



Whitepaper
Consensus Credit Data

The Creditworthiness of CCPs and the Global Clearing Member Network

February 2020



Executive Summary

- ❖ Central Counterparty Clearing Houses (CCPs) lie at the epicenter of global financial markets. They have consolidated and grown stronger since the global financial crisis.
- ❖ However, there is broad recognition that there remains room for improvement. Regulators, clearing members and their underlying clients are recommending changes.
- ❖ Many of these recommendations focus upon CCP post default waterfalls.
- ❖ Suggestions include greater transparency, “skin in the game”, and alignment.
- ❖ There is less focus upstream i.e. before the default occurs.
- ❖ Many of the CCPs, their clearing members and their underlying clients are not rated by the main credit rating agencies (CRAs).
- ❖ Consensus credit data can help illuminate risks associated with non-CRA rated entities.
- ❖ Broader adoption of creditworthiness early warnings can help prevent defaults.

This whitepaper is the first in a series that will look at the potential application of Consensus credit data to help tackle the challenges posed by the consolidation of clearing, settlement and trading functions in the global capital markets.

This paper focuses on the “CCP Network” – Central Counterparties, their clearing members and their underlying clients.

At this critical stage in the credit cycle it is particularly essential for all participants in the CCP Network to measure, manage and mitigate their various risk sources; and credit risk or “creditworthiness” is one of the most important.

This paper aims to understand the network and its interconnectedness: identifying the participants; introducing the Consensus creditworthiness concept; and suggesting ways in which Consensus credit data can play a role in early warnings of credit issues.

The overall aim is to identify how participants can assess the true risk level that they face, and how – collectively – the network participants can prevent potential triggers of CCP default waterfalls.

Working with leading global financial institutions, Credit Benchmark (CB) collects a specific measure of credit risk: a one-year, forward-looking Probability of Default (PD) and forward-looking senior unsecured Loss Given Default (LGD).

The underlying inputs from contributors are subject to a rigorous data quality approval process and derived from models that are approved by regulatory authorities. Contributors have a strong incentive to ensure the accuracy of each PD and LGD, which are used in their regulatory submissions, leading to a credible market view of credit risk.

After being anonymized and aggregated, the contributed risk estimates are mapped to the appropriate credit category on the Credit Benchmark Consensus scale, which is calibrated periodically and can be used as a comparison to the scales published by the rating agencies. Contributors can also see their submissions in their own rating scale.

Credit Benchmark produces regular data updates with monthly history going back to 2015.

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1. Purpose

The purpose of this paper is to highlight a new source of credit data available to Central Counterparty Clearing Houses (“CCPs”), their clearing members and the broader financial community, including the predominantly “buy-side” clients of the clearing members. We call this collective the “CCP Network”.

The catalysts for this paper are several excellent industry and academic papers in the CCP field including Berner et al. (2019)¹, Briukhova et al. (2019)², Allianz Global Investors et al. (2019)³ and Oliver Wyman and The Worldwide Federation of Exchanges (2019)⁴. We welcome their different approaches, including:

- Calling upon CCP participants to enhance resilience, recovery, and resolution;
- To increase transparency and alignment; to propose alternatives to the current CCP default waterfalls;
- To attempt to quantify and measure the significance of CCP and clearing member interconnectedness;
- To commit to undertake a detailed review of the market structure.

Other recent high-profile media coverage on the activities of CCPs (including the New York Times⁵, Risk.Net⁶ and The Securities Lending Times⁷) demonstrates the relevance and importance of the CCP Network topic.

In addition to recognising and welcoming the valuable suggestions being offered up in the referenced sources, this paper highlights the power of Consensus credit data to help quantify, observe and manage credit risk as inputs to early warnings for credit issues. On the basis that prevention is better than cure, credit intelligence may be critical in triggering intervention ahead of CCP default waterfalls.

Bringing together the internal credit risk views of the world’s leading financial institutions, Credit Benchmark provides an independent and unique measure of credit quality. The data contributed by our partners is subject to rigorous internal ratings systems and/or strict regulatory requirements. Credit Benchmark anonymizes and aggregates the data before releasing it in the form of Consensus ratings and aggregate analytics.

This growing credit dataset offers insights into the Consensus views of the creditworthiness of ~50,000 global entities including financials, sovereigns, corporates and funds. Many of these entities are participants in the CCP Network.

The interconnectedness of the CCP Network is an integral part of the global financial system. It is critical to understand the creditworthiness of these nodes and how they interact, impact and potentially move and mitigate systemic risk.

This paper will be empirically and visualisation driven – drawing from recent papers in the field and from a growing repository of Consensus credit data.

¹ Berner, R. B., Cecchetti, S. G., & Schoenholtz, K. L. (2019). Stress Testing Networks: The Case of Central Counterparties (No. w25686). National Bureau of Economic Research

² Briukhova, O., D’Errico, M., & Battiston, S. (2019). Reshaping the Financial Network: Externalities and Redistribution Effects in Central Clearing. Available at SSRN 3413844: <https://tinyurl.com/r3gzp2j>

³ Allianz Global Investors, Blackrock, Citi, Goldman Sachs, Societe Generale, JPMorgan Chase & Co, State Street, T.Rowe Price & Vanguard. (2019). A Path Forward For CCP Resilience, Recovery, and Resolution. Retrieved January 20, 2020, from JP Morgan: <https://tinyurl.com/wpmgfn9>

⁴ Oliver Wyman & World Federation of Exchanges. (2019). The Future of Clearing. Retrieved January 20,2020, from World Federation of Exchanges: <https://tinyurl.com/u3bbyac>

⁵ Ewing, J., Schreuer M., (2019, May). How a Lone Norwegian Trader Shook the World’s Financial System. *The New York Times*. Retrieved from <https://tinyurl.com/y6gslk6g>

⁶ Cesa M. (host). (2020, January 20). Podcast: Andrew Dickinson on CCPs’ defence mechanisms. Retrieved from <https://tinyurl.com/t626n84>

⁷ Turner N. (2020, January). ESMA mulls “enhanced” CCP supervision. *Securities Lending Times*. Retrieved from <https://tinyurl.com/snsxsn>

2. Background and Definitions

Before we discuss the role of the CCP Network we will provide some additional background and definitions to help underpin our approach and analysis.

In this paper, we will defer to ESMA's functional definition of a CCP⁸:

"CCP clearing refers to the management (risk management, transaction monitoring, netting) of a transaction after the matching of a buy and sale trade and prior to the legal fulfilment of the respective obligation. A CCP becomes the counterparty of the original buyer and seller."

In the U.S., the equivalent of a CCP is known as a Derivatives Clearing Organization (DCO) or a Derivatives Clearinghouse.

Credit Benchmark clients include many of the largest global bank and non-bank financial institutions, most of which are extensive users of CCPs. They are in unanimous agreement that:

The CCPs and their Network now occupy an ever-more-critical role in the global financial system, and CCPs will have a front row seat at the next global crisis.

This helps explain why so many different kinds of organisations are actively engaged in this conversation and are exploring possibilities to improve the existing CCP networks and procedures.

Whilst there is an ongoing debate about the total number of active CCPs today, one can observe the logical and significant consolidation that has taken place since the crisis. We agree with the approach taken by Oliver Wyman and the Worldwide Federation of Exchanges (2019)⁴ that there are currently 74 CCPs globally (see figure 2.1 below), down from around 100 a few years ago.

Oliver Wyman and the Worldwide Federation of Exchanges (2019)⁴ summarise that "Policymakers, standard-setting bodies, regulators and industry participants (including WFE member CCPs) agree that overall, a significant amount of progress has been made". In its November 2018 report to the G20 the FSB concluded:

- The new regulatory framework was largely in place;
- The financial system was more resilient; and
- OTC derivatives markets were simpler and more transparent

There is also widespread recognition that there is still a great deal of work still to be done. Allianz Global Investors et al. (2019)³ conclude that they "look forward to working with CCPs, regulators and policymakers to help implement the recommendations and CCP default waterfall enhancements proposed in this paper."

