ 3,209,016,688		$ -
3	NEWEDGE USA LLC	35.12%	$ 62,704,651,748	$ 16,142,375,083	$ 13,164,428,650	$ 2,977,946,433		$ -
4	DEUTSCHE BANK SECURITIES INC	42.58%	$ 76,033,212,310	$ 13,328,560,562	$ 12,402,354,155	$ 926,206,407		
5	MERRILL LYNCH PIERCE FENNER & SMITH	49.79%	$ 88,897,008,197	$ 12,863,795,887	$ 10,097,450,250	$ 2,766,345,637		$ -
6	MORGAN STANLEY & CO LLC	56.85%	$ 101,521,124,445	$ 12,624,116,248	$ 10,233,308,793	$ 2,390,807,455		$ -
7	UBS SECURITIES LLC	63.58%	$ 113,531,515,995	$ 12,010,391,550	$ 8,191,731,999	$ 3,818,659,551		$ -
8	CREDIT SUISSE SECURITIES (USA) LLC	69.58%	$ 124,238,356,117	$ 10,706,840,122	$ 7,918,920,731	$ 2,787,919,391		
9	BARCLAYS CAPITAL INC	75.52%	$ 134,851,138,687	$ 10,612,782,570	$ 6,377,915,171	$ 4,234,867,399		
10	CITIGROUP GLOBAL MARKETS INC	78.70%	$ 140,534,779,161	$ 5,683,640,474	$ 4,844,742,715	$ 838,897,759		
11	RJ OBRIEN ASSOCIATES LLC	80.87%	$ 144,407,722,824	$ 3,872,943,663	$ 3,703,754,600	$ 168,623,374		$ 565,689
12	ADM INVESTOR SERVICES INC	82.61%	$ 147,510,814,130	$ 3,103,091,306	$ 2,931,401,486	$ 171,689,820		
13	MIZUHO SECURITIES USA INC	84.06%	$ 150,099,586,160	$ 2,588,772,030	$ 2,054,124,905	$ 534,647,125		$ -
14	INTERACTIVE BROKERS LLC	85.34%	$ 152,380,594,678	$ 2,281,008,518	$ 1,939,801,946	$ 300,433,178		$ 40,773,394
15	ABN AMRO CLEARING CHICAGO LLC	86.53%	$ 154,516,960,123	$ 2,136,365,445	$ 1,981,333,752	$ 155,031,693		
16	BNP PARIBAS PRIME BROKERAGE INC	87.67%	$ 156,538,476,586	$ 2,021,516,463	$ 2,019,918,460	$ 1,598,003		
17	JEFFERIES BACHE LLC	88.80%	$ 158,555,620,586	$ 2,017,144,000	$ 1,879,889,000	$ 137,255,000		$ -
18	FCSTONE LLC	89.71%	$ 160,190,751,608	$ 1,635,131,022	$ 1,582,727,766	$ 52,403,256		
19	RBS SECURITIES INC	90.56%	$ 161,700,782,957	$ 1,510,031,349	$ 1,449,331,490	$ 60,699,859		$ -
20	ROSENTHAL COLLINS GROUP LLC	91.36%	$ 163,140,567,573	$ 1,439,784,616	$ 1,412,661,189	$ 27,123,427		$ -
21	MACQUARIE FUTURES USA LLC	92.06%	$ 164,381,739,520	$ 1,241,171,947	$ 1,228,662,410	$ 12,509,537		$ -
22	HSBC SECURITIES USA INC	92.70%	$ 165,522,398,380	$ 1,140,658,860	$ 1,048,317,517	$ 92,341,343		
23	JP MORGAN CLEARING CORP	93.32%	$ 166,627,456,004	$ 1,105,057,624	$ 700,772,180	$ 404,285,444		$ -
24	RBC CAPITAL MARKETS LLC	93.87%	$ 167,619,281,265	$ 991,825,261	$ 913,109,618	$ 78,715,643		$ -
25	GOLDMAN SACHS EXECUTION & CLEARING LP	94.36%	$ 168,499,508,196	$ 880,226,931	$ 847,350,112	$ 32,876,819		
26	BNP PARIBAS SECURITIES CORP	94.85%	$ 169,366,695,720	$ 867,187,524	$ 867,187,524	$ -		
27	MERRILL LYNCH PROFESSIONAL CLEARING CORP	95.28%	$ 170,137,039,578	$ 770,343,858	$ 768,875,721	$ 1,468,137		$ -
	Total across all FCMs : December 2013			$ 178,561,604,053	$ 143,741,158,888	$ 34,219,663,358	$ 600,781,807	

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Top Firms With Client Margins Greater Than 1 USD Billion

