



SIFMA ASSET MANAGEMENT GROUP

CCP Evaluation Framework

AMG Counterparty Risk Forum

BACKGROUND

The AMG Counterparty Risk Forum is made up of a diverse set of asset managers who discuss counterparty-risk related topics and collaborate on initiatives of common interest. A primary focus of the Forum has been to better understand the counterparty risks associated with central clearing - including the risks with facing central counterparty (CCP) clearinghouses and how these risks are managed.

As we began exploring this topic, we learned that many Forum members were building or enhancing their CCP risk management practices as their centrally cleared volumes have grown and their fiduciary standards have risen. However, other Forum members had the desire, but lacked the resources and/or expertise to pursue similar endeavors. We also found that CCP-related data, analytics, and disclosures lacked in availability and quality - presenting challenges to building a robust CCP evaluation process that is equivalent to what many maintain for bank counterparties.

The Forum agreed that meaningful opportunities exist to improve the status quo and as a result, established a working group to achieve 3 primary goals:

1. Facilitate member engagement and educational opportunities on central clearing risks;
2. Develop asset manager best practices for central clearing risk management; and
3. Increase and facilitate member participation in CCP, industry and regulator discussions to advance information disclosure practices and improve market standards.

For asset managers who have material exposure in centrally cleared derivatives, the Forum agreed that these risks should be considered in a comprehensive counterparty risk management framework. Therefore, we are sharing our initial version of a CCP evaluation criterion that can be used by AMG members as a tool in their efforts. As we continue to pursue the aforementioned goals, we expect our recommended best practices and this document will evolve.

ESTABLISHING BEST PRACTICES

Over the course of a year, the Forum's CCP Counterparty Risk Working Group travelled the country to meet with CCPs, conducted research and analysis on CCP disclosures, and contributed their own risk management expertise to develop meaningful CCP evaluation criteria and recommendations for improved CCP information disclosure standards.

Through our efforts, we identified the following focus areas and topics to be most relevant for asset manager CCP evaluations:

 <p>Organization Profile</p>	 <p>Governance and Oversight</p>
<ul style="list-style-type: none"> • Business lines and structure • Market presence • Corporate financial resources • Country risk 	<ul style="list-style-type: none"> • Business leadership • Board and committees • Compliance and audit • Regulatory
 <p>Investment Risk</p>	 <p>Counterparty Credit Risk</p>
<ul style="list-style-type: none"> • Policy overview • Roles/responsibilities • Vehicles, attribution, liquidity • Investment loss allocation 	<ul style="list-style-type: none"> • Membership criteria and approval • Governance and decision-making • Monitoring and risk mitigation tools • Membership attribution, account structures
 <p>Operational resilience</p>	 <p>Liquidity and collateral</p>
<ul style="list-style-type: none"> • Operational risk management • Third-party vendors • InfoSec and Cyber Risk • Business Recovery Plan 	<ul style="list-style-type: none"> • Policy overview, market stress response tools • Roles/responsibilities • Prefunded default resources • Financial resources for non-default losses
 <p>Financial Resources</p>	 <p>Recovery, Resolution</p>
<ul style="list-style-type: none"> • Margin Methodology • Model oversight and back-testing • Default waterfall • Assessment powers, replenishment rights 	<ul style="list-style-type: none"> • Process, plans, rulebook • Regulatory, resolution authority • Member, end-user rights • Portability, loss allocation

The following resources are most helpful to learn about these concepts and to acquire CCP-specific information:

- Principles in Financial Market Infrastructures (PFMIs) qualitative and quantitative disclosures
- CCP whitepapers and risk management overview materials
- CCP industry engagements, including webinars and conference calls
- Industry body (SIFMA, FIA, CCP12) websites and disclosures

The appendix contains a more detailed collection of CCP evaluation criteria – topics, data points, and questions to consider – along with explanations as to why they are important. This matrix is a point-in-time and not all-inclusive, but we believe can be used as a foundation for prudent CCP evaluations.

We also recommend that asset managers partner with their inhouse experts – lawyers, cyber-security, vendor risk, trading and clearing operations – to delve into these topics and identify which risks are most relevant to the assets you manage.

We hope that this document is helpful in encouraging and aiding asset managers to become more aware of central clearing risks and begin to incorporate aspects within their counterparty risk management frameworks. We believe that as asset managers become more educated and engaged in these topics, we can collectively help improve market integrity and the protections for end-client assets.