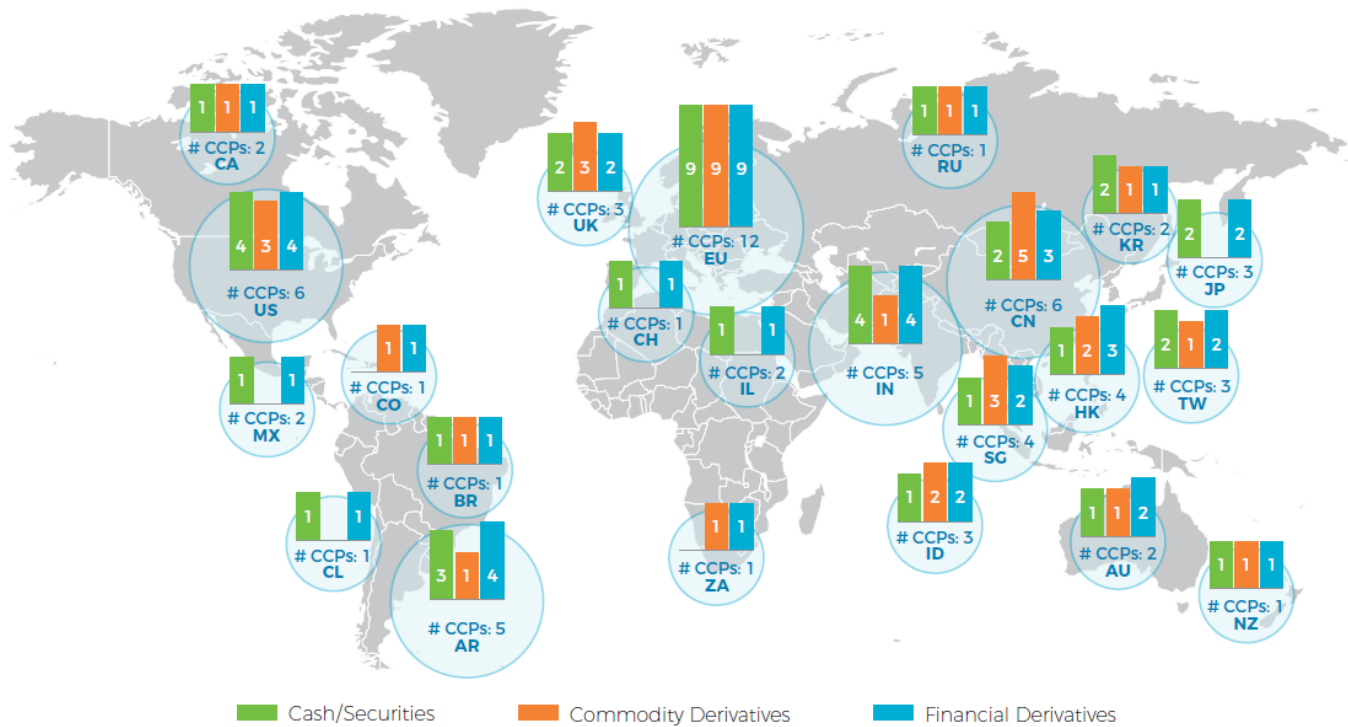
To this end, the World Federation of Exchanges announced on 4th December 2019 that it is starting a 12-month workplan to ensure that the role and nature of CCPs is correctly understood and is not undermined by narrow interests that diverge from good public policy⁹.

⁸ (2020). Retrieved 20 January 2020, from <https://tinyurl.com/rnfajsk>

⁹ The WFE Regulatory Affairs Team. (2019, December). The World Federation of Exchanges launches workplan to drive greater understanding around CCPs & their role in systemic safety. *World Federation of Exchanges*. Retrieved from <https://tinyurl.com/qukw3zd>

Those at the very core of the CCP Network are committed to explore what might be done to enhance the network and it is encouraging to see that the industry’s Regulators, members and the buy-side are all engaged. At this critical stage of the economic cycle there is no time to waste.

Figure 2.1 Overview of Global CCP Coverage Across Key Asset Classes



Number of CCPs with asset class coverage per jurisdiction; excl. cross-jurisdictional services. Excl. MY.PH and TH with 1 CCP each; Total of 74 CCPs based on FSB / CPMI / WFE sample.

Source: CPMI Statistics on payment, clearing and settlement systems in the CPMI countries 2018. FSB OTC Derivatives Market Reforms – 13th Progress Report, WFE, Oliver Wyman analysis⁴

The European Securities and Markets Authority and the CCP Network

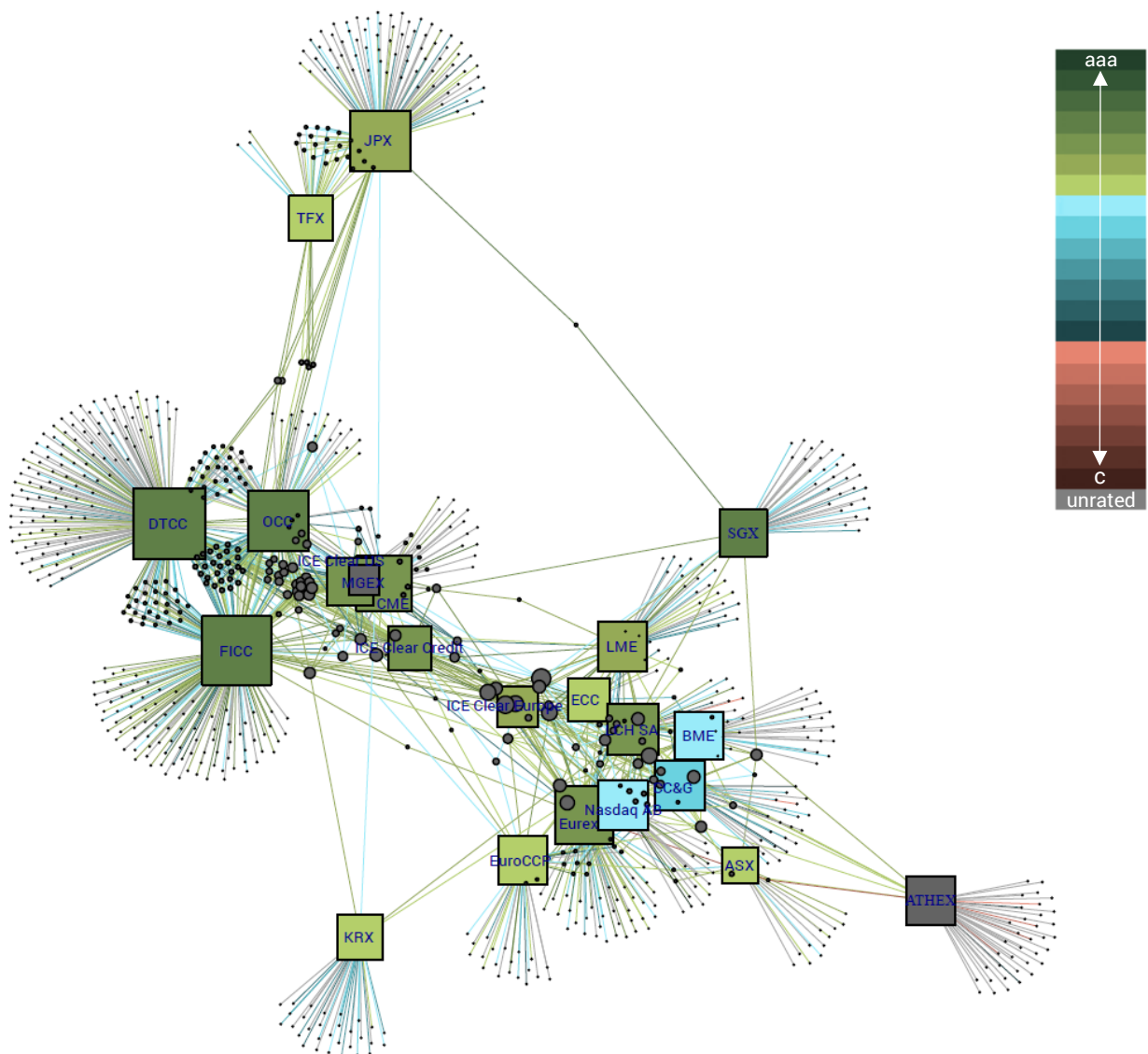
We noted that regulators globally have an understandable interest in the successful functioning of the CCP Network. It was very recently announced in The Securities Lending Times⁷ that “The European Securities and Markets Authority (ESMA), is considering “enhanced” CCP supervision.” Having conducted a review of how an individual caused a default in 2018 on Nasdaq Commodities’ Norwegian Exchange, ESMA highlighted the importance of membership criteria as the “first line of defence of CCPs to control counterparty credit risk.” ESMA says it is now considering these findings and will “look to enhance supervisory practices and continue to provide further guidance on the areas for which CCPs would be expected to have detailed due diligence practices”.

