

Whitepaper series “Incentives to Clear” Incentives and Impediments to Clear for Clients

The whitepaper series

This whitepaper is part of a series of papers developed by ISDA members to complement the work of the FSB Derivatives Assessment Team and their post-implementation evaluation of the effects of the G20 financial regulatory reforms¹.

Summary

This paper describes the different methods clients can use to access clearing, and identifies incentives and impediments to clearing faced by clients under these different methods. The uptake of voluntary client clearing seems to depend on the type of client and jurisdiction. However, all clients generally support clearing with the understanding that liquidity is in the process of transitioning to clearing.

Indeed, some clients have already started to clear voluntarily where they feel the benefits outweigh costs by far: clearing provides benefits like operational efficiency, margin segregation, transparency, standardised valuations and many more. However for some clients there are still impediments which disincentivise voluntary clearing. This paper aims to identify these impediments with a view of finding solutions to those potential issues.

Our comments focus on clearing of OTC derivatives.

The clearing member to client relationship is critical for client clearing to be successful. Particularly, there must be enough capacity and appetite from banks to meet the demand from clients desiring to clear.

We find that capital rules and the clearing risk that clearing members take on do not incentivise these firms to clear for clients. Another area of concern is porting, especially in Europe. While porting is partially linked to capacity, improvements could be made to increase the likelihood of porting.

¹ <http://www.fsb.org/2018/08/fsb-and-standard-setting-bodies-consult-on-effects-of-reforms-on-incentives-to-centrally-clear-over-the-counter-derivatives/>

DISCLAIMER: The purpose of this study is to analyze the impact of regulation on incentives and impediments to clearing. The study considers these topics from an industry-wide perspective, and does not discuss specific firms, positions or plans. The quantitative analysis incorporates only aggregated and anonymized data from a range of market participants.

Based on these considerations, we have developed the following policy proposals:

Clearing Member Capacity

Clearing member capacity for client clearing is a key determinant of clients finding clearing members, and for porting to be successful.

We propose to increase capacity through:

- Review of all capital requirements related to client clearing
 - In particular this should include recognising initial margin when calculating the leverage exposure.
 - Holistic recalibration of SA-CCR, for instance of the way IM is recognised or the general over-conservative calibration, in line with policy recommendations produced by ISDA in a separate stream of work.²
- Review the G-SIB framework
 - Recognise that clearing – regardless of the clearing model at issue (principal vs. agency) – reduces complexity and interconnectedness
 - Recognise initial margin in the G-SIB framework
- Considering the willingness of clearing members to underwrite the risk of a CCP when designing rules regarding CCP recovery and resolution. The more burden is placed on clearing members in a crisis, the less risk and exposure these clearing members will be willing to take on.

Porting

- Permit the new clearing member to rely initially on the previous due diligence conducted by the previous clearing member, due to the fact that they are a regulated entity³. A realistic timeline for subsequently conducting “know your customer” (KYC) by the accepting clearing member could be set through regulation.
- Improve the operational processes around porting to ensure there are no bottlenecks outside of the decision to take on a client that wishes to be ported.
- Temporarily waive minimum capital requirements for the exposures of the ported clients.
- Implement an implied consent of all clients in an omnibus account to port positions from the defaulted clearing member.

We also recommend greater standardisation, alignment and comparability of CCP rulebooks where possible – in particular in respect of default management process, porting, recovery and resolution to provide transparency and confidence, as well as reduce the legal resource required for participants to assess the impact of those rules on their business.

² Given the known severe shortcomings of the Current Exposure Method (CEM) in particular for exchange-traded derivatives, any delay in replacing CEM should be avoided by introducing the option for firms to use SA-CCR as currently calibrated.

³ Firms must of course remain permitted to apply their own KYC policies over and above any regulatory requirements.

Scope

Clearing members and firms which meet CCP access criteria have a choice as to which CCPs to join. Their access to clearing is dependent on whether they are willing to bear the risk and cost of being a clearing member at a particular CCP.

This paper focuses on firms that are not usually direct members of CCPs. These are typically buy-side and smaller banks that are too small to satisfy CCP access criteria, do not have large enough positions to warrant the fixed cost (significant compliance, risk management, legal and technology burden) of being a clearing member, or are unable to join a CCP due to other reasons, for example because they cannot participate in the default management process or mutualise members' risk. These firms would usually access clearing via a traditional broker willing to intermediate and provide clearing member services.