December 2018

Rank	FirmName	Cumulative %	Cumulative Total	Firm Total	Seg	Part 30	Swaps	Retail Forex
1	CITIGROUP GLOBAL MARKETS INC	12.89%	$ 38,127,013,601	$ 38,127,013,601	$ 10,073,230,917	$ 2,883,689,309	$ 25,170,093,375	$ -
2	GOLDMAN SACHS & CO LLC	25.62%	$ 75,787,812,674	$ 37,660,799,073	$ 23,161,036,039	$ 8,306,101,441	$ 6,193,661,593	$ -
3	MORGAN STANLEY & CO LLC	38.22%	$ 113,083,215,455	$ 37,295,402,781	$ 16,932,979,813	$ 5,225,735,238	$ 15,136,687,730	$ -
4	JP MORGAN SECURITIES LLC	50.70%	$ 150,002,633,655	$ 36,919,418,200	$ 20,552,368,013	$ 4,484,427,422	$ 11,882,622,765	$ -
5	MERRILL LYNCH PIERCE FENNER & SMITH INCORPORATED	59.88%	$ 177,155,835,111	$ 27,153,201,456	$ 15,734,898,983	$ 4,719,194,906	$ 6,699,107,567	$ -
6	SG AMERICAS SECURITIES LLC	66.85%	$ 197,789,261,162	$ 20,633,426,051	$ 14,368,890,561	$ 5,868,221,535	$ 396,313,955	$ -
7	CREDIT SUISSE SECURITIES (USA) LLC	73.16%	$ 216,475,088,766	$ 18,685,827,604	$ 5,745,407,839	$ 3,048,965,544	$ 9,891,454,221	$ -
8	BARCLAYS CAPITAL INC	77.76%	$ 230,066,469,194	$ 13,591,380,428	$ 4,710,924,626	$ 2,901,646,601	$ 5,978,809,201	$ -
9	WELLS FARGO SECURITIES LLC	81.46%	$ 241,018,573,525	$ 10,952,104,331	$ 3,261,775,305	$ 265,900,246	$ 7,424,428,780	$ -
10	UBS SECURITIES LLC	84.03%	$ 248,620,504,100	$ 7,601,930,575	$ 5,296,506,408	$ 1,613,413,351	$ 692,010,816	$ -
11	ADM INVESTOR SERVICES INC	85.51%	$ 252,998,074,879	$ 4,377,570,779	$ 4,093,633,205	$ 279,323,820	$ 4,613,754	$ -
12	INTERACTIVE BROKERS LLC	86.98%	$ 257,346,199,438	$ 4,348,124,559	$ 3,847,462,576	$ 437,338,700	$ -	$ 63,323,283
13	BNP PARIBAS SECURITIES CORP	88.31%	$ 261,294,054,191	$ 3,947,854,753	$ 2,953,075,113	$ 144,925,370	$ 849,854,270	$ -
14	MIZUHO SECURITIES USA LLC	89.62%	$ 265,170,487,071	$ 3,876,432,880	$ 3,305,314,597	$ 569,845,887	$ 1,272,396	$ -
15	RJ OBRIEN ASSOCIATES LLC	90.86%	$ 268,825,337,319	$ 3,654,850,248	$ 3,493,850,742	$ 160,999,506	$ -	$ -
16	HSBC SECURITIES USA INC	91.92%	$ 271,961,211,699	$ 3,135,874,380	$ 2,112,738,452	$ 117,262,997	$ 905,872,931	$ -
17	ABN AMRO CLEARING CHICAGO LLC	92.95%	$ 275,014,763,806	$ 3,053,552,107	$ 2,958,078,065	$ 95,474,042	$ -	$ -
18	DEUTSCHE BANK SECURITIES INC	93.97%	$ 278,035,586,871	$ 3,020,823,065	$ 2,315,541,830	$ 705,281,235	$ -	$ -
19	RBC CAPITAL MARKETS LLC	94.86%	$ 280,675,075,040	$ 2,639,488,169	$ 1,911,857,985	$ 267,953,514	$ 459,676,670	$ -
20	INTL FCSTONE FINANCIAL INC	95.63%	$ 282,944,620,310	$ 2,269,545,270	$ 2,151,587,853	$ 117,957,417	$ -	$ -
21	MACQUARIE FUTURES USA LLC	96.36%	$ 285,097,794,154	$ 2,153,173,844	$ 2,127,115,780	$ 23,976,108	$ 2,081,956	$ -
22	E D & F MAN CAPITAL MARKETS INC	96.84%	$ 286,530,314,741	$ 1,432,520,587	$ 1,395,689,053	$ 36,242,220	$ 589,314	$ -
23	ROSENTHAL COLLINS GROUP LLC	97.26%	$ 287,764,355,042	$ 1,234,040,301	$ 1,216,201,810	$ 17,838,491	$ -	$ -
24	MERRILL LYNCH PROFESSIONAL CLEARING CORP	97.65%	$ 288,906,300,589	$ 1,141,945,547	$ 1,141,945,547	$ -	$ -	$ -
25	WEDBUSH SECURITIES INC	97.97%	$ 289,880,924,126	$ 974,623,537	$ 963,200,256	$ 11,423,281	$ -	$ -
	Total across all FCMs : December 2018			**$ 295,872,501,184**	**$ 161,080,254,754**	**$ 42,538,604,313**	**$ 564,490,823**	**$ 91,689,151,294**