3. The Significance of ‘Interconnectedness’

Credit Benchmark data covers 36 CCPs that clear derivatives and securities, and 1,390 unique members (identified using public disclosures of clearing members provided by the CCPs). The visualisations in this section are examples of network analysis using the current data subset¹⁰; as the CB database continues to grow this network map will become increasingly comprehensive.

High resolution copies of all of the charts within this paper are available upon request using the contact details on the back page. We welcome the opportunity to discuss these findings in more detail with interested parties.

Figure 3.1 CCPs and Clearing Members



¹⁰ Credit Benchmark does not currently publish a complete dataset on clearing relationships but we are working with our contributing partners (40+ global financial institutions) to increase our coverage. We welcome the addition of new contributing clients. We publish Consensus data at an entity level when 3 or more contributors submit data and also create aggregates from a much larger database of contributed observations.

Figure 3.1 shows the network of CCPs and their clearing members and illustrates the interconnectedness; it is based on the 22 most interlinked CCPs and their 807 unique clearing members.

Square shapes represent CCPs, circles represent clearing members, and links represent membership between clearing members and CCPs. Furthermore, the size of square reflects the number of clearing members registered with the CCP and the colour shows the Credit Benchmark Consensus Rating (CBR) of the CCP.

The size of circle captures the number of CCPs that the clearing member is linked to and the colour of the links shows the CBR of the clearing member. 90% of CCPs and 62% of clearing members have a CBR.

The distance between CCPs correlates with their interconnectedness defined as the number of shared clearing members. For example, SGX and JPX share only one member and the distance between the two nodes is high, while Eurex and LME share 20 clearing members and the nodes are close to each other.

The shape of the network reveals two main clusters of CCPs – American and European, which are connected through a few big clearing members. The Asian CCPs show only few connections to these clusters; Japanese CCPs (TFX, JPX) share some clearing members with their American peers, while Korean (KRX) and Singaporean (SGX) CCPs link to both American and European CCPs. The Australian CCP (ASX) is linked to the European cluster.

In our current analysis DTCC and FICC are the biggest CCPs in terms of number of clearing members (DTCC has 240 clearing members and FICC 193) and there are a few important clearing members linked to multiple CCPs across the regions.

The credit quality of American CCPs is better compared to Europe; there are some clearing members with CBR in high yield category, particularly in Italian (CC&G) and Greek (ATHEX) CCPs.

The CBR of clearing members can be a useful indicator of the CCP credit quality when a CBR is not available for the CCP itself. For example, a CBR is not available for the CCP 'ATHEX' but the CBRs of the clearing members of ATHEX reveal a lower credit quality than those observed for the clearing members of other CCPs. Several clearing members of ATHEX are rated as high yield.

Figure 3.2 DTCC and CCP Interconnectedness

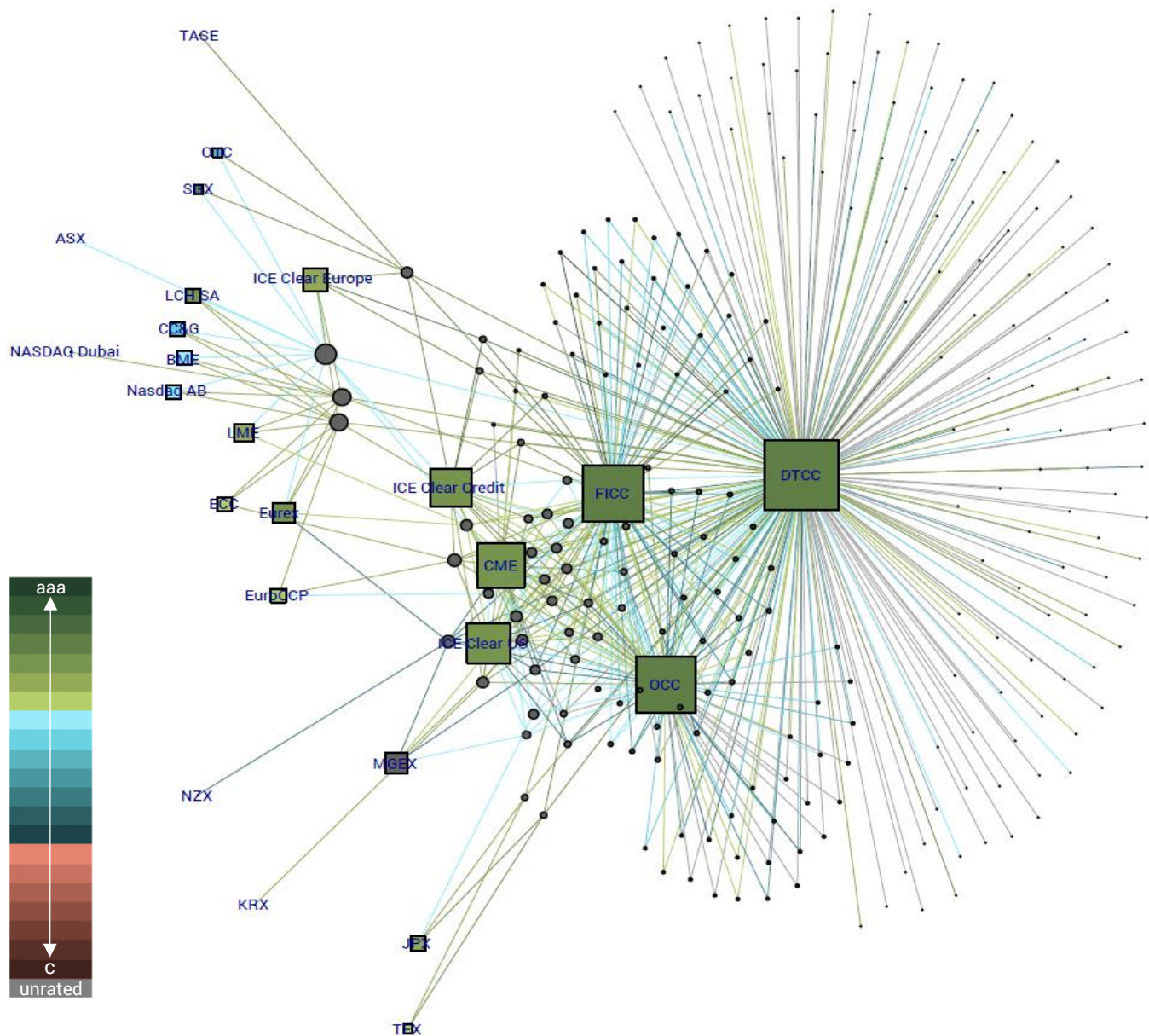


Figure 3.2 focuses on DTCC and its interconnectedness with other CCPs. It follows a similar logic as Figure 3.1. Square shapes represent CCPs, circles represent clearing members, and links represent membership between clearing members and CCPs. The size of the square correlates with the number of shared clearing members between DTCC and the CCP.