The risk and cost associated with being a clearing member can affect the willingness of clearing members to join a particular CCP. Even if a clearing member clears its house positions, they may not be willing to provide client clearing services. These considerations will be covered further below.

Non clearing member firms ("Clients")

Buy-side entities are generally in favour of central clearing. Different types of buy-side clients may however weigh the costs and benefits of clearing differently (and disagree on whether certain costs or benefits exist). This assessment can also be dependent on the location of the client. Examples of each category include:

Potential benefits:

- Operational efficiency
- Clear legal framework
- Multilateral netting and credit risk elimination to execution brokers
- Standardised valuations and margin requirements etc.
- Reduced margin due to portfolio margin benefits versus non cleared margin rules (multilateral netting)
- Increased base of execution brokers
- Consolidated daily settlements
- Collateral being held at the CCP rather than on the balance sheet of a trading counterparty
- Options on different account structures/ levels of protection
- Robust risk management and default management practices of the CCP
- Transparent end-of-day pricing of cleared positions.

Potential impediments:

- Increases fees and costs for clients (both CCP and CM fees) for maintaining positions. Fixed costs (internal and external IT systems, setting up middleware and connections, risk models and management, minimum fees) are particularly inefficient for smaller counterparties.
- Creates complicated, two-tiered counterparty risk, with risk to clearing member (e.g. VM transit risk) and central counterparty

- Introduces information challenges to clients who must analyse CCP counterparty risk with insufficient disclosure
- Lack of opportunities for cross-product netting and margining
- Concentrates counterparty risk at one, or in some cases a small number of, clearing member and a handful of CCPs instead of across various execution brokers
- Risk to “continuity of transactions” if porting is not reliable, either in the case of the clearing member defaulting, or the clearing member terminating its services.
- Forces clients to post collateral in a format that may not suit its asset holdings, because CCPs can only accept variation margin in cash.
- CCP default management is focused on stabilising the system as a whole. If porting fails, this could make liquidation less flexible and more costly for clients compared to bilateral transactions.
- Clearing participants might have to bear costs of CCP recovery and resolution.
- The operational models of CCPs requiring variation margin to be posted in cash is also significant disincentive to clear for many clients, in particular European pension funds.

There are several possible methods for clients to access clearing:

- Becoming a clearing member itself
- Client clearing through a direct relationship with a clearing member
- Hybrid clearing models, which are hybrids between CCP membership and client clearing relationships (see description below)
- Indirect clearing, a variant of client clearing, where the firm becomes a client of a firm which is itself a client of a clearing member

Client Clearing

For OTC derivatives, becoming a direct client of a clearing member is the usual way to access clearing.

Client clearing falls under a variety of models, which include:

The agency model: The agency model considered in this paper is the US “futures commission merchant” (FCM) model, which is a variant of the agency model. In the US, collateral for OTC derivatives transactions is posted according to the Legally Segregated Operationally Commingled (LSOC) model. Under LSOC all margin is collected gross and passed to the CCP. US laws provide safeguards that the client will always receive back the value of its collateral, but not necessarily the same collateral. Should an FCM default, there is support by the US bankruptcy code for flexibility and precedent of CCPs porting the whole client book of the failed FCM to another FCM. If porting fails, client positions will be liquidated by the CCP together with the defaulting FCM’s positions as part of the CCP’s default management process.

The principal-to-principal model: This model is predominantly used in Europe and Asia. The client transacts with its clearing member, who then has an equal but opposite transaction with the CCP. There are more diverse segregation models, dependent on the jurisdiction. In Europe, a client has the choice between net omnibus models with the least amount of protection, gross omnibus models and full segregation, under which a client receives back exactly the same collateral it posted. As in

the US, if porting fails, client positions will be liquidated by the CCP together with the defaulting clearing member's positions as part of the CCP's default management process.

Porting

Porting must work for clients under all clearing models in order to ensure that client portfolios benefit from continuity of clearing even if the clients' clearing member defaults.

Clearing members do not usually provide guaranteed back up clearing service because of the significant cost and risk this introduces to clearing providers. Usually clients would have agreements with more than one clearing member in normal market circumstances so, if one clearing member defaults or terminates its services, then there are systems and connectivity established with an alternate clearing member which can be used to port the positions to. This is dependent on whether the alternate clearing member agrees to accept additional risk and positions on behalf of clients or not.