Top Firms With Client Margins Greater Than 1 USD Billion

March 2020

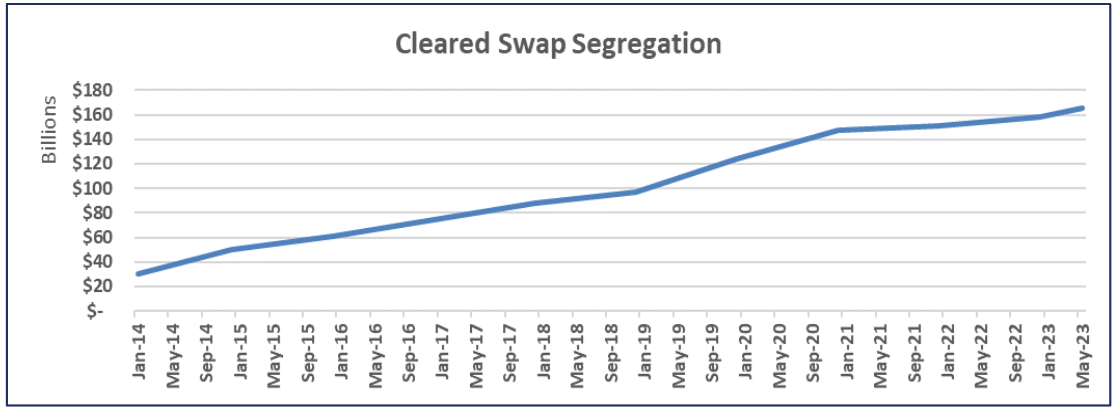
Rank	FirmName	Cumulative %	Cumulative Total	Firm Total	Seg	Part 30	Swaps	Retail Forex	Adjusted Net Capital	ANC/ Client Margin
1	JP MORGAN SECURITIES LLC	14.36%	$ 67,826,462,102	$ 67,826,462,102	$ 41,233,907,548	$ 6,915,933,683	$ 19,676,620,871	$ -	$ 17,287,996,462	25%
2	MORGAN STANLEY & CO LLC	27.83%	$ 131,404,170,859	$ 63,577,708,757	$ 26,826,061,957	$ 7,071,556,996	$ 29,680,089,804	$ -	$ 10,886,543,804	17%
3	GOLDMAN SACHS & CO LLC	40.71%	$ 192,238,601,915	$ 60,834,431,056	$ 40,603,677,549	$ 10,151,904,519	$ 10,078,848,988	$ -	$ 18,660,795,245	31%
4	CITIGROUP GLOBAL MARKETS INC	53.45%	$ 252,372,604,551	$ 60,134,002,636	$ 17,587,576,602	$ 4,720,545,647	$ 37,825,880,387	$ -	$ 6,767,095,455	11%
5	BOFA SECURITIES INC	62.99%	$ 297,435,261,748	$ 45,062,657,197	$ 26,744,325,263	$ 5,976,875,351	$ 12,341,456,583	$ -	$ 12,045,330,393	27%
6	CREDIT SUISSE SECURITIES (USA) LLC	68.81%	$ 324,884,453,945	$ 27,449,192,197	$ 9,165,723,877	$ 4,257,029,923	$ 14,026,438,397	$ -	$ 7,699,492,978	28%
7	SG AMERICAS SECURITIES LLC	73.87%	$ 348,818,986,363	$ 23,934,532,418	$ 16,819,221,718	$ 6,230,577,040	$ 884,733,660	$ -	$ 4,315,850,938	18%
8	WELLS FARGO SECURITIES LLC	78.74%	$ 371,783,708,424	$ 22,964,722,061	$ 6,873,127,419	$ 842,455,685	$ 15,249,138,957	$ -	$ 8,668,858,041	38%
9	BARCLAYS CAPITAL INC	83.21%	$ 392,888,985,966	$ 21,105,277,542	$ 9,592,806,287	$ 2,559,891,847	$ 8,952,579,408	$ -	$ 5,104,998,737	24%
10	UBS SECURITIES LLC	85.53%	$ 403,843,443,233	$ 10,954,457,267	$ 8,758,164,534	$ 1,200,411,069	$ 995,881,664	$ -	$ 4,311,180,083	39%
11	MIZUHO SECURITIES USA LLC	86.97%	$ 410,663,723,341	$ 6,820,280,108	$ 5,901,260,470	$ 918,694,570	$ 325,068	$ -	$ 905,319,289	13%
12	INTERACTIVE BROKERS LLC	88.41%	$ 417,436,700,833	$ 6,772,977,492	$ 6,149,774,289	$ 550,253,077	$ -	$ 72,950,126	$ 5,136,877,599	76%
13	BNP PARIBAS SECURITIES CORP	89.68%	$ 423,443,158,036	$ 6,006,457,203	$ 4,242,337,793	$ 140,427,481	$ 1,623,691,929	$ -	$ 1,989,319,331	33%
14	HSBC SECURITIES USA INC	90.94%	$ 429,389,659,902	$ 5,946,501,866	$ 4,441,882,697	$ 292,165,364	$ 1,212,453,805	$ -	$ 1,474,721,791	25%
15	DEUTSCHE BANK SECURITIES INC	92.00%	$ 434,397,890,744	$ 5,008,230,842	$ 4,506,963,285	$ 501,267,557	$ -	$ -	$ 7,343,573,533	147%
16	ADM INVESTOR SERVICES INC	93.02%	$ 439,228,691,845	$ 4,830,801,101	$ 4,565,332,166	$ 265,299,998	$ 168,937	$ -	$ 334,932,961	7%
17	RJ OBRIEN ASSOCIATES LLC	94.04%	$ 444,055,889,012	$ 4,827,197,167	$ 4,681,064,378	$ 146,132,789	$ -	$ -	$ 258,401,881	5%
18	RBC CAPITAL MARKETS LLC	94.84%	$ 447,807,152,353	$ 3,751,263,341	$ 2,693,656,590	$ 263,426,711	$ 794,180,040	$ -	$ 1,890,913,819	50%
19	ABN AMRO CLEARING CHICAGO LLC	95.63%	$ 451,543,926,816	$ 3,736,774,463	$ 3,645,339,914	$ 91,434,549	$ -	$ -	$ 838,812,048	22%
20	MACQUARIE FUTURES USA LLC	96.23%	$ 454,359,090,178	$ 2,815,163,362	$ 2,776,990,768	$ 36,766,186	$ 1,406,408	$ -	$ 285,117,214	10%
21	INTL FCSTONE FINANCIAL INC	96.78%	$ 456,995,180,842	$ 2,636,090,664	$ 2,485,873,808	$ 149,951,287	$ 265,569	$ -	$ 175,748,337	7%
22	MERRILL LYNCH PROFESSIONAL CLEARING CORP	97.23%	$ 459,077,098,808	$ 2,081,917,966	$ 2,081,917,966	$ -	$ -	$ -	$ 5,913,769,720	284%
23	SANTANDER INVESTMENT SECURITIES INC	97.66%	$ 461,117,957,225	$ 2,040,858,417	$ 2,040,858,417	$ -	$ -	$ -	$ 428,315,228	21%
24	E D & F MAN CAPITAL MARKETS INC	98.04%	$ 462,900,292,892	$ 1,782,335,667	$ 1,700,938,095	$ 81,071,497	$ 326,075	$ -	$ 162,140,071	9%
25	MAREX NORTH AMERICA LLC	98.36%	$ 464,436,978,824	$ 1,536,685,932	$ 1,493,087,776	$ 43,598,156	$ -	$ -	$ 97,238,180	6%
26	NATWEST MARKETS SECURITIES INC	98.64%	$ 465,771,392,232	$ 1,334,413,408	$ 1,322,636,874	$ 11,776,534	$ -	$ -	$ 634,908,093	48%
27	WEDBUSH SECURITIES INC	98.92%	$ 467,091,702,392	$ 1,320,310,160	$ 1,309,199,764	$ 11,110,396	$ -	$ -	$ 169,914,445	13%
	Total across all FCMs : March 2020			$ 472,177,815,335	$ 264,622,419,883	$ 53,654,632,186	$ 153,344,557,074	$ 556,206,192		