The chart utilizes the full CCP dataset available to Credit Benchmark covering 36 CCPs and their 1,390 unique clearing members. DTCC shares clearing members with 24 other CCPs, 49% of the clearing members do not have other connections, 35% link to two to three CCPs, 8% to three to five CCPs and 8% to more than five CCPs, one clearing member (Deutsche Bank AG) has 13 connections in total.

DTCC is most connected to the other American CCPs such as FICC, OCC, CME and ICE Clear US but it links also to most of the European CCPs through a few important clearing members (e.g. Deutsche Bank AG, Goldman Sachs International and Morgan Stanley & Co International Plc).

65% of DTCC clearing members have CBR; 50% are classified as investment grade and 15% as high yield. There are no clearing members with a Consensus rating worse than **bb**.

Figure 3.3 CCP Membership Is Not Exclusive

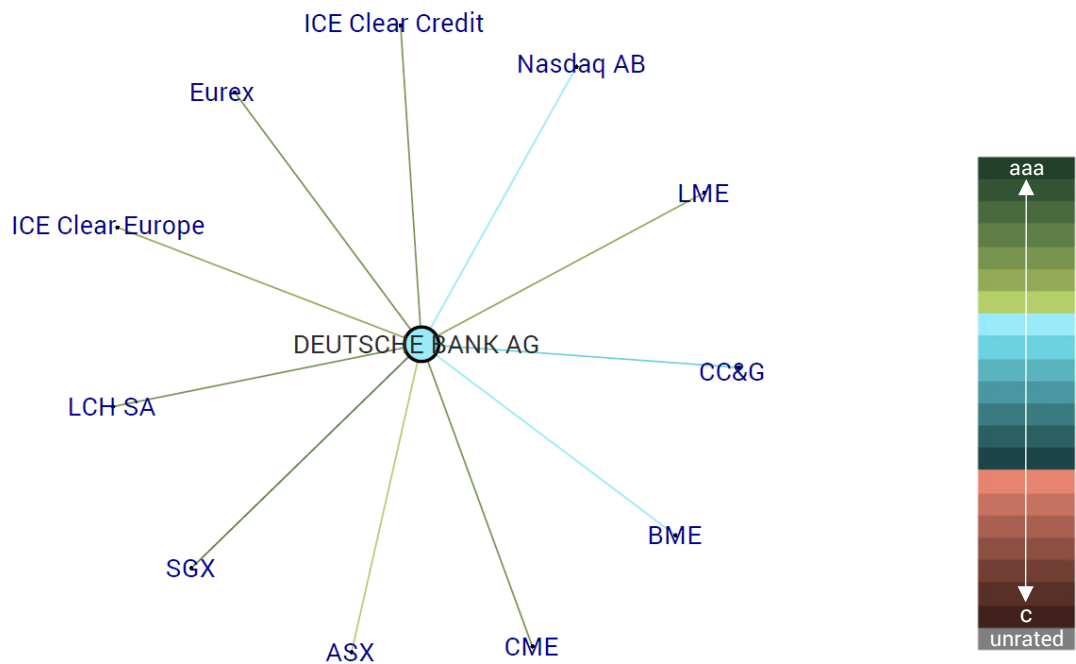


Figure 3.3 shows the connections of Deutsche Bank AG to CCPs. Deutsche Bank AG is the clearing member with links to most CCPs (13) and the chart lists them together with the CCP's CBR represented by the colour of the link. Deutsche Bank AG is connected mainly to the European CCPs (7 out of the 13 connections) but links also to Australian, Asian and American CCPs.

The chart is based on the full CCP dataset available to Credit Benchmark covering 36 CCPs and their 1,390 unique clearing members; 82% of all the clearing members are linked to a single CCP, 9% are connected to two, 6% to three to five and 3% to more than five CCPs. The biggest players are Deutsche Bank AG, Goldman Sachs International, Morgan Stanley & Co International Plc, and UBS AG with more than 10 connections.

One of the many challenges presented by the complexity and interconnectivity of the CCP Network is to understand the extent to which firms (and their subsidiaries) are clearing members of multiple CCPs. Based on the data set described above we can identify yet another challenge.

“There is no such thing as one Deutsche Bank.” What we mean by this statement is that Deutsche Bank operates globally and joins several CCPs using different subsidiaries and legal entities, each of which often have a different financial structure and creditworthiness than their parent or holding company. Deutsche Bank is not unique in this regard from other global financial organisations, many of which are CCP clearing members, either directly or via their subsidiaries.

Figure 3.4 Deutsche Bank Entities That Are CCP Clearing Members

Name	CCP Memberships	SP/Fitch Rated	CB Consensus Rating
DEUTSCHE BANK AG	13	Yes	Yes
DEUTSCHE BANK SECURITIES INC	5	Yes	Yes
DEUTSCHE BANK SPA	1	Yes	Yes
DEUTSCHE BANK TRUST COMPANY AMERICAS	1	Yes	Yes
DEUTSCHE BANK LONDON BRANCH	1	Yes	Yes
DEUTSCHE ASSET MANAGEMENT SA	1	No	Yes
DEUTSCHE SECURITIES ASIA LTD	1	No	No
DEUTSCHE SECURITIES KOREA CO	1	No	No
DEUTSCHE SECURITIES AUSTRALIA LIMITED	1	No	Yes

Counterparty Risk and the CCP Network

Given the importance of the CCP Network to the efficient functioning of the global financial system and the level of systemic risk within that system², understanding the level of interconnectedness within the CCP Network is of critical importance to many organisations.

The creditworthiness of the CCP nodes is variable and changes over time. Measuring and monitoring these nodes is an important component of the risk management and early warning agenda. Some of the CCPs are rated by credit rating agencies, but around 80% are not - leaving a critical “information vacuum” that can be filled by Consensus credit data.

Briukhova et al. (2019)², observe that “insulation from the counterparty risk is achieved only if “skin in the game” capital posted by a CCP is sufficiently large” and that systemic risk can rise rather than fall, dependent upon the level of CCP skin in the game.

Their position is best summarized by their abstract:

“This paper argues that the post-crisis infrastructural reform mandating central clearing of standardized over-the-counter derivatives impacts the valuation of a derivative contract and leads to unintended value redistribution effects among market participants. In a theoretical model, we show how the exogenously imposed change in the market structure affects counterparty risk and funding costs of different types of market participants. Specifically, we find that netting is beneficial for relatively high-quality counterparties, but counterparties with low creditworthiness are better off from accumulating larger gross positions. Further, even though a CCP interposes itself between a buyer and a seller of a derivative contract, precisely in times of distress the network of expected exposures between CCP members becomes fully connected. Our results highlight that mutualization of risks and resources in a CCP leads to externalities between the members.”