A clearing member default and the subsequent increased number of clients needing an alternate clearing member is likely to coincide with stressed market conditions when clearing members are less likely to want to increase their risk and exposure which introduces the risk of porting failing.

Since porting cannot be guaranteed, clients face a significant risk of that their positions are liquidated if porting fails upon either clearing member default or termination provisions.

While the choice of CCP account structures have increased over the last few years to offer greater asset protection and segregation, which is a necessary condition to ensure the feasibility of successfully porting, porting is still not guaranteed. One way of minimising the risk of porting failing is to increase clearing member capacity by increasing banks' appetite for clearing business. This can be tackled by a combination of proportionate bank capital treatment to the risk, as well as temporarily waiving capital requirements for ported portfolios in stressed market conditions. Please see below for further discussion of cost and incentives for banks to provide client clearing services.

In previous FCM defaults in the US, CCPs ported the whole client book to another FCM in accordance with the legal structure in the US which encourages this approach⁴. This is a pragmatic way to port many clients in a short time, assuming a replacement FCM can be found. However, this can cause issues with documentation, as well as know-your-customer and anti-money-laundering requirements.

In Europe, the legal framework is different and each client must find a replacement clearing member to port its positions within a tight time frame of usually 2 business days. As banks do not typically provide guaranteed porting services to clients, it would be a considerably difficult task for clients to find a bank willing to increase its exposure and step in as an alternate CM, at what is likely to be a time of stress if a CM defaults. This process has not yet been tested and there is currently no precedent for porting a defaulting CMs OTC client positions.

For clients in a net omnibus account, porting will be extremely difficult, especially in a framework where every client can choose the clearing member to port to, as collateral and transactions are commingled with other clients' collateral and transactions.

⁴ To date there haven't been any defaults involving porting of OTC derivatives clients.

The risk of porting failing is further exacerbated by the fact that several banks have left the client clearing business⁵. This, combined with the high barriers to entry, have resulted in clearing being concentrated in a small number of clearing members, increasing concentration risk, and could make porting less likely to work when needed. For instance, at the end of 2017 SwapClear's largest five clearing members cleared 77.52% and the 10 largest clearing members 93.9% of the client clearing exposures⁶. These percentages have been roughly the same albeit slightly declining over the last years.

Residual Counterparty Risk to Clearing Members

While clearing substantially reduces counterparty credit risk to execution brokers, clients still face residual risk to clearing members, both in terms of variation margin transit risk and friction costs associated with failed porting. The US regulatory and statutory regime applicable to FCMs gives clients more comfort with porting and asset segregation. Some EU clients are not as confident that porting is reliable in Europe.

If porting fails, CCPs shall liquidate clients' positions under their default management procedure and clients' positions fail to benefit from continuity of trades. The forced liquidation of positions could expose clients to close-out costs.⁷

This forms a significant disincentive to clearing for some clients.

If a client portfolio enters a CCP default management process (as a result of porting failing), the focus of the CCP will be to stabilise the system, making liquidation less flexible for clients compared to bilateral transactions. Clients will not have visibility and control over the default management process and therefore, clients will not know which positions are unwound and when, which could lead to them losing a hedge at time when it is most needed. Furthermore, the clients' positions would be unwound at the unwind price and clients shall incur additional cost in the form of bid-offer (difference between unwind price and price of replacement trades) as clients enter into new transactions to replace the exposure lost.

This is different from the default management process in a non-cleared contract, where clients (or asset managers on behalf of clients) are exercising their close-out rights in the case that the client is the non-defaulting entity. The client may have more flexibility in determining the close-out value of the transaction (e.g. by obtaining market quotations or consulting relevant pricing data), however this will depend on both the nature of the event giving rise to the termination and the close-out methodology agreed between the parties in their underlying trading agreement. It is important to note that the client may also be required to demonstrate that they have acted in good faith and used commercially reasonable procedures in order to produce a commercially reasonable result. Given that there is full visibility of timing of getting these quotes, clients can simultaneously enter into positions replacing the exposure that is lost, and at the replacement price used to value the

⁵ See ISDA study "Key Trends in Clearing for Small Derivatives Users" at <https://www.isda.org/2016/10/17/key-trends-in-clearing-for-small-derivatives-users/>

⁶ From LCH's Q4 2017 Data: April 2018 Disclosure at <https://www.lch.com/resources/rules-and-regulations/ccp-disclosures>

⁷ A CCP member does not support certain positions taken in this paper. In particular, the CCP believes the: i) level of uncertainty noted in the paper on likelihood of customer porting is not universally applicable across jurisdictions; and ii) paper does not adequately represent the importance CCPs and regulators in certain jurisdictions place on protecting non-defaulting customers as a core mechanism in supporting the stability of the financial system while managing a clearing member default.

portfolio. This can result in a more tailored approach to meet the needs of the non-defaulting client, with more control, visibility and valuation of positions reflecting the side of the market that mimics the cost that clients would face when replacing that exposure in the market.