Top Firms With Client Margins Greater Than 1 USD Billion

May 2023

Rank	FirmName	Cumulative %	Cumulative Total	Firm Total	Seg	Part 30	Swaps	Retail Forex	Adjusted Net Capital	ANC/ Client Margin
1	JP MORGAN SECURITIES LLC	14.31%	$ 71,819,570,602	$ 71,819,570,602	$ 42,239,417,619	$ 7,099,114,776	$ 22,481,038,207	$ -	$ 25,680,275,802	36%
2	GOLDMAN SACHS & CO LLC	28.26%	$ 141,849,229,225	$ 70,029,658,623	$ 37,914,191,432	$ 11,268,473,155	$ 20,846,994,036	$ -	$ 22,793,076,376	33%
3	MORGAN STANLEY & CO LLC	41.21%	$ 206,863,482,203	$ 65,014,252,978	$ 27,986,473,938	$ 9,083,074,369	$ 27,944,704,671	$ -	$ 17,916,269,146	28%
4	CITIGROUP GLOBAL MARKETS INC	52.52%	$ 263,624,901,019	$ 56,761,418,816	$ 18,546,434,622	$ 5,314,171,276	$ 32,900,812,918	$ -	$ 16,389,514,625	29%
5	BOFA SECURITIES INC	62.75%	$ 314,978,974,464	$ 51,354,073,445	$ 29,094,540,741	$ 5,245,136,322	$ 17,014,396,382	$ -	$ 19,915,978,956	39%
6	BARCLAYS CAPITAL INC	69.28%	$ 347,759,973,912	$ 32,780,999,448	$ 14,814,343,300	$ 4,044,149,001	$ 13,922,507,147	$ -	$ 5,938,402,207	18%
7	SG AMERICAS SECURITIES LLC	74.64%	$ 374,629,631,550	$ 26,869,657,638	$ 18,389,880,754	$ 7,354,373,425	$ 1,125,403,459	$ -	$ 5,171,903,575	19%
8	WELLS FARGO SECURITIES LLC	78.75%	$ 395,287,643,383	$ 20,658,011,833	$ 5,690,208,935	$ 628,086,192	$ 14,339,716,706	$ -	$ 9,762,659,549	47%
9	MIZUHO SECURITIES USA LLC	80.97%	$ 406,403,690,178	$ 11,116,046,795	$ 9,571,046,500	$ 1,545,000,295	$ -	$ -	$ 1,123,253,420	10%
10	UBS SECURITIES LLC	82.91%	$ 416,151,083,281	$ 9,747,393,103	$ 5,992,375,843	$ 1,898,860,671	$ 1,856,156,589	$ -	$ 4,988,802,041	51%
11	BNP PARIBAS SECURITIES CORP	84.79%	$ 425,575,698,317	$ 9,424,615,036	$ 5,696,568,340	$ 804,182,206	$ 2,923,864,490	$ -	$ 2,112,551,478	22%
12	ADM INVESTOR SERVICES INC	86.49%	$ 434,120,471,555	$ 8,544,773,238	$ 8,081,518,724	$ 463,254,514	$ -	$ -	$ 562,810,342	7%
13	INTERACTIVE BROKERS LLC	88.02%	$ 441,805,209,763	$ 7,684,738,208	$ 6,986,541,808	$ 664,893,437	$ -	$ 33,302,963	$ 6,854,617,769	89%
14	HSBC SECURITIES USA INC	89.40%	$ 448,703,969,582	$ 6,898,759,819	$ 4,359,018,812	$ 172,573,038	$ 2,367,167,969	$ -	$ 1,103,748,902	16%
15	RJ OBRIEN ASSOCIATES LLC	90.64%	$ 454,961,316,768	$ 6,257,347,186	$ 5,975,441,616	$ 281,905,570	$ -	$ -	$ 321,802,422	5%
16	STONEX FINANCIAL INC	91.84%	$ 460,982,170,212	$ 6,020,853,444	$ 5,812,152,440	$ 208,701,004	$ -	$ -	$ 353,843,666	6%
17	WEDBUSH SECURITIES INC	92.94%	$ 466,475,463,344	$ 5,493,293,132	$ 5,451,747,755	$ 41,545,377	$ -	$ -	$ 259,582,781	5%
18	RBC CAPITAL MARKETS LLC	93.95%	$ 471,576,464,313	$ 5,101,000,969	$ 3,160,878,248	$ 210,091,260	$ 1,730,031,461	$ -	$ 2,156,446,028	42%
19	MACQUARIE FUTURES USA LLC	94.78%	$ 475,723,151,712	$ 4,146,687,399	$ 4,045,073,176	$ 101,614,223	$ -	$ -	$ 601,519,430	15%
20	MAREX CAPITAL MARKETS INC	95.60%	$ 479,853,668,684	$ 4,130,516,972	$ 4,055,103,316	$ 75,413,656	$ -	$ -	$ 310,448,203	8%
21	MAREX NORTH AMERICA LLC	96.32%	$ 483,478,605,314	$ 3,624,936,630	$ 3,475,297,191	$ 149,639,439	$ -	$ -	$ 244,118,174	7%
22	ABN AMRO CLEARING USA LLC	97.04%	$ 487,084,453,370	$ 3,605,848,056	$ 3,482,533,401	$ 123,314,655	$ -	$ -	$ 702,572,910	19%
23	DEUTSCHE BANK SECURITIES INC	97.61%	$ 489,942,216,975	$ 2,857,763,605	$ 2,055,599,770	$ 802,163,835	$ -	$ -	$ 4,948,755,942	173%
24	MERRILL LYNCH PROFESSIONAL CLEARING CORP	98.12%	$ 492,504,456,814	$ 2,562,239,839	$ 2,562,239,839	$ -	$ -	$ -	$ 7,200,479,369	281%
25	SANTANDER US CAPITAL MARKETS LLC	98.62%	$ 494,986,157,679	$ 2,481,700,865	$ 2,481,700,865	$ -	$ -	$ -	$ 468,002,091	19%
	Total across all FCMs : May 2023			$ 501,929,251,475	$ 284,161,795,927	$ 57,786,358,044	$ 159,453,127,197	$ 527,970,307		

<u>Funds in Separate Cleared Swap Segregation:</u> This represents the total amount of money, securities, and property held in cleared swap customer accounts for cleared swap customers in compliance with Section 4d(f) of the Commodity Exchange Act.



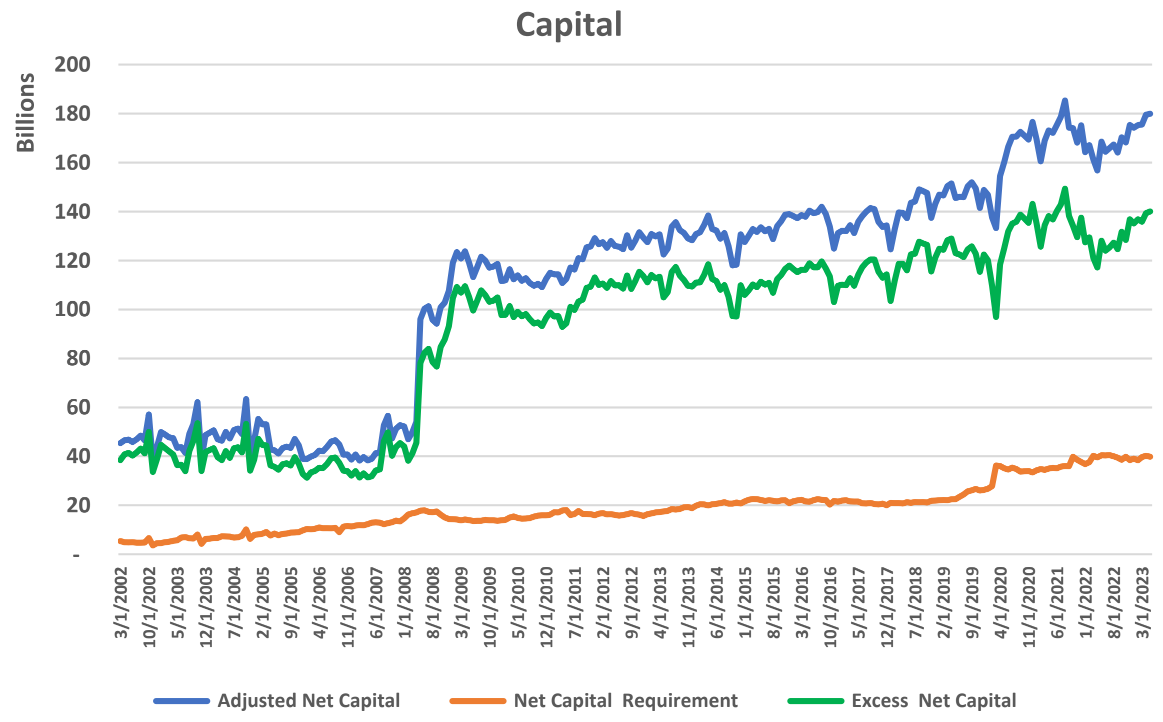
Rank in the size of Swap Margin	May-23	Dec-22	Dec-21	Dec-20	Dec-19	Dec-18	Dec-15	Jan-14
Citigroup Global Markets Inc.	1	1	1	1	1	1	3	3
Morgan Stanley & Co LLC	2	2	2	2	2	2	2	5
JP Morgan Securities LLC	3	3	3	3	3	3	4	4
Goldman Sachs & Co LLC	4	4	4	6	8	7	8	6
BOFA Securities Inc	5	5	6	7	6	6	7	8
Wells Fargo Securities LLC	6	7	5	4	5	5	5	9
Barclays Capital Inc	7	6	7	8	7	8	6	1
BNP Paribas Securities Corp	8	8	9	9	9	10	12	13
HSBC Securities USA Inc	9	10	11	10	10	9	11	15
UBS Securities LLC	10	12	13	12	11	11	10	10