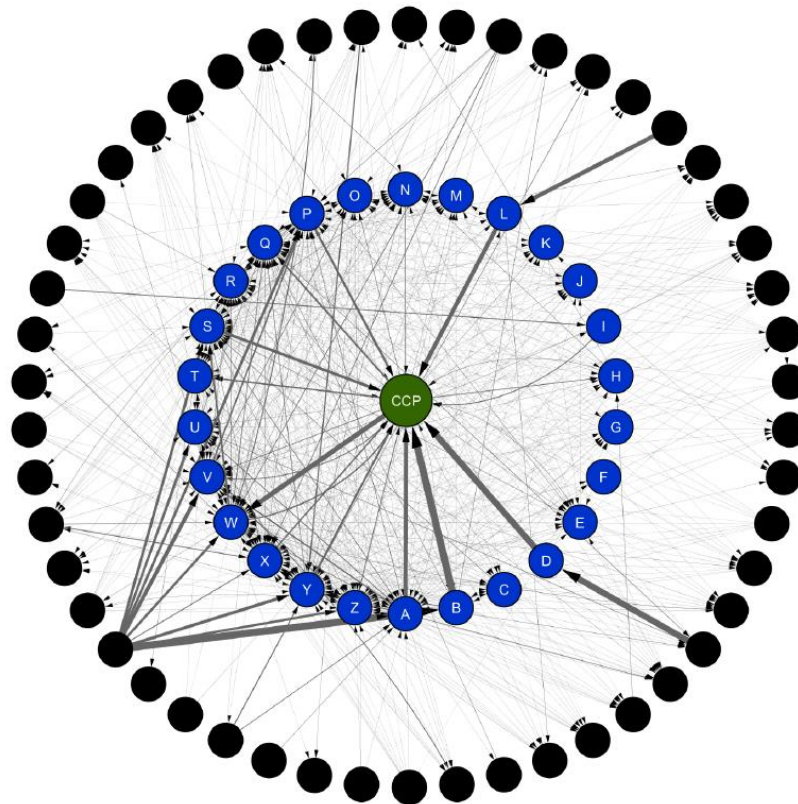
It is therefore unsurprising that Regulators, CCP Network participants and many other organisations dependent upon the efficient operation of the CCP Network are eager to understand all of the risks associated with it, including the impact of interconnectedness upon the creditworthiness of the nodes and clusters on the Network.

Interested parties need to understand the following factors, irrespective of a rating bestowed by a credit rating agency (where one exists):

1. The market's view of a CCP's Consensus creditworthiness i.e. what those with skin in the game really think of a CCP from a credit risk perspective.
2. The Consensus creditworthiness of a CCP cluster and how they compare to other CCP clusters.
3. The Consensus creditworthiness of clearing members of a CCP and how they compare to one another. Many clearing members are interconnected and unrated by the credit rating agencies.
4. The Consensus creditworthiness of the buy-side, or funds, that make up a large portion of the customer base of the clearing members.

The need to understand the buy-side or second order risk (as an increasing number of CCPs call it) mentioned in point 4 above, is represented well in Figure 3.5 by Paddrik et al. (2016)¹¹ shown below and referenced in footnote. This diagram depicts the flow of variation margin after an asset price shock. Risk may not present itself where one expects it and it is important to try and understand where the risks lie.

Figure 3.5 Vulnerabilities May Lie Outside Central Nodes – Variation Margin Payment Network After an Asset Price Shock¹²



¹¹ Paddrik, M. E., Rajan, S., & Young, P. (2018). Contagion in derivatives markets. Retrieved from Department of Economics, University of Oxford <https://tinyurl.com/vk48942>

The importance of understanding interconnectedness and furthermore the “alignment of motives” by the nodes within the CCP Network lie at the core of two papers, Berner et al. (2019)¹ and Allianz Global Investors et al. (2019)³ which acted as catalysts for this paper.

Berner et al. (2019)¹ in their work relating to CCP Networks highlight the need to understand the interconnectedness of the CCP Network; the importance of stressing the CCP network to assess its robustness to shocks; and to encourage the use of high frequency indicators such as SRISK¹³ to complement and inform more traditional tests.

Allianz Global Investors et al. (2019)³ call for more CCP skin in the game to ensure an improved “alignment of motives” within the CCP Network, making the point that whilst understanding interconnectedness is important, alignment is essential.

¹³ Brownlees, C., & Engle, R. F. (2016). SRISK: A conditional capital shortfall measure of systemic risk. *The Review of Financial Studies*, 30(1), 48-79.

4. The Creditworthiness of the CCP Network

In life, diversity is almost universally recognised as a good thing – and this especially applies to Consensus credit data. A major advantage of the Consensus approach is that it supports metrics describing the diversity of credit opinions. These metrics provide valuable information and context for credit professionals looking for benchmarks for their own credit portfolio.

Understanding the diversity of credit opinions derived from the regulated models used by banks and non-bank financial institutions provides colour that is missing from other credit rating sources. It enables contributors and subscribers to the Credit Benchmark Consensus dataset to understand how their internal view of a counterpart's creditworthiness, at the entity level, compares to the expert opinions of three or more peers with skin in the game.

The rule of three applies to ensure the anonymity of those contributing credit views to the Credit Benchmark dataset. Basing a Consensus rating on a minimum of three separate observations prevents reverse engineering and enriches the depth of the data.

For those entities that do not meet this rule of three, Credit Benchmark has formulated 'aggregates', which can be thought of as a basket of obligors. These aggregates are macro-level risk indicators that assess credit trends, activity and distribution across 105 countries, 300 industries and 75 sectors. Our analysis of the CCP Network covers data at both the entity and aggregate level.

The information that feeds into Consensus ratings and aggregates is not a hypothetical opinion made by those paid to rate an entity or issuer. This Consensus reflects real world judgements made by specialists charged with the pressure and responsibility of protecting their organisation's capital, reputation and stakeholders. They need to identify which entity poses a risk, the interconnectedness of that entity to others, and to quantify as best they can the creditworthiness of those entities.

This is a new Consensus view of creditworthiness that can help inform the key decisions that face anyone considering CCP Network risk and the entities that are part of that Network.

We will now look at some of the credit Consensus risk data available on the three distinct parts of the CCP network and how this data changes over time. These three parts are:

- CCPs
- CCP clearing members
- The buy-side or fund coverage – i.e. clients of the clearing members

As Figures 4.1, 4.2 and 4.3 on the following page demonstrate, the extra coverage available via the Credit Benchmark Consensus creditworthiness data is compelling – especially in the buy-side.

Figure 4.1 CCPs Coverage

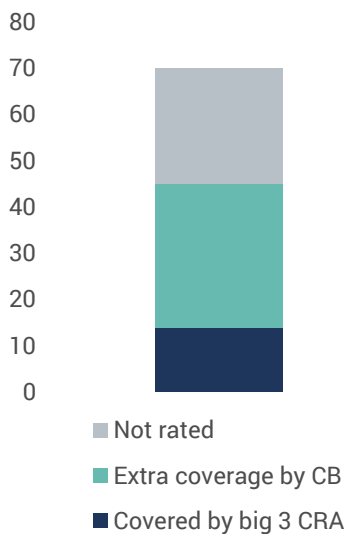


Figure 4.2 CCP Member Coverage

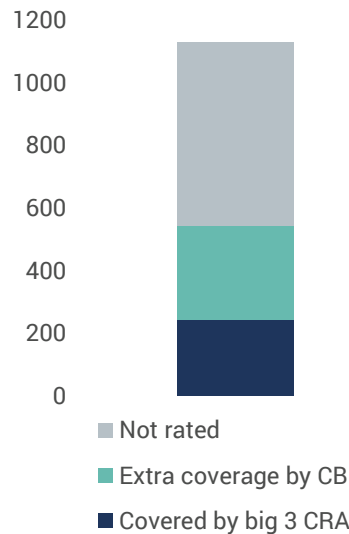
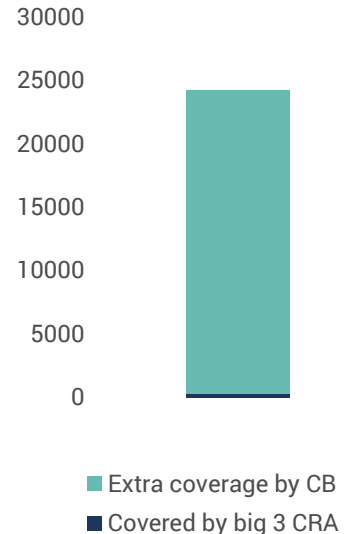


Figure 4.3 Funds Coverage



CCP Credit Consensus

Figures 4.4, 4.5 and 4.6 show the credit trend and distribution of 29 CCPs presented as an aggregate. It is interesting to observe the variation of the market view of CCP creditworthiness month-on-month over time. Given the strong and growing coverage of CCPs, this sensitivity has strong informational value for those responsible for understanding CCP and CCP Network risk, upstream of the CCP default waterfalls.