Overall, the derivatives market worked well during the Lehman Brothers default for most participants, especially in the cleared space. Subsequent regulation has strengthened the market further, or will do so once phased in, for instance bilateral exchange of initial margin for uncleared derivatives.

Some clients had positive experience of managing the Lehman Brothers default as a result of the aforementioned flexibility that the non-cleared trades provide. For other clients, especially clients who were also posting one-way initial margin to the bank, the experience of Lehman Brothers for non-cleared trades were less favourable. Clients' initial margin was on Lehman Brothers' balance sheet and therefore clients had to submit unsecured claims for it in Lehman's insolvency proceedings. Some clients also experienced issues with the inability of collecting gains post default and disagreements in valuations of closed out trades.

Depending on their confidence in porting, the combination of the risk of porting failing and CCP default management can disincentivise some clients from clearing, outside of the clearing mandate.

Recommendations to improve the likelihood of porting

We do not support under any circumstance a situation where clearing brokers had to guarantee porting. The biggest barrier to porting is risk appetite, which has to be managed by the clearing member at the point of time that a porting request comes in.

While porting cannot be guaranteed, we offer the following recommendations to make porting more likely, especially in stressed market situations:

- Permit the new clearing member to temporarily rely on the previous due diligence conducted by the previous clearing member, due to the fact that they are a regulated entity. A realistic timeline for subsequently conducting KYC by the accepting clearing member could be set through regulation.
- Improve the operational processes around porting to ensure there are no bottlenecks outside of the decision to take on a client that wishes to be ported.
- Temporary waiving of minimum capital requirements for the exposures of the ported clients.
- Implement an implied consent to port positions under clearing member default: In the EU all clients in an omnibus account need to approve porting. If the relationship is established with an implied consent to port then porting can be more easily achieved.

Clearing Member Capacity

Clearing member capacity is impacted by risk and cost, including bank capital requirements. Clearing member capacity is constrained by a number of factors, including:

- Credit risk appetite to the client
- Capital rules including the leverage ratio
- The risk on the client, and the risk and cost associated with introducing more risk to a CCP, for instance higher default fund contributions.

All of these factors are exacerbated for long-dated directional positions.

These constraints often result in clearing members preferring short-term high turn-over client business over long-dated, held-to-maturity, one-directional portfolios. In some cases clearing member banks can maintain tight credit limits to be just over the current volume of clearing per client, which can significantly constrain capacity for clients.

It should also be noted that, in the EU, pension funds currently benefit from a temporary clearing exemption⁸. The reason for that is the need to post variation margin in cash. This requirement would likely result in pension funds having to reduce their physical asset holdings (and therefore increase their financial solvency risk as cash is not a good matching asset for their liabilities), or increase risk by relying on the repo markets to transform the high quality government bonds into cash for posting as variation margin.

When this exemption expires, a large amount of very directional risk will be introduced to client clearing. A study by Pensions Europe and ISDA⁹ estimates an increase in initial margin of ca. EUR85bn (or a full range of ca. EUR 58bn to ca EUR111bn depending on varying assumptions) would be required over a number of years when European pension funds start clearing in large volumes. This is significant when compared with ca. EUR 77bn of client IM held by the three major CCPs for interest swaps.

For certain classes of counterparties the clearing mandate will be phased in only over the next few years. It is unclear if there is clearing member capacity for this additional demand for clearing.

Termination right provisions

Another issue for clients are termination right provisions: clearing member agreements typically allow clearing members to terminate the service to clients upon giving some notice (usually 1-2 months). Clearing members require such clauses to be able to manage their own risk, but would not use such a clause lightly as invoking the clause would impact the client relationship significantly. Upon providing such notice, clients will need to find an alternate CM to port their positions or risk the portfolio being liquidated. In non-cleared transactions where the bank (execution broker) is committed to the life of the transaction, there are no concerns about the viability of porting and the ability of clearing brokers to exercise termination rights and clients therefore have more certainty that their trades will continue for the life of the trade than they do for cleared transactions. When combined with concerns about porting, this uncertainty may increase the risk of client transactions being liquidated and can be a potential disincentive to clear for clients.