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total number of FCMs	23	20	20	19	19	20	21	18	18	17
ADM Investor Services Inc	x	x	x	x	x	x	x	x	x	x
Barclays Capital Inc	x	x	x	x	x	x	x	x	x	x
BNP Paribas Securities Corp	x	x	x	x	x	x	x	x	x	x
BNYMellon Clearing LLC	x									
BOCI Commoties & Futures USA LLC	x	x	x	x	x	x	x			
BOFA Securities Inc (previously Merrill Lynch)	x	x	x	x	x	x	x	x	x	x
CHS Hedging LLC	x	x	x	x	x	x	x	x	x	x
Citigroup Global Markets Inc	x	x	x	x	x	x	x	x	x	x
Credit Suisse Securities USA LLC	x	x	x	x	x	x	x	x	x	x
Deutsche Bank Securities Inc	x	x	x							
E D & F Man Capital Markets Inc		x	x	x	x	x	x			
Goldman Sachs & Co LLC	x	x	x	x	x	x	x	x	x	x
HSBC Securities USA Inc	x	x	x	x	x	x	x	x	x	x
INTL FCStone Financial inc						x	x			
Jeffries LLC	x									
JP Morgan Securities LLC	x	x	x	x	x	x	x	x	x	x
Macquarie Futures USA LLC	x	x	x	x	x	x	x	x	x	x
Mizuho Securities USA LLC	x	x	x	x	x	x	x	x	x	x
Morgan Stanley & Co LLC	x	x	x	x	x	x	x	x	x	x
NewEdge USA LLC	x									
Nomura Securities Intl Inc	x									
RBC Capital Markets LLC		x	x	x	x	x	x	x	x	x
RBS Securities Inc	x									
SG Americas Securities LLC		x	x	x	x	x	x	x	x	x
State Street Global Markets LLC	x									
Stonex Financial Inc							x	x	x	
UBS Securities LLC	x	x	x	x	x	x	x	x	x	x
Wells Fargo Securities LLC	x	x	x	x	x	x	x	x	x	x

Concentration of Swap Margin	May-23	Dec-22	Dec-21	Dec-20	Dec-19	Dec-18	Dec-15	Jan-14
Top 1	20%	21%	21%	23%	26%	27%	18%	18%
Top 2	37%	38%	39%	40%	43%	42%	33%	34%
Top 3	52%	52%	51%	54%	57%	56%	45%	49%
Top 4	65%	64%	62%	64%	67%	67%	57%	60%
Top 5	75%	75%	72%	73%	76%	75%	66%	71%
Top 6	84%	84%	81%	81%	83%	82%	74%	80%
Top 7	93%	93%	89%	89%	90%	89%	83%	85%
Top 8	95%	95%	94%	95%	96%	96%	89%	89%
Top 9	97%	97%	96%	97%	97%	97%	92%	92%
Top 10	98%	98%	97%	98%	98%	98%	94%	95%
Top 10 Margin ($bn)	**162**	**155**	**147**	**144**	**121**	**95**	**58**	**29**
Total Margin in Cleared Swap Segregation	**166**	**158**	**151**	**148**	**124**	**97**	**61**	**31**

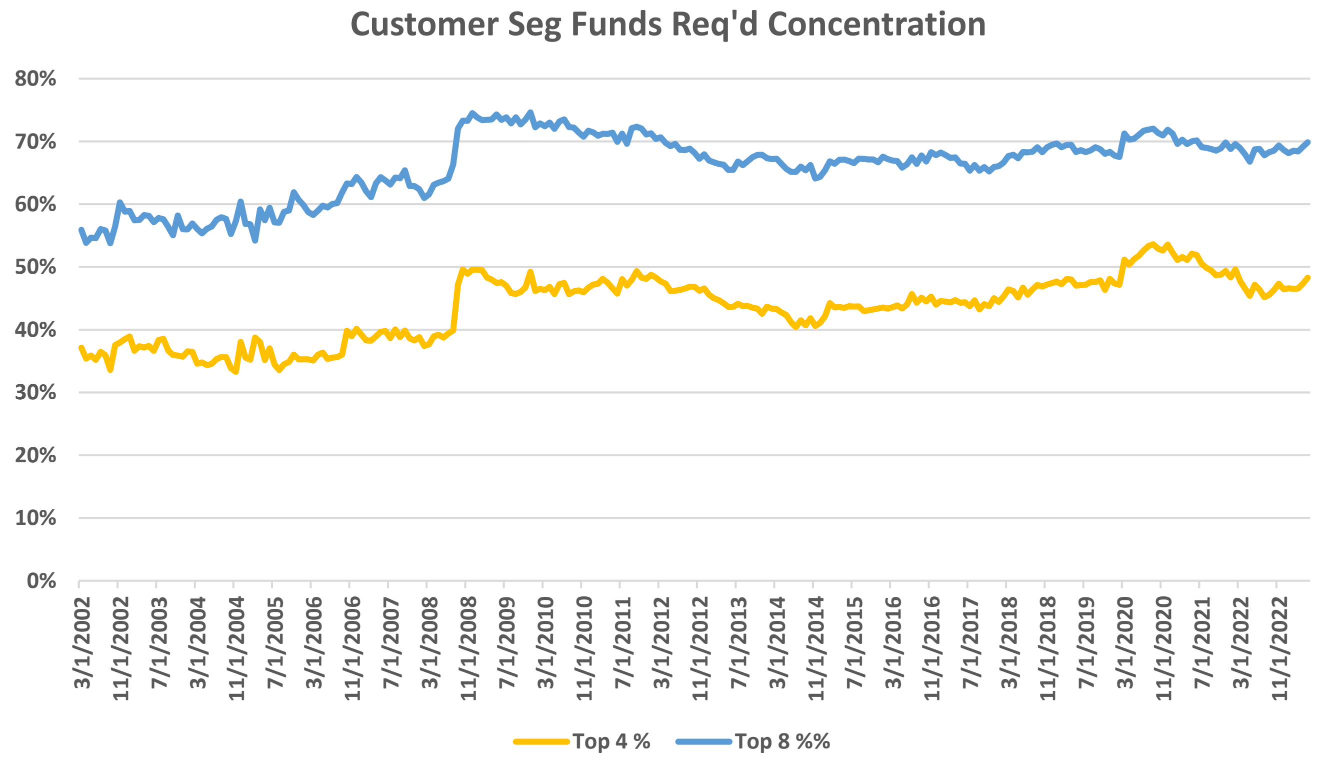
CFTC

Excess Net Capital



As a whole, the remaining FCMs are well-capitalized and most hold significant excess capital relative to CFTC minimum requirements, with the FCM-BDs and the bank-affiliated FCMs holding significantly greater levels of excess capital than independent FCMs, primarily due to the fact that, they need to adhere to other more stringent regulatory or jurisdictional capital requirements.