Appendix

CCP Evaluation Criteria: Detail

This matrix is a point-in-time and not all-inclusive, but we believe can be used as a foundation for prudent CCP evaluations.

Focus Area	Sub focus Area	Evaluation Criteria	Why is the focus/sub-focus area important to CCP CP risk evaluation.	
Business and Corporate Profile	Organization	CCP Legal entity name	Identifying the CCP legal entity, and its parent and affiliates, is useful for general monitoring efforts and to gain an understanding of associated business risks, dependencies, and benefits. Understanding the CCPs markets of domicile and of operation helps monitor for macro risks and also determines the regulatory regimes it is subject to.	
		CCP Legal entity identifier (LEI)		
		Organizational chart (parent to the clearing service level)		
		Organizational chart (key affiliates)		
		Country(s) of domicile and operation		
	Ownership structure			
Market presence		Market Share	Assessing fundamental business activity volumes and experience, coupled with how the firm has evolved over time, provide a gauge for their market presence and expertise.	
		Open interest of contracts they clear		
		History and evolution		
Corporate financial resources		Credit ratings (CCP, parent)	Fundamental credit assessment of CCP organization and CCP entity to determine its financial viability and ability to cover clearing associated losses (e.g., non-default losses).	
		Fundamental credit analysis (CCP if available, parent)		
Country risk		Credit rating, operating environment of the countries/markets in which it operates.	Understanding of the business and regulatory environment the CCP operates will help gauge whether there are any unique challenges or risks faced by the CCP.	
Focus Area	Sub focus Area	Evaluation Criteria	Why is the focus/sub-focus area important to CCP CP risk evaluation.	
Governance and Oversight	Business leadership	Management (key people)	Assessing the experience and background of CCP (and parent) employees in key positions (e.g., C-suite) provides some insights on the quality of business leadership and decision-makers.	
	Board and committee structures	Make-up (internal/external, member overlap with other committees)	Understanding of board and committee structures and their role within the operation of the CCP is important to assess any related governance and business management risks.	
		Roles and responsibilities, decision-making authority		
		Interaction with business-lines, Board of Directors and other oversight committees		
	Compliance and audit		Internal compliance (role and responsibility)	CCP should have an internal compliance function to provide independent oversight and checks and balances to business operation. Generation of SOC1 (or equivalent) reports prepared by an external auditor for the CCP or its organization is a best practice for any
			Audit policies/procedures including SOC1	
Regulatory		Designations (systemically important, Qualified CCP)	SIFMU status places an entity under enhanced regulatory oversight by the Federal Reserve Board, SEC, and CFTC, which brings a sense of security to market participants. For a CCP to be considered a QCCP, the CCP must make available or calculate required data for the purposes of calculating the capital requirements for default fund exposures	
		Primary regulators	Regulatory compliance/infractions monitoring is an important gauge of the integrity of the CCPs business operation, decision-making, and controls/oversight.	
		Regulatory history/infraction		
Focus Area	Sub focus Area	Evaluation Criteria	Why is the focus/sub-focus area important to CCP CP risk evaluation.	
	Policy overview	Briefly describe the investment policy/process implemented at the CCP	Baseline understanding of the CCP's investment policy and practices approach. Proper description would include items such as: - roles and responsibilities; - applicable regulation; - investible universe (e.g., IM, GF, cash) - types of investments (instruments,risk characteristics); - risk management (e.g., stress testing, oversight, controls)	
	Investment policy availability	Investment risk policy and practices are subject to regulatory requirements (Yes, list regulator and rules reference / No)	Baseline understanding of what the CCP's regulatory requirements are and the level of disclosure/transparency, rules on policy details.	
		CCP has an investment policy (Yes / No)		
		CCP investment policy is publicly disclosed (Yes/No)		
		CCP investment policy description is publicly disclosed (Yes/No)		
		CCP investment policy elements are included in the clearinghouse rulebook (Yes/No)		
Roles/responsibilities		List the department/committee/individual roles at the CCP that is ultimately responsible for the investment policy	Baseline understanding of roles and responsibilities related to investment policy - ensure there's board/committee level oversight.	
		List the department/committee/individual roles at the CCP that makes day to day investment decisions		
		List the department/committee/individual roles at the CCP that performs day-to-day investments oversight		