⁸ For reference, there are many structural reasons why EU pension funds are exempt from clearing but US pension funds are not. US pension funds manage their financial solvency risk using predominantly corporate bonds, whereas EU pension funds use OTC derivatives and do not hold much cash required to post as variation margin by CCPs.

The combination of the following makes the corporate bond market a good instrument for US pension schemes to manage their financial solvency risk over OTC derivatives: (i) US pension funds have much shorter duration than EU pension funds (on average 10 years versus 20 years), (ii) US corporate bond market is broader and deeper than in EU, and (iii) US pension funds are usually driven by managing balance sheet impact which discounts liabilities on a corporate bond yield basis, whereas EU pension funds typically discount on a basis more closely linked to swaps rates.

The longer duration of EU pension funds, combined with short EU corporate bond maturities and discounting basis more similar to swap rates, leads EU pension funds to make greater use of OTC derivatives for managing financial solvency risk versus a US pension fund.

⁹ <http://www.fsb.org/wp-content/uploads/ISDA-Pensions-Europe-joint-response.pdf>

Many of the risks mentioned above including increased credit risk to the clearing member and risk of porting failing upon either clearing member default or termination provisions, would be manageable if the appetite for banks to provide clearing member services would increase, such that porting can be more reliable. Ensuring the capital banks are required to hold is proportionate to the risk introduced by clearing derivatives, would incentivise banks to take on more client cleared trades and therefore increase banks' appetite for clearing member services.

Fair, reasonable and non-discriminatory commercial terms' (FRAND)

In the EU, there are also currently proposals which could inadvertently disincentivise the provision of clearing services. Under EMIR REFIT, there is a proposal to require clearing members and firms that provide clearing services (directly or indirectly) to provide them on a 'fair, reasonable and non-discriminatory commercial terms' (FRAND)¹⁰.

In principle, ISDA agrees with the aim of the proposal which is to increase access to clearing. However, if FRAND is not interpreted in a way that allows clearing firms to be able to give due consideration to both risk and commercial factors, firms may consider that they may not be able to manage the level of risk to which they are willing to be exposed or that it may not be commercially viable to offer clearing services to all clients on the same terms. Firms currently provide clearing services to clients on the basis of clear and objective factors which are made transparent under Article 38 of EMIR. These factors mean that the terms on which a firm offers clearing services will naturally vary due to individual differences between clients (e.g. a client's credit quality) or the nature of their activity (e.g. volume of transactions and operational complexity of supporting the client). If members were required to provide clearing services to all clients on the same terms, it would disincentivise firms from providing clearing services and may ultimately reduce the availability of client clearing services in the market. This would be counterproductive to the goal of the proposal.

¹⁰ The EMIR REFIT legislative proposal was published by the European Commission on 4 May 2017 (2017/0090 (COD)). The legislative proposal is still progressing through the legislative process and is not yet law. <https://eur-lex.europa.eu/legal-content/EN/TXT/DOC/?uri=CELEX:52017PC0208&from=EN>

Hybrid Clearing Models

Many CCPs are now offering, or working on, hybrid models as alternatives to are client clearing relationships. Firms that participate in a hybrid model (Hybrid Client) usually access the CCP themselves, with some features being similar to a classic clearing member. This includes meeting access criteria such as minimum capital and credit quality, posting and receiving collateral directly and transacting directly with the CCP. As many of these hybrid clients would be unable to participate in the default management process, the hybrid clients will nominate a clearing member (agent) that posts default fund contributions and would bid in an auction on behalf of the hybrid client. In some, but not all of those models the nominated clearing member (agent) will also guarantee the performance of the hybrid client to the CCP.

Hybrid access models could mitigate some of the impediments to client clearing such as:

- *Capital* – In some models the agent would not have to guarantee transactions of the hybrid client, and posted collateral of the hybrid client could not affect the agent's balance sheet, therefore in principal these models should reduce capital requirements for both the client and the clearing member. Each model needs capital opinions to support individual capital impact analysis.
- *Porting* – Should the clearing member or agent that provides the default fund contribution for the hybrid client default or terminate its services, the hybrid client would still have to find a new alternate clearing member or agent. As the hybrid client can continue paying margin and other liabilities to the CCP, there might be more flexibility, but technically the windows for finding a new clearing member or agent that are currently available are not greater than porting windows under a traditional client clearing model. Therefore these models do not address the porting risk upon default or termination of CM services. It is hoped that future evolutions of these models would allow for a longer windows to ease some of the risk of having to find a new clearing member or agent.