Figure 4.4 CCPs Credit Trend



Figure 4.5 CCP Credit Changes

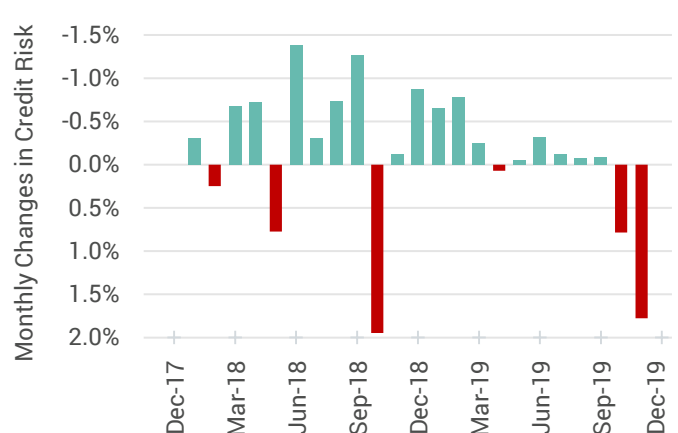
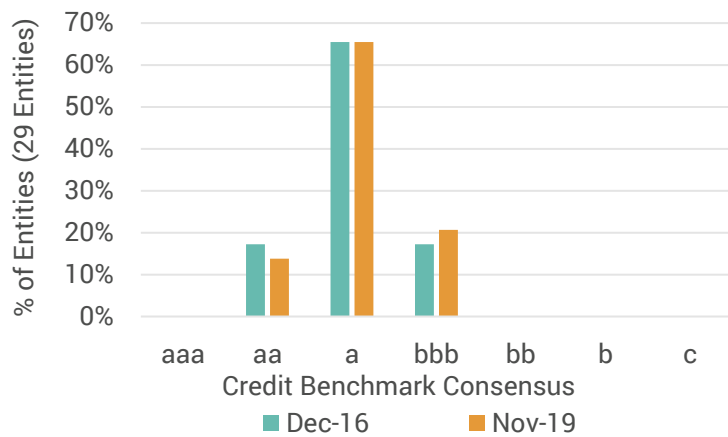


Figure 4.6 CCP Distribution – Dec-16 vs Nov-19



29 CCP clearing members

Aggregated CCP risk data outputs provide the user with directional and comparative insights. They combine the Consensus view of an entity along with the contributed views that number less than three and thus are ineligible to provide an entity level Consensus view (as seen in Figures 4.7 and 4.8, below). Trends are uncovered over time and comparisons can be made between different time periods as in Figure 4.6. As the data set grows in volume (by adding contributors or gathering more data from existing contributors), additional aggregates and entity level views will become available.

Entity level charts provide the user with credit Consensus data at a specific entity level and are available when a minimum of three observations are contributed on that particular entity. As you can see from Figures 4.7 and 4.8 below, some of the larger CCPs have a stable CB Consensus. Entity level data is available for entities that have a CRA rating (see Figure 4.8, Major US CCP) and those that do not (see Figure 4.7, Major EU CCP).

When both credit Consensus and CRA rating are available as is the case in Figure 4.8 for the US CCP, it is fascinating to see that although S&P and the market agree on the stability of the entity over time, there is a wide range of opinion contributing to the Consensus view. Some of the opinions contributed are as pessimistic as **bbb**. The 'depth' for the US CCP is 'High' for most of the displayed time period which indicates there are at least seven contributing financial institutions underpinning this Consensus.

Entity level CCP Consensus credit data can be combined with other data sets - proprietary or not - such as exposures and margin, to build up a hitherto unavailable perspective on a CCP entity. When combined with insights as to its interconnectedness to other CCPs and clearing members, a much more insightful understanding of the credit and counterparty risk emerges.

Figure 4.7 Entity Level Credit Consensus – Major EU CCP

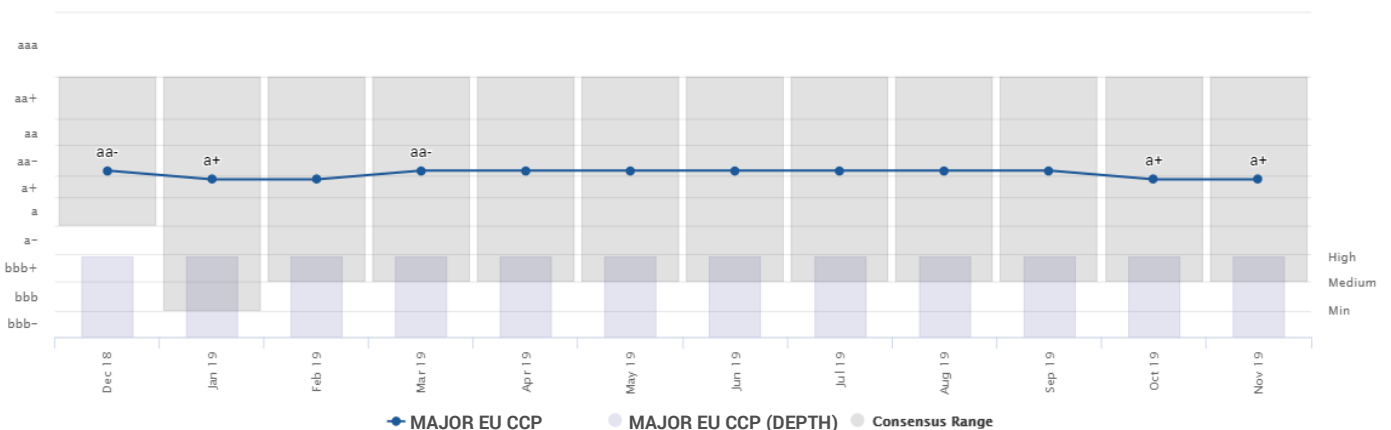
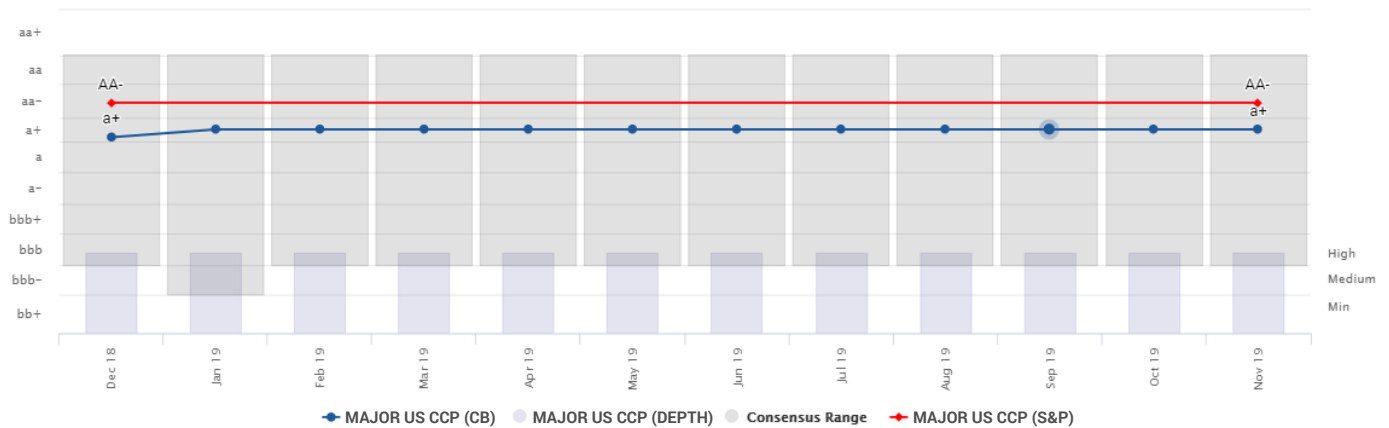


Figure 4.8 Entity Level Credit Consensus – Major US CCP



CCP Clearing Member Credit Consensus

Consensus credit data is available at all levels of the CCP Network, including for CCP clearing members. This information is typically not available from credit rating agencies because the clearing member is often a hitherto unrated subsidiary of a flagship parent entity, as mentioned previously in the case of Deutsche Bank and its subsidiaries.