	Sub focus Area	Evaluation Criteria	Why is the focus/sub-focus area important to CCP CP risk evaluation.
Investment Risk	Investment policy attributes	List the assets (e.g., CCP own capital, guarantee fund, initial margin, other) that are subject to the investment policy	Understanding the size and scope of their investment activities to determine what's at risk if something were to occur and whether client assets (e.g., IM) is exposed.
		Quantify the amount of assets subject to the investment policy, in US dollar terms and as a percentage of prefunded resources	
		List the types of investment vehicles allowable under the investment policy, including any limits.	Understanding the risk profile of their investment strategy.
		Quantify the amount of assets invested in each allowable investment vehicle (US dollars)	
	Investment losses	Does the CCP pass on any investment (or custodial) related losses to FCMs? (Yes / No)	Understanding of who is responsible for any losses, how they will be covered, and whether there's a potential for them to be passed on to end-clients (indirectly) via FCMs.
		If yes, is the CCP's liability capped and if so, in what amount? (Yes, US dollar amount / No)	
		If yes, is the FCM's liability capped and if so, in what amount (Yes, US dollar amount / No)	
What financial resources (including insurance policies) does the CCP have available to cover investment-related losses. Does the CCP reserve capital to cover potential investment losses?			
Liquidity	How quickly can the CCPs investments be converted to cash (# of days)?	Understanding of baseline liquidity metrics to gauge whether they are situated to quickly respond to capital needs in the event of volatility or default.	
	How often is the liquidity of the investments analyzed / tested (# of days)?		
Custodians	Briefly describe the process to select and approve custodian banks.		
	List the custodian bank(s) utilized as part of the CCP's investment process.		
Focus Area	Sub focus Area	Evaluation Criteria	Why is the focus/sub-focus area important to CCP CP risk evaluation.
Counterparty Credit Risk	Counterparty evaluation	Counterparty evaluation process	The risk to a CCP is that one or more of its clearing members defaults with respect to their obligations to the CCP. A CCP is only as strong/safe as the quality of its membership. Accordingly, CCPs manage the counterparty risk associated with their clearing members via well-resourced credit risk teams, conservative membership criteria, initial and on-going credit worthiness and risk mitigating capabilities.
	Ongoing surveillance & monitoring	Member positions	A CCP needs to monitor intraday and overnight exposures against applicable limits. This is an important input in calculating margin requirements and tracking breaches or abnormal trading activity.
		Member Creditworthiness	CCPs need to review membership requirements and the creditworthiness of their members on a regular basis and take necessary action if a member fails to meet those requirements – for instance, through increasing margin, limiting positions, and suspending or terminating membership. Additionally, CCPs must set minimum requirements (particularly capital) at a sufficiently conservative level - this acts as a first line of defence against member defaults/breaches.
	Membership base	Membership Requirements	A CCP needs to have a transparent set of membership requirements. These membership requirements need to be designed to protect the CCP and clearing members from the risk other members pose to them. CCPs have a responsibility to monitor compliance with their membership requirements on an ongoing basis. Should a member stop complying with the membership requirements, the CCP needs to take steps to ensure it resumes compliance or else take action to protect the CCP and other clearing participants.
		Membership Composition & Concentration	Mutualization of risk in a CCP works best if done across many members. If membership of a CCP is too concentrated, liquidation via an auction is less likely to yield a good price. This is the case particularly if other clearing members have positions in the same direction as the defaulter. Concentration among a handful of large members can also pose problems with porting. If a large FCM defaults, there might be limited capacity to absorb healthy positions by the remaining members.
	Governance	Counterparty Credit Risk Organization	Baseline understanding of roles and responsibilities related to counterparty credit risk policy - ensure there's appropriate board/committee level oversight. Understand what involvement does the board/committee have in regards to CCRM. Also, it is important that the credit risk function is sufficiently autonomous to provide an independent risk assessment and assigning credit ratings.
	Risk Mitigation	Risk Mitigating Actions	CCPs need to review membership requirements and the creditworthiness of their members on a regular basis and take necessary action if a member fails to meet those requirements – for instance, through increasing margin, limiting positions, and suspending or terminating membership. Credit teams must publish regular credit notes/credit ratings and hold due diligence calls including on-site meetings. Members should also submit regular financial disclosure as an ongoing obligation. All of these will help the CCP identify early warning signals of credit concerns.