However, challenges remain in realizing the benefits of the hybrid clearing model. In some models, as the hybrid client is accessing the CCP directly, the clearing member will not insulate the CCP and other clearing members from the risk of default of the hybrid client. In that case, should a hybrid client default and if its posted margin is insufficient to cover the loss, the remaining loss will have to be mutualised by all clearing members. The CCP will apply the same requirements to minimum capital, operational capabilities and credit quality as for clearing members. This means that hybrid models will only be suitable for larger clients with higher credit quality and might therefore be of limited utility for providing clearing access to the wider market.

Overall, most of these models are either in their infancy or still being developed and do not have significant volumes yet. The true cost of the operational complexity and technology costs are not fully known so the cost of opting into these models is not clear.

In the US, only a subset of FCMs is prepared to step in the role of an agent for the client under new hybrid clearing models.

Therefore, while the model can provide some improvements for certain clients, it is not a proven model yet and will prove its worth only in the future.

Indirect Clearing

Indirect clearing is similar to client clearing, but a firm does not become client of a clearing member, but client of a firm which is itself client of a clearing member or another client. This model is particularly common for accessing listed derivatives in the futures market, but not for OTC derivatives clearing.

Indirect clearing will not solve the issues listed above in the client clearing section, but could help smaller clients. However, currently there is no known instance of indirect clearing for OTC derivatives. Unlike futures markets, net omnibus accounts are not commonly used for OTC derivatives. Under indirect clearing it is difficult to implement segregation, especially cross-border, when different laws and insolvency regimes are involved.

Without segregation of collateral at the CCP, for OTC derivatives the indirect client has counterparty and credit risk against their clearing member and the firm they use to access that clearing member to a similar extent as if the transactions were bilateral - potentially to a larger extent, as bilateral margin could be posted in a bankruptcy remote way, opposite to unsegregated cleared margin¹¹.

We therefore support exemptions from clearing for small firms that are not systemically important, as is currently envisaged in EMIR REFIT and CFTC Regulation 2.0¹².

Cost of Clearing for Clearing Members

Cost of clearing for clearing members consist of

- *Known costs*: being a clearing member comes with significant costs for compliance, risk management, legal and technology. When a clearing member joins a CCP, it agrees to mutualise the credit risk of its fellow clearing members. This is done by paying into a default fund (DF) that can be used when the posted margin of a defaulting clearing member is insufficient, and the requirement to post further funds (assessments) should the DF be depleted.
- *Unknown costs due to current CCP recovery & resolution proposals*: If the CCP gets into difficulty, current legislative proposals allocate a disproportionate part of recovery and resolution cost to clearing members, for instance with additional cash calls.

Clearing members pass of many of the costs onto clients, usually in terms of fees and manage any residual risk or costs beyond what has been modelled or factored in.

If the clearing member takes on additional clients, especially clients with long dated, directional portfolios, the DF contribution of the clearing member is likely to increase, driving other risks, such as being assessed for further contributions. These again are likely to be passed onto the clients making clearing more expensive for these clients.

¹¹ For futures, indirect clearing is commonly used and often required to access futures markets in other jurisdictions, and to facilitate relationships where the client faces only one broker that can then access other markets via their network of indirect brokers.

¹² <https://eur-lex.europa.eu/legal-content/EN/TXT/DOC/?uri=CELEX:52017PC0208&from=EN> and https://www.cftc.gov/sites/default/files/2018-04/oce_chairman_swapregversion2whitepaper_042618.pdf

With CCPs being central nodes in the derivatives clearing market, these entities have become some of the biggest credit risks in a clearing member's portfolio on nominal terms. Many clearing members have to carefully manage the exposure they take on to CCPs.