Figures 4.9 and 4.10 show the credit trends of two groups of CCP clearing members – Figure 4.9 shows the 49 clearing members of the CME Group and Figure 4.10 shows the 174 clearing members of the DTCC. The Consensus credit quality of both groups of CCP members shows improvement over time. Looking further into the Consensus creditworthiness at an entity level provides additional insight such as in Figure 4.11. This chart shows the Consensus rating on a major global bank. Once again, the interconnectedness of the clearing member is an important risk consideration.

Figure 4.9 Credit Trend of CME Group Members (49)

Figure 4.10 Credit Trend of DTCC Members (174)

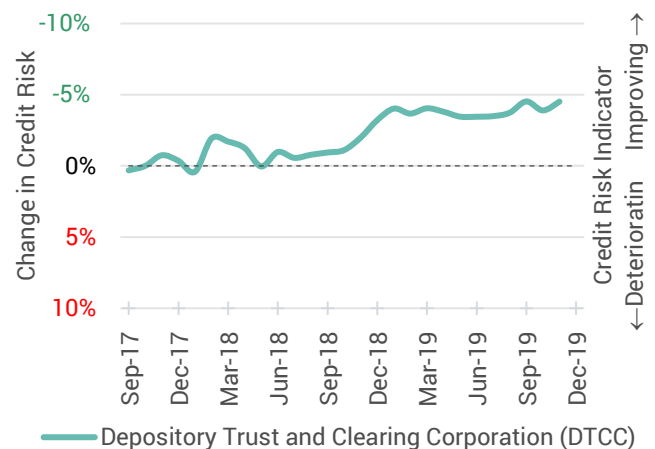
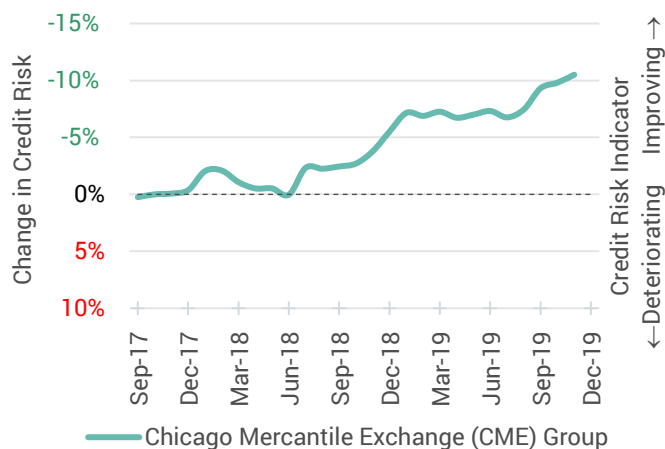
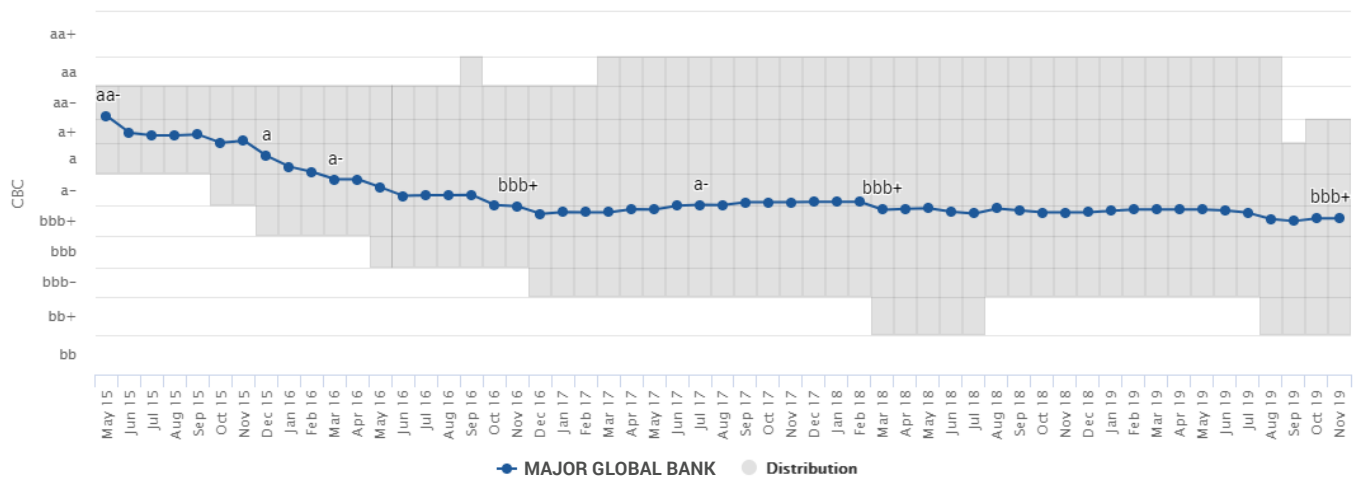


Figure 4.11 Entity Level Credit Consensus – CCP Clearing Member – Major Global Bank



There are increasing calls from the CCP community for membership to include more representation from the buy-side. This representation may come from large hedge fund managers, traditional asset managers, sovereign wealth funds and pension funds, rather than the more typical broker dealer or broker sponsored members. Should these types of entities become more representative in the CCP membership pool, Consensus credit data has the potential to become a valuable tool in the eligibility consideration process. A broader view of creditworthiness may lend transparency to existing admission procedures and encourage standardisation across the global networks.

Buy-Side Credit Consensus

Buy-side entities (along with corporate entities and some markets) make up the customer base of the clearing members and are by far the most numerous within the CCP network. They are often clients of several CCP clearing members within the same CCP, and also active across many different CCPs.

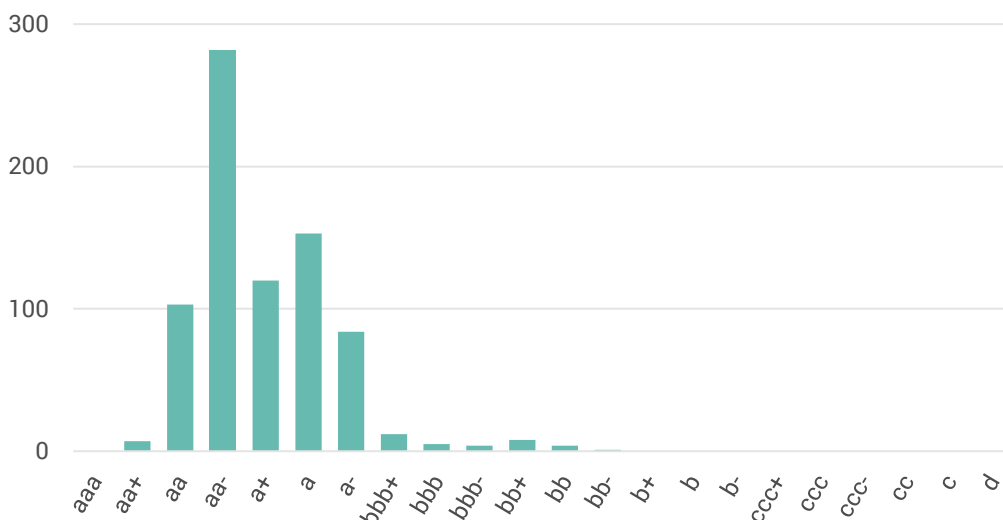
Understanding this highly complex level of interconnectedness is made more complicated by the fact that the vast majority of the funds, even those that are managed by household names in the asset management business, are publicly unrated. This lack of fundamental credit information contributes significantly to the challenge of assessing counterpart risk and creditworthiness within the CCP Network. It is to the benefit of CCP clearing members and others that deal with the buy-side directly, or indirectly, that so many of the buy-side funds have an entity and/or aggregate level credit Consensus available.