Concentration



FCM Failures and Regulatory Consequences

A number of notable FCM bankruptcies, some of which led the CFTC to add regulations intended to increase protections for customer funds.

- Two of the more notable failures that did not entail customer seg fund violations represent failures of significantly large FCMs resulted in all customer accounts being successfully liquidated and/or transferred to other FCMs
  - **Refco,** which petitioned for protection under Chapter 11 in October 2005, was the subject of fraudulent behavior and related-party transactions by its CEO. Upon its failure, the majority of firm's FCM business was sold to Man Financial
  - **Lehman Brothers,** a large FCM-BD, filed for Chapter 7 bankruptcy in September 2008 following the failure of its parent holding company due to losses related to investments in subprime mortgages. Lehman's customer funds and futures positions were quickly returned to customers or transferred to Barclay Capital and other firms
- **Three notable FCM failures involving customer seg fund violations**
  - **Sentinel Management Group Inc.** petitioned for protection under Chapter 11 in August 2007. Sentinel was a registered FCM-BD that engaged in a number of fraudulent activities including commingling customer funds with its own proprietary funds and using client funds to collateralize a line of credit. According to estimates reported by the NFA, Sentinel's customer losses were over $130 million.
  - **MF Global** became the 8th largest U.S. firm to file for bankruptcy when it filed for protection under Chapter 11 in October 2011. MF Global was formerly Man Financial (the same FCM that acquired the customer accounts of Refco following its failure in 2005). In 2007, the Man Group spun off Man Financial and changed its name to MF Global. MF Global's new CEO decided to seek additional channels of revenues for the firm through proprietary trading. Part of this strategy included making investments in European sovereign debt involving repurchase agreements, which by 2011 exceeded $6 billion. It was subsequently discovered that approximately $1 billion in customer funds had been improperly transferred to meet losses on these investments. As a result of recoveries in the bankruptcy process and payouts in other legal settlements, the total recoveries in MF Global as of August 2013 were 96% for seg fund customers (leaving a $205 million shortfall), and to 90% for Part 30 customers (or a $100 million shortfall). There were reports that MF Global customers ultimately received all funds back. The collapse of MF Global may have also affected the level of industry customer funds as anecdotal evidence suggests that customers became more reluctant to leave excess funds in their accounts and to regularly sweep back excess funds beyond those directly needed to support margin requirements. Following the collapse of MF Global the amount of excess funds left in customer accounts had been cut in half.
  - **Peregrine Financial Group** filed for bankruptcy on July 10, 2012, on the same date that the CFTC filed an injunction against the firm. It was discovered that the firm's CEO had embezzled customer funds for several years and had submitted false statements to the CFTC and auditors at the NFA to cover up his actions. It is estimated that Peregrine customers ultimately experienced a shortfall of about $200 million or 50% of customer seg funds.

In response to the above events, the CFTC took initiatives to provide additional protections for customer funds.
- In 2011, the CFTC approved final rules amending Rule 1.25 (effective February 17, 2012) to restrict FCMs from investing customer funds in foreign sovereign debt.
- On October 30, 2013, the CFTC approved final rules (effective January 13, 2014) to require FCMs to maintain residual interest balances in any customer seg fund, secured fund, or cleared swap accounts that they hold.
- These rules also imposed requirements on FCMs to file daily segregation reports with the CFTC and their DSROs and required FCMs to establish risk management programs to oversee the protection of customer accounts.

Changes to Permissible Investments, Residual Interest, Retail Forex

Permissible Investments

- FCMs are subject to risk-related restrictions on the set of instruments in which they may invest excess customer funds, which are covered by CFTC Rule 1.25.
- Several changes in this rule occurred over our study period.
  - In December 2000, rule amendments expanded permitted investments to include general obligations of any enterprise sponsored by the U.S. government, sovereign debt, bank CDs, commercial paper, money market mutual funds, and some corporate notes. At the same time, the CFTC added provisions to limit exposures to the credit, liquidity and market risks of these products.
  - In 2004 the CFTC amended Rule 1.25 to allow repurchase agreements.
  - Further amendments in 2005 allowed investments in eligible instruments having embedded derivative features and in adjustable-rate securities tied to benchmark rates on a variety of previously approved instruments.
  - In December 2011, in response to the financial crisis and in reaction to the failure of MF Global, the CFTC approved amendments (effective February 2012), which tightened the list of eligible investments. Of note was the removal of corporate debt whose interest and principal payment obligations were not guaranteed by the U.S. government (which essentially eliminated most corporate debt), the prohibition of investments in foreign sovereign debt, the elimination of in-house and affiliate transactions such as those involving repurchase agreements, and limitations place on investments in money market mutual funds. The CFTC also harmonized the list of eligible investments for the investment of Rule 30.7 secured funds to match those in Rule 1.25 for segregated funds. Prior to 2012, secured funds were not technically subject to Rule 1.25, but the CFTC reminded FCMs of their fiduciary duty and to use Rule 1.25 as guidance. Losses from investments in sovereign debt was one cause for the MF Global collapse as it had invested approximately $6 billion in repurchase agreements involving the debt of countries including Ireland, Italy, Spain, and Portugal.

Residual Interest

- Each day an FCM must determine a customer's open trade equity and current margin requirements to ensure that the customer has sufficient funds. If there is a deficit, the customer must rectify it. Further, if the FCM determines that there is an aggregate net shortage in its customers' funds, the FCM must report this immediately to the CFTC and to its designated self-regulatory organization (DSRO). To avoid the regulatory consequences of becoming underfunded or "under-seg," FCMs will establish a buffer by depositing some of their own house funds into their customer accounts, with such funds referred to as "residual interest."
- The use of residual interest to avoid becoming under-seg is important as violations are viewed seriously by regulators.
- To illustrate, for the three days January 24–26, 2012, Cantor Fitzgerald & Co, a large FCM, became under-seg due to an inadvertent transfer of funds from their customers' segregated account, rather than the intended house account. This error was discovered upon the return of the responsible operations employee who had been out of the office. Though the firm quickly returned into compliance, the firm failed to report the event to either the CFTC or the Chicago Mercantile Exchange (its DSRO) until March 13, 2012, when the event was discovered during a routine CME audit. As a result, Cantor was fined $700,000 for failing to maintain sufficient funds in its segregated accounts and for not reporting the violation in a timely manner.
- In March 2013, the CFTC amended its Rule 1.22 to mandate that FCMs maintain residual interest in amounts equal or greater to the customers' aggregated under-margined amounts.