Whilst there are incentives to clear, capital rules and other regulation since the credit crisis of 2007/2008 are linked to the cost of clearing for clearing members:

- Similar capital requirements on client cleared transactions as for similar uncleared transactions, albeit reduced by the posted IM.
- Low risk weight on transactions with the CCP and on IM which is not bankruptcy remote.
- A capital requirement on DF contributions.
- Received IM for client clearing positions (that is passed on to the CCP) cannot currently be used to reduce the Exposure at Default (EAD) for those positions when calculating the Leverage Ratio.
- The client leg of cleared transactions is exempt from the CVA capital charge in the EU, but not in the US. In order to not restrict clearing member capacity further, the client leg of cleared transactions should be exempted. This would also ensure that accounting and regulatory capital for CVA are more closely aligned for cleared client transactions.
- GSIB calculations currently overstate the true exposure of CMs under both the size and complexity indicators, and

Since cleared exposures are included in the leverage ratio exposures, these also feed into the GSIB calculation under the size indicator. Therefore, lack of recognition of margin within the leverage ratio calculation also feed into the GSIB calculation. Additionally, under the complexity indicator, specifically for OTC client cleared transactions, notional is included on both CCP facing and client facing legs of the client cleared transactions, where these are cleared under the principal model. Particularly in the context of porting, this creates a significant disincentive to facilitate, due to potential for abrupt increase in two times gross notional associated with the client portfolios to be ported, which in turn could have impact on the overall GSIB score.

Basel Monitoring QIS

We have analysed the contributions of large firms to the Basel monitoring QIS as related to client clearing. This QIS focusses on the impact of new measures, like the Standardised Approach for Counterparty Credit Risk (SA-CCR) and the leverage ratio.

The most notable data point from the Basel monitoring QIS is that the leverage ratio exposure (LRE) for client cleared OTC derivatives increases significantly if initial margin cannot be recognised.

GARP and ISDA analyzed data submitted by 18 G-SIBs and internationally active banks (the Participating Banks) that conform to a worksheet created by ISDA which was based on the Basel Committee on Banking Supervision's (BCBS) current Basel III monitoring exercise template, using data as reported end-December 2017.

The BCBS conducts its monitoring exercise semi-annually to assess the *“Impact of Basel III: A global regulatory framework for more resilient banks and banking systems (“the Basel III standards”), the Basel III leverage ratio framework and disclosure requirements (“the Basel III leverage ratio framework”) and Basel III: The Net Stable Funding Ratio (“Basel III NSFR standards”) on Participating Banks.”*¹³

This ISDA and GARP QIS utilizes the data from each Participating Bank to calculate a number of ratios, which estimate the impact of SA-CCR on Potential Future Exposure (PFE), Replacement Cost (RC), Leverage Ratio Exposure (LRE), and Risk-Weighted Assets (RWAs). For the purposes of providing impacts of the leverage ratio on client cleared over-the-counter derivatives transactions to the Financial Stability Board's Derivatives Assessment Team, the study focused on assessing leverage ratio exposures calculating using SA-CCR with and without the risk-reducing benefits of initial margin.

Based on the feedback from 10 banks who shared their response in the Basel monitoring QIS, the LRE, for client clearing exposures only, and calculated under SA-CCR, increases by 109% if the exposure reducing effect of initial margin cannot be recognised, vs. the same exposure calculated under SA-CCR with recognition of the exposure reducing effect of initial margin, allowing IM to offset PFE as in the risk weighted SA-CCR (i.e. using the multiplier function).

- LRE1 (Cell J309¹⁴ in the April 2018 Basel Monitoring's "Leverage Ratio" tab) is the current leverage ratio exposure for client cleared trades calculated under SA-CCR without recognition of the exposure reducing effect of IM
- LRE2 (Cell K309 in the April 2018 Basel Monitoring's "Leverage Ratio" tab) is the current leverage ratio exposure for client cleared trades calculated under SA-CCR with recognition of the exposure reducing effect of IM
- LRE1 = 2.09x LRE2

We also looked at the ratio of the LRE for client clearing exposures only, and calculated under SA-CCR if the exposure reducing effect of initial margin cannot be recognised, vs. the same exposure

¹³ For more information on the Basel III monitoring exercise, including instructions to Participating Banks and the associated data template, see <https://www.bis.org/bcbs/qis/>

¹⁴ Note that the cells referenced here contain different row numbers than the cells referenced in the GARP QIS report. This is due to some template differences—the panel used for the DAT exercise (panel 'M' of the Basel III monitoring template's 'Leverage Ratio' tab) is identical to the same panel in the ISDA SA-CCR QIS template's 'Leverage Ratio' tab, but has moved position in the spreadsheet as other elements of the ISDA SA-CCR QIS template were not.

calculated under SA-CCR with recognition of the exposure reducing effect of initial margin, allowing IM to offset PFE as in the risk weighted SA-CCR as before, but looked at the part of the template where these numbers are broken down by counterparty type.