Focus Area	Sub focus Area	Evaluation Criteria	Why is the focus/sub-focus area important to CCP CP risk evaluation.
Operational resilience	Operational Risk	Operational Risk Policy	An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls.
		Operational Risk Governance	An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls.
		Operational Capacity	Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity.
		External Sources of Operational Risk, 4th Party Risk	An FMI should identify, monitor, and manage the risks that key participants, other FMIs, and service and utility providers might pose to its operations.
		# of Clearing Failures over the past 12 months, duration of failures	Transparency regarding operational stability regarding a CCP's key function in addition to its ability to restore operations upon failure
		Fraud Management	
	Technology system recovery	Recovery process for systems in the event of an unavoidable disaster?	CCPs with a SIFMU designation are required to abide by Regulation SCI, which is designed to reduce the occurrence of systems issues, improve resiliency when systems problems do occur, and enhance the Commission's oversight and enforcement of securities market technology infrastructure. Regulation SCI is for trading, clearance and settlement, order routing, market data, market regulation, and market surveillance.
		Existence of documented procedures in place for system recovery	
		Frequency of system recovery testing	
		Systems recovery turnaround times	
	Third-party Vendors	3rd party vendor risk management documentation	It imperative that CCP systems are running in all situations so transactions are placed in time.
	InfoSec and Cyber Risk	Existence of Red and Blue Teams	Cyber risk is a top threat in the industry and can lead to financial loss or business disruption. Companies are not overly transparent regarding their risk management approach, but some level of disclosure/due diligence is needed to gauge the relative risks.
		Robustness of Cyber Governance Program in terms of budget, staffing, relevant experience	
		3rd party dependencies & interconnections	
		Cyber threat escalation protocols	
Assessment of cyber security capabilities of vendors/FCMs in the CCP network			
Business Recovery Plan	Does the plan include backup of all computer files, offsite data storage, back-up files stored/locked, off-site operations facility, etc.	A business continuity plan is essential for any organization. Recommend that evaluation of BCP preparedness is done in consultation with your firm's 3rd party/Vendor Risk teams. However, understanding how critical CCP functions are considered within the BCP is important to understand what to expect in a crisis scenario, and how best to prepare from a CP risk perspective.	
	Is this recovery plan tested with participants? And if so, with what types of entities?		
	How does notification take place ?		
Focus Area	Sub focus Area	Evaluation Criteria	Why is the focus/sub-focus area important to CCP CP risk evaluation.
	Liquidity policy availability	Liquidity risk policy and practices are subject to regulatory requirements (Yes, list regulator and rules reference / No)	Baseline understanding of what the CCP's regulatory requirements are and the level of disclosure/transparency, rules on policy details.
		CCP has a liquidity policy (Yes / No)	
		CCP Liquidity policy is publicly disclosed (Yes/No)	
		CCP Liquidity policy description is publicly disclosed (Yes/No)	
Policy / framework overview	Briefly describe the liquidity policy/process implemented at the CCP	CCP Liquidity policy elements are included in the clearinghouse rulebook (Yes/No)	Baseline understanding of the CCP's investment policy and practices approach. Proper description would include items such as: - roles and responsibilities; - applicable regulation; - investible universe (e.g., IM, GF, cash - forms of committed/uncommitted liquidity resources available (including amts) - types of investments (instruments,risk characteristics); - risk management (e.g., stress testing, oversight, controls); satisfying liquidity needs in a BAU vs. default/crisis environment; risk factors considered in their program.
Roles/responsibilities		List the department/committee/individual roles at the CCP that is ultimately responsible for the liquidity policy	Baseline understanding of roles and responsibilities related to investment policy - ensure there's board/committee level oversight.
		List the department/committee/individual roles at the CCP that makes day to day liquidity decisions	
		List the department/committee/individual roles at the CCP that performs day-to-day liquidity oversight	