Retail Forex

- In 2000, Congress passed the Commodity Futures Modernization Act (CFMA), which attempted to bring clarity to the regulation of retail forex. Specifically, the CFMA required retail forex trades to be conducted through a regulated entity such as a financial institution, BD, insurance company, financial or investment bank holding company, or, importantly, an FCM.
  - Consequently, many previously unregulated entities that wished to participate as counterparties in retail forex trading then registered as FCMs due to their relatively low capital requirement, which at the time was only $250,000. These firms were often referred to as "shell" FCMs as they were registered as FCMs, but did not hold any customer segregated funds.
  - In 2008 Congress passed the CFTC Reauthorization Act that gave the CFTC jurisdiction over retail forex and created a new category of registrants—the retail foreign exchange dealer (RFED). Importantly, this Act established a minimum capital requirement of $20 million for RFEDs and FCMs offering retail forex contracts. This became effective on October 18, 2010. While some retail forex dealers complied with the new regulation and met the $20 million capital requirement, many others either closed their business or moved their operations offshore.

Changes to FCM Capital Requirements

❑ CFTC Rule 1.17

August 2004

Greater of
- (i) $250,000
- (ii) 4% of total funds required to be segregated or secured
- (iii) For BD FCMs, the amount of net capital requirement under SEC Rule 15c3-1(a)

September 2004

Greater of
- (i) $250,000
- (ii) 8% of total risk margin of customer accounts plus 4% of non-customer accounts
- (iii) For BD FCMs, the amount of net capital requirement under SEC Rule 15c3-1(a)

2009 - Present

Greater of
- (i) $1,000,000
- (ii) 8% of total risk margin of customer accounts plus non-customer accounts, including cleared swap positions
- (iii) For BD FCMs, the amount of net capital requirement under SEC Rule 15c3-1(a)

October 2010

RFED

- CFTC Reauthorization Act that gave CFTC jurisdiction over retail forex
- Minimum Capital Requirement of $20 million for Retail Foreign Exchange Dealers (RFED)

December 2016

SD

- CFTC Proposed rules that raised the minimum to $20 million for FCMs also registered as swap dealers

Capital is a driver of internal caps on clearing members' capacity to offer clearing for clients.

- ❑ Binding Constraints on clearing capacity through capital requirements
- ❑ Bank-affiliated FCMs are subject to significantly higher capital post 2008 (SLR, GSIB, SA-CCR etc.) even pre-Basel III Endgame Proposal

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COMMODITY FUTURES TRADING COMMISSION

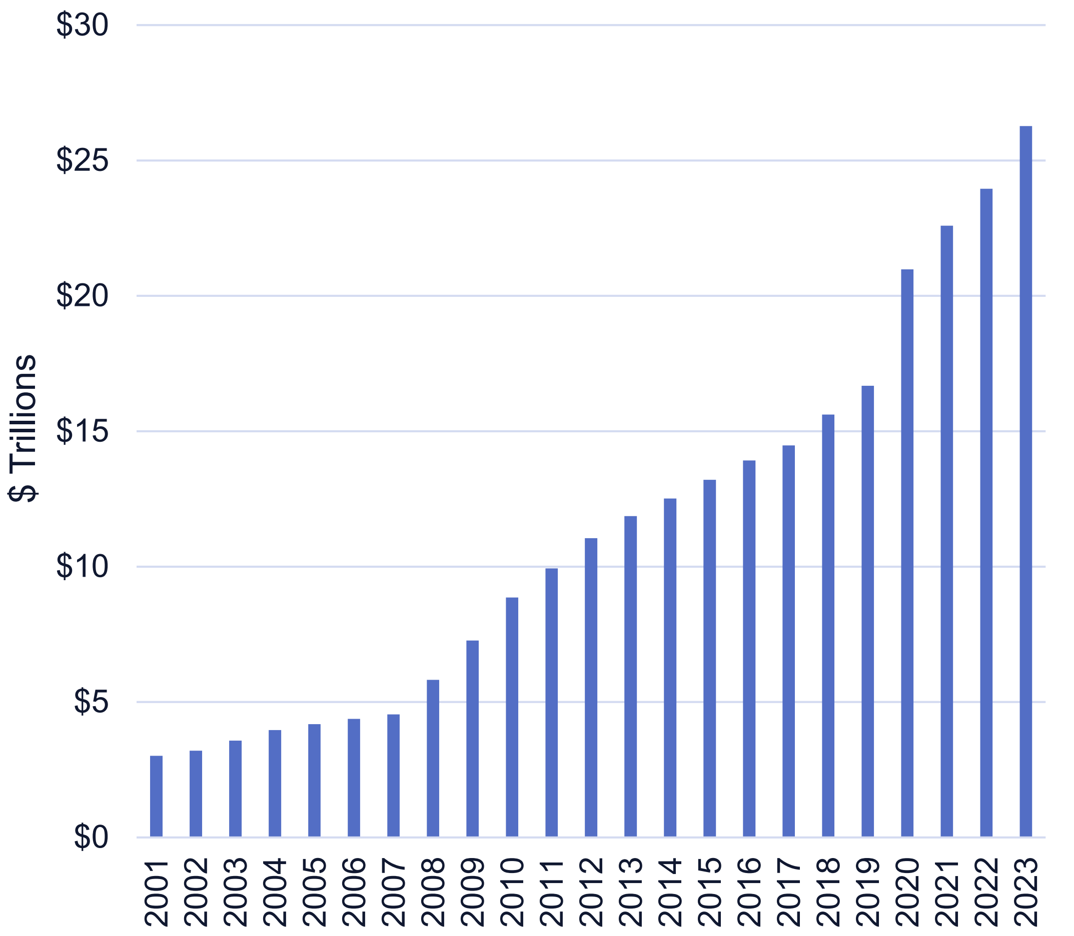
Section Three—Market Structure, Panel Two
Treasury Market Reform

State of the U.S. Treasury Markets

Treasury markets are the bedrock of our global financial system.

- The U.S. Treasury markets are the largest and most liquid government bond markets in the world.
- Since 2000, the supply of Treasuries has grown significantly to support the expanding U.S government debt.
- It is critical to understand the potential consequences of significant modifications to markets.

Size of U.S. Treasury Markets, By Year



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Diversity of Market Participants is Key

Preserving robust participation by a diverse group of market participants is essential. It ensures that demand keeps up with supply and that government funding costs are kept as low as possible as debt continues to expand.