Figure 4.12 lists the number of buy-side funds with a credit Consensus under some well-known asset managers. Figure 4.13 shows the Consensus distribution of 1,118 funds under the management of one of these institutions; BlackRock.

Figure 4.12 Consensus Fund Coverage Under Major Asset Managers

Name	Fund Count
BLACKROCK INC	1,118
ALLIANZ SE	748
JPMORGAN CHASE & CO	299
VANGUARD GROUP INC	296
STATE STREET CORP	260
T ROWE PRICE GROUP INC	205
GOLDMAN SACHS GROUP INC	204

Figure 4.13 Distribution of Fund Consensus Creditworthiness Under BlackRock Management



Figures 4.14 and 4.15 demonstrate that entity level Consensus credit information is available at both at an asset manager level as well as for a fund under management of the same asset manager. Reviewing both sets of Consensus credit data will contribute to a better understanding of the risk coming from this extensive part of the CCP Credit Network.

Figure 4.14 Entity Level Credit Consensus – Major Global Asset Manager

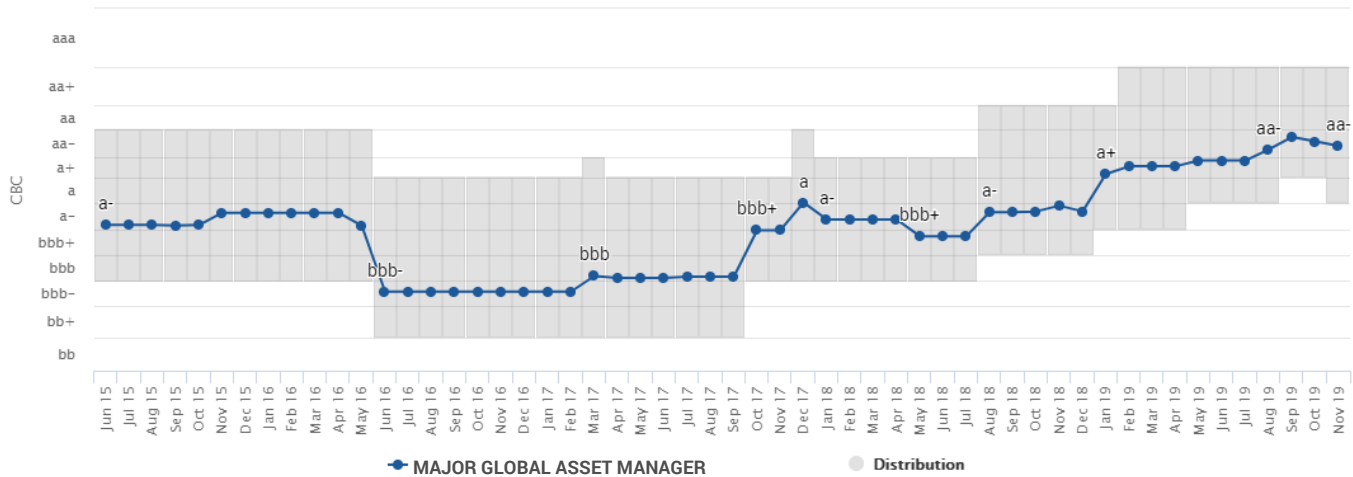
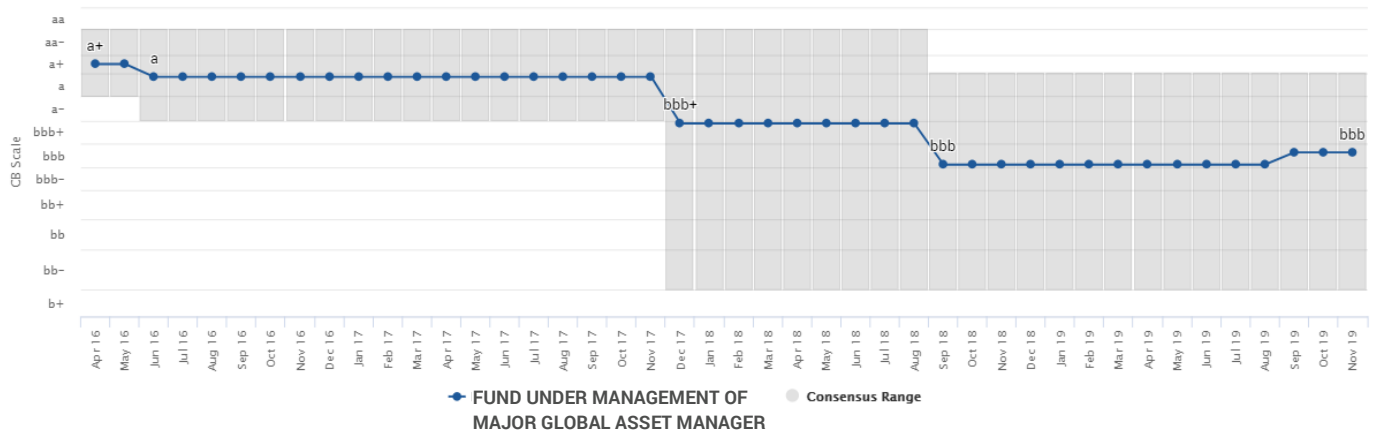


Figure 4.15 Entity Level Credit Consensus – Fund Under Management of Major Global Asset Manager



Credit intelligence on the buy-side is hard to come by and the volume of buy-side funds managed by the traditional and alternative asset managers compounds the problem, as does the paucity of data available from the credit rating agencies.

5. Conclusion

It is clear that CCPs lie at the epicentre of the global financial markets and that with the encouragement of global regulators they have consolidated and grown stronger since the global financial crisis.

However, there is broad recognition from CCP clearing members and the buy-side that there is room for improvement in enhancing the security and performance of CCPs under severe stress. Participants are calling for greater transparency from the CCPs; for more capital commitment from the CCPs to increase their “skin in the game”; and for a greater degree of alignment between CCPs and their clearing members. Removing or at least reducing the possibility of free riding or moral hazard by CCPs unaligned with the best interests of their clearing members and the broader market is an excellent goal.

CCPs are supposed to reduce the systemic risk in the global financial marketplace, but that is by no means a certain outcome. It is no surprise therefore to see regulators like ESMA considering enhanced supervision, and industry bodies such as The World Federation of Exchanges conducting a detailed review of industry practices. We welcome this increased attention with the aim of ensuring the Resilience, Recovery, and Resolution of CCPs. From a proactive standpoint, if Resilience is first achieved, there is no need for Recovery or Resolution.

Many of the current recommendations focus on CCP post-default waterfalls, with little attention given upstream i.e. before the default occurs. Assessing credit risk and picking up on early warnings is made more challenging by the fact that many of the CCPs, their clearing members and their underlying clients are not CRA-rated and are interconnected in complex ways.

It is our opinion that careful mapping of the interconnectedness within the CCP Network combined along with the application of Consensus credit data (at both entity and aggregate level) can help inform risk management decisions and avoid CCP default waterfalls upstream. Whilst credit risk is only one of several factors that may lead to the default of a CCP clearing member or CCP itself, any resource that can be used to mitigate risk at this critical stage of the credit cycle is worth further investigation.

Prevention is better than cure, and thus a proactive approach alongside the adoption of the best recommendations of regulators, trade associations, CCPs, their clearing members and the buy-side is key to the successful functioning of the CCP network.



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