Focus Area	Sub focus Area	Evaluation Criteria	Why is the focus/sub-focus area important to CCP CP risk evaluation.
Liquidity and collateral	Prefunded resources - liquidity characteristics	Assets eligible as initial margin, and the respective haircuts applied	Understanding what assets are accepted by the CCP, their liquidity characteristics, how conservative of any approach the CCP takes, and how they are stress-tested (haircuts, etc) to help assess the liquidity of their prefunded resources.
		Assets Eligible for pre-funded participant contributions to the default resources, and the respective haircuts applied (if different from 5.1)	
		Results of testing haircuts	
	Assets assessment	Total Initial Margin Required	Understanding and quantifying the size and scope of their financial resources to determine what's at risk if something were to occur and whether client assets (e.g., IM) is exposed.
		Total IM Held - break out what instruments are held, pre and post haircut, and potentially by house vs. client assets (especially for further analysis)	
		Size and composition of qualifying liquid assets sources	
		Size and composition of supplementary liquid assets	
		Assessment of whether liquid assets availability or sufficient - based on modeled/stress test results and largest realized 1 day liquidity demand	
	Financial resources for NDLs - liquidity characteristics	Number of months of operating costs are covered by the financial resources maintained in the CCP's liquidity strategy.	To assess the financial resources available to cover non-default losses in the event of a business disruption, error, etc CFTC Reg 39.11 (a) requires a CCP to maintain resources to cover 1 year of operation costs. so this will help assess how the CCP complies with this rule (to the extent they are subject to it).
		Number of month of operating costs are covered by unencumbered liquid assets in the CCP's liquidity strategy.	Builds upon the preceding assessment but specific to CFTC and Reg 39.11 (e) which requires the same except 6 mos of operating costs in unencumbered liquid assets.
	Market stress response tools	Rulebook rules, and scenarios under which, add-ons to IM are allowed.	Assess the CCP's tools and ability to respond to an intraday event or market stress, to ensure they continue to maintain sufficient resources during a stressed market/crisis.
		Rulebook rules, and scenarios under which, add-ons to the guarantee fund are allowed.	
Rulebook rules, and scenarios under which, intraday margin calls are allowed.			
Number of times initial margin is called per day.			
Focus Area	Sub focus Area	Evaluation Criteria	Why is the focus/sub-focus area important to CCP CP risk evaluation.
IM Model Risk	Model Oversight	Whether there is a strong foundation for control and change management to ensure that unauthorized or unintended modifications are not made to these models.	Small changes in models can result in large issues with the accuracy of the model. Hence, sufficient controls over model changes is important to ensure that "accidental" changes do not occur. This also might include regulatory approval.
		Whether the CCP provides sufficient transparency/information to replicate the modeling process.	Transparency is important to ensure trust and confidence in the market participants.
		Model review frequency	Due to changes in the market or economy, a model can be out of date and therefore less effective. Regular review is important to ensure the model accounts for all market changes, but too much review will result in a model that is overfit and picks up noise as pertinent information. Yearly model validation is typically sufficient for most product types. The model should be performing backtesting and validated by a third party (independent or external) who was not involved in the model construction or change process to ensure there is no confirmation bias.
		Description of the model review process (backtesting? stress testing? input review?)	
		Responsible party to review model efficacy, including the use of 3rd party reviews.	
	Model Quality	Whether and what model bias is being addressed	The modelling framework needs to incorporate a set of risk factors that is flexible but sufficiently comprehensive to capture, under a wide range of extreme but plausible market conditions, both the material risks that currently impact cleared portfolios and risks that could plausibly emerge in the future. This includes address biases within the model
		Whether the model based on individual instrument type or OTC vs ETD.	ISDA recommends that CCP risk management requirements should not be solely dependent on whether a product is an OTC derivative or ETD, but should be based on the risk that each product exhibits and the complexity of the default management process (DMP)
Focus Area	Sub focus Area	Evaluation Criteria	Why is the focus/sub-focus area important to CCP CP risk evaluation.
Margin Methodology		Confidence Interval, Close-out horizon, look-back period, Concentration charges	
		Haircut values and assumptions	
		Total Initial Margin Required (Total)	First line of defense in the event of a default; simply to help gauge the size of the CCP and its default fund/clearing service
		Total Initial Margin Held (Total)	First line of defense in the event of a default; simply to help gauge the size of the CCP and its default fund/clearing service. CCPs will levy additional margins to cover concentration, wrong way risk, illiquid positions, and CM credit risk. CMs may also contribute additional margin (residual interest) to cover potential shortfalls in client accounts.
		Excess Initial Margin (Total)*	A higher amount of excess margin could be indicative of more conservative margin methodologies
		Excess Initial Margin Multiple (Total)*	Allows for comparability of Total excess initial margin amounts across CCPs