Treasury market participants include:

- Foreign entities
- Mutual funds
- Depository institutions
- State & local governments
- Hedge funds
- Private & public pensions
- Insurance companies
- U.S. savings bonds

Role of the Basis Trade in U.S. Treasury Markets

- Many investors—such as mutual funds and pension funds—rely on Treasury futures as an efficient way to manage risk while maximizing their allocation to other higher-yielding assets, such as corporate bonds.
- Hedge funds and other market participants engage in a “basis trade" when there is a price dislocation between Treasury futures and the underlying cash Treasuries.

Benefits of the basis trade include:

- Increasing liquidity;
- Dampening volatility;
- Reducing bid-ask spreads; and
- Lowering the cost of government borrowing.

Collateralization of the Basis Trade

- The price differences are small, so hedge funds often use leverage to make the trade economically viable. Collateral posted in connection with the basis trade includes both margin posted on the futures leg of the trade and any haircuts on the repo transaction to finance the cash leg of the trade.
  - The futures leg is over-collateralized. CME margins the short futures position as an outright directional position and does not account for the underlying cash Treasury being held against it.
  - Low haircuts for repo financing are due to master netting agreements where a dealer/prime broker recognizes that its client has a netted package of a Treasury future and a cash Treasury.

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Risk Management Practices Already Limit Leverage

- Counterparty banks—through their own risk management protocols—determine margin requirements on hedge fund financing arrangements.
- Bank regulators work with banks to ensure appropriate counterparty and collateral risk management.
- The Federal Reserve noted that imposing additional limits could have negative impacts on Treasury markets.

> *"[Most] funds already satisfy the collateral requirement and, in our analysis, do not need additional capital to support existing borrowing… [Imposing leverage limits] may affect the size and volatility of spreads among related instruments in Treasury cash and derivatives markets, as well as market liquidity conditions in those markets."* – U.S. Federal Reserve

Treasury Market Oversight & Transparency

- Regulators have significant oversight of Treasury markets:
  - Cash transactions reported to FINRA through TRACE;
  - Treasury Futures are subject to CFTC regulation;
  - Centrally cleared repo data is collected by OFR; and
  - Non-centrally cleared tri-party repo market data is collected by BONY under the supervisory authority of the Federal Reserve Board.
- Hedge fund managers provide data and information to the SEC about the fund, their investments, and use of leverage through Form PF.

Recent Proposals Risk Harming Markets & Investors

- *Dealer Proposal*: The SEC's proposal to expand the scope of who is a "dealer" to capture a large number of private funds and their advisers that are already subject to SEC registration, examination, and reporting requirements. Many private funds will be forced to curtail their participation in the U.S. Treasury markets.
- *Treasury Clearing Proposal*: The SEC's proposal to mandate clearing in the U.S. Treasury markets before the necessary infrastructure is developed would be counterproductive. In addition, the proposal singles out hedge funds for a cash clearing mandate, which risks limiting their participation in the U.S. Treasury markets.

Enhancing Treasury Markets

- Treasury markets are expected to continue growing, so it is important to modernize these markets to meet evolving market dynamics. Potential enhancements include:
    - Improving data collection through TRACE;
    - Expanding the use of voluntary central clearing in the dealer-to-customer segment;
    - Requiring clearing members of FICC to accept “done away” trades;
    - Providing for segregation of customer margin at FICC; and
    - Introducing cross-margining for end-users for Treasury futures and cash Treasury transactions.

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Section Three—Market Structure, Panel Three
Block Implementation Rule

Block Trade Analysis

- Questions intended to define two distinct data population sets to study and understand the scale of the number of market participants

  1. Would it be appropriate to define the two data sets and focus the analysis on two representative items as these have the largest data population sets- are those two instruments 10yr USD IRS and 5yr CDX in your data set?
  2. If we look at 2022 full year data, how many unique Swap Dealers (SDs) and unique non-SDs were part of the population of the two instruments in question 1?

Block Trade Analysis

- Questions intended to determine the scale and concentration of the number of block participants and their trading needs
  3. How many unique SDs reported block trades for each of those two data sets?
  4. If you look at the % of number of block vs total trades for each SD reporting block trades, how many fall in each category: Less than 25%, 25-50%, 50-75% and greater than 75%
  5. How many unique non-SDs executed block trades?
  6. If you look at the % of number of block vs total trades for each non-SD reporting block trades, how many fall in each category: Less than 25%, 25-50%, 50-75% and greater than 75%

Block Trade Analysis

- Question on recalibration of swap data to check relevance/materiality of difference between block sizes being used by the market presently versus what the data under the 67% and 75% calculation rules would impose

7. If the 67% calculation method is applied to full 2022 data, what is the computed block threshold [A mm]?

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Block Trade Analysis

- Questions on recalibration of the scale and concentration of the number of block participants and their trading needs if the new block sizes were to be used

8. If the 75% calculation method is applied to the full 2022 data, what is the computed block threshold [B mm]?
9. If the A mm and B mm block numbers are applied to the 2022 data, how would the answers to questions 3-6 change?
   3. How many unique SDs reported block trades for each of those two data sets?
   4. If you look at the % of number of block vs total trades for each SD reporting block trades, how many fall in each category: Less than 25%, 25-50%, 50-75% and greater than 75%How many unique non-SDs executed block trades?
   5. How many unique non-SDs executed block trades?
   6. If you look at the % of number of block vs total trades for each non-SD reporting block trades, how many fall in each category: Less than 25%, 25-50%, 50-75% and greater than 75%

Block Trade Analysis

- Questions designed to identify how trading profile and reliance of block trading changes in volatile market conditions and lack of liquidity (first 3 months of global lockdown during COVID-19 pandemic)

10. During the period Q2 2020, if the 67% [A mm] and 75% [B mm] calculation methods are applied, what would be the calculated block size?
11. During the period Q2 2020, what are the answers to questions 3-6?
    3. How many unique SDs reported block trades for each of those two data sets?
    4. If you look at the % of number of block vs total trades for each SD reporting block trades, how many fall in each category: Less than 25%, 25-50%, 50-75% and greater than 75%How many unique non-SDs executed block trades?
    5. How many unique non-SDs executed block trades?
    6. If you look at the % of number of block vs total trades for each non-SD reporting block trades, how many fall in each category: Less than 25%, 25-50%, 50-75% and greater than 75%

Block Trade Analysis

- Question designed to compute SOFR block size and compare to LIBOR block size

12. Based on 2023 YTD (end October 2023) SOFR swap data, what would the imputed block size for 5yr and 10yr SOFR swap be under 67% and 75% calculation methods compared to the answers to questions 7-8?
    7. If the 67% calculation method is applied to full 2022 data, what is the computed block threshold [A mm]?
    8. If the 75% calculation method is applied to the full 2022 data, what is the computed block threshold [B mm]?

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Section Three—Market Structure, Panel Four
Post-Trade Risk Reduction

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Section Four—Climate Related Market Risk

Kerstin Mathias, Director of Policy and Innovation, City of London Corporation

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Section Five—Future of Finance

Jai Massari, Co-Founder and Chief Legal Officer, Lightspark

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Closing Remarks

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Adjournment