	Sub focus Area	Evaluation Criteria	Why is the focus/sub-focus area important to CCP CP risk evaluation.	
Funded Financial Resources		Loss Absorption Cover 1 / Cover 2	understanding of stress loss coverage target in terms of number of top members	
		FDF vs SITG	understanding of who is at risk by relative amounts	
		SITG Placement	CCP & Member interest alignment	
		Sizing Approach (stress test, etc)	Ensure coverage of losses if IM is exhausted	
		Sizing Frequency	More frequent ensures changes in CCP risk profile are covered	
		Nature of Stress Tests	To ensure proper number and types stress tests are utilized (Scenario, reverse, historical, etc)	
		Frequency of Stress test	To monitor sufficiency on an ongoing basis & facilitate intra-period calls	
		Validation of stress framework		
		Reverse Stress Tests Conducted (Yes/No)		
		Stress Period of Risk	Longer periods are more conservative in the event of auction / liquidation delays	
		Coverage of peak largest aggregate stress loss for top 1 Member	Shows coverage ratio of stress losses for top member default	
		Coverage of peak largest aggregate stress loss for top 2 Members	Shows coverage ratio of stress losses for top 2 members defaulting	
		Coverage of average largest aggregate stress loss for top 1 Member	Shows coverage ratio of stress losses for top member default	
	Coverage of average largest aggregate stress loss for top 2 Members	Shows coverage ratio of stress losses for top 2 members defaulting		
	Funded Resources (Post Margin)		Any nuances / segmentation / uncommon splits / cross service sharing?	Can impact coverage ratios & assumptions
			Membership concentration and how is this managed	Oversized members can conflict with defaulter pays model
			Other Info	
	Funded Default Fund (FDF), Skin in the Game (SITG), Other		Default Fund Participant Contributions (Prefunded)	Should ideally be viewed in conjunction with initial margin. Viewed over time, a surge in default fund contributions could signal an increased level of risk in the positions (i.e., larger position swings). If IM and default fund both increase, than it's likely there's just increased activity at the CCP/clearing service.
			FDF % of Total IM Held	See above comment on FDF contributions. Allows for comparability across CCPs.
			Estimated largest aggregate stress loss in excess of initial margin that would be caused by the default of any single participant (avg)	To help gauge the strength of default waterfall resources in more of a BAU environment
		Estimated largest aggregate stress loss in excess of initial margin that would be caused by the default of any two participants and their affiliates (avg)	To help gauge the strength of default waterfall resources in more of a BAU environment	
		Estimated largest aggregate stress loss in excess of initial margin that would be caused by the default of any single participant (peak)	To help gauge the strength of default waterfall resources in more of a stress environment	
		Estimated largest aggregate stress loss in excess of initial margin that would be caused by the default of any two participants and their affiliates (peak)	To help gauge the strength of default waterfall resources in more of a stress environment	
Unfunded financial resources	Assessment Powers, Replenishment Rights, Other	Default Fund Participant Contributions (Committed)	Should ideally be viewed in conjunction with initial margin. Viewed over time, a surge in default fund contributions could signal an increased level of risk in the positions (i.e., larger position swings). If IM and default fund both increase, than it's likely there's just increased activity at the CCP/clearing service. Includes assessment powers.	
Preventing Default	Membership Profile	Requirements for membership		
		Credit Quality of Members		
		% of Initial Margin Posted by the Largest 5 CMs	Shows the concentration of the total pool of initial margin among the top 5 CMs	
		% of Initial Margin Posted by the Largest 10 CMs	Shows the concentration of the total pool of initial margin among the top 10 CMs	
		Top 5, Top 10 Concentration Differential*	Provides somewhat of a proxy for how concentrated the total pool of initial margin is	
		% of Default Fund Contributions by Largest 5 CMS	Shows the concentration of the total pool of default fund among the top 5 CMs	
		% of Default Fund Contributions by Largest 10 CMS	Shows the concentration of the total pool of default fund among the top 10 CMs	
	Top 5, Top 10 Concentration Differential*	Provides somewhat of a proxy for how concentrated the total pool of default fund resources is		
	Monitoring Practices	Credit risk management team independent from sales/business development?		
	Product suitability of clearing	Review of products cleared by the CCP and their perceived suitability for clearing and ability to be risk managed.		

Focus Area	Sub focus Area	Evaluation Criteria	Why is the focus/sub-focus area important to CCP CP risk evaluation.
Crisis Preparedness - Managing a Default	Default Management Process	Description of the process for managing a default of a clearing member(s) or CCP	Understanding these concepts help assess the risks and to develop oversight and crisis management playbooks in the extreme event of clearing member or CCP default.
	Tools to Manage a Member Default	Overview of the tools available in the CCP rulebook to manage a default	
	Account Structures & Portability Potential	Overview of the account structures available at the CCP, and within the regulatory regime, including the ability to port positions to a new FCM	
Resolution - CCP windup	Resolution plan including any prepositioning capital instruments	Is the resolution plan reviewed by regulators frequently?	
	Resolution Authority	Who is the resolution authority and is their mandate backed by law?	
	Post recovery or resolution loss	If the CCP is successfully resolved and continuing do members/end users have a right to recoup losses (default fund, partial tear up, VMGH) before the new going concern may declare a return to profitability	