We did not have sufficient responses to provide the impact on the categories

- Banks
- Corporates
- Insurance
- Retail
- Sovereign

We however got data for the following three counterparty types, with the same overall calculation as the overall LRE increase of 109%:

Counterparty Type	Cell reference	Increase
Investment funds	J259 and K259	101.1%
Asset managers	J266 and K266	169.6%
Pension funds	J294and K294	140.4%

Given the headline impact of 109% increase in LRE if IM cannot be recognised under SA-CCR, we assume the other categories where we don't have data for will have a lower impact to make the overall impact of 109%. We believe this shows that clients with large, directional portfolios seem to be particularly hit by the non-recognition of the exposure reducing effect of IM when applying SA-CCR to calculate LRE. Note that the above counterparty-type numbers are a mean average based on bank responses, while the overall number is a weighted average. This is due to the number of submissions being below GARP's required threshold for being able to provide a weighted average on an aggregated and anonymized basis. We don't expect that these numbers should differ significantly from those which would have been obtained through a weighted average (for example, the difference in weighted average and mean ratios for the overall impact is 10%).

While LRE from client clearing businesses are only a small part of the overall LRE, business lines and their capital consumption are judged on a standalone basis. With client clearing being a low margin businesses, needlessly penal capital requirements will not increase the capacity of clearing members to provide client clearing services.

Re-calibration of SA-CCR

In addition to recognising IM for calculation of the LRE, we suggest that the calibration of SA-CCR should be reviewed holistically, including whether the alpha factor is appropriate.

Firstly, the alpha factor is set at 1.4 – the original value set by the Basel Committee for IMM in 2005. This calibration is based on studies dating back to 2003, and does not reflect the current market environment, in particular the shift towards increased clearing and collateralization and the larger portfolio diversification effects. In addition, the alpha factor of 1.4 was not originally designed to apply to a standardized methodology, but rather to account for model risk (including assumptions implicit in the IRB framework)¹⁵ and severe market moves that could affect the use of an internal model to calculate exposures.

Consequently, market participants strongly believe that the usage and calibration of the alpha factor should be revisited to better reflect current market and regulatory environments and considering the overall conservative calibration of the framework. In particular in the leverage ratio, application of alpha to RC should be removed completely given the on-balance sheet component should align with accounting values.

Secondly, addressing the following points¹⁶ would be required to improve the risk sensitivity of SA-CCR and align it to regulatory developments since its design:

1. Multiple credit support annexes (CSAs) under one qualifying master netting agreement are penalised, as SA-CCR requires banks to divide a netting set into sub-sets to align with the CSAs, thereby undermining the legal agreement, which allows net settlement in the event of default and reducing netting. This will become a bigger issue as more counterparties are phased into the uncleared margin requirements (UMR), where a UMR compliant CSA is added to the netting agreement. Simple modifications would make the treatment of multiple CSAs applied to a single netting set more consistent with the market practices. This also poses an issue in the client cleared context given a client could have trades that settled-to-market (STM), e.g. equity futures, and trades that are collateralized-to-market (CTM), e.g. listed equity options.
2. Under SA-CCR, IM is recognized through the PFE multiplier formula, which allows a bank to reduce the aggregate add-on. This formula results in a far more conservative recognition of IM than CEM, where a dollar-for-dollar offset of PFE after haircut adjustments is allowed. Given the expected future increase in IM requirements with the phase-in of more counterparties under the uncleared margin requirements (UMR) and replacement of legacy trades with new trades, this impact is expected to grow and therefore, a more risk-sensitive recognition of IM is needed. This results in an even more conservative calibration considering that collateral recognition is already penalized through haircuts and MPOR. Moreover, the modified SA-CCR implemented for leverage ratio purposes fully omits the offset to potential future exposure provided by initial margin, including when margin is posted in a custodial account and thus cannot be leveraged by the pledge beneficiary.
3. SA-CCR does not allow recognition of diversification across IR hedging sets and FX hedging sets leading to overstate counterparty credit risk. In order to increase the consistency with the actual risk to which banks are exposed and to being better aligned with market practices, SA-CCR should allow for diversification across IR hedging sets and FX hedging sets.

¹⁵ See BCBS publication (<https://www.bis.org/publ/bcbs116.pdf>)

¹⁶ Please refer to <https://www.isda.org/a/hTiDE/isda-sa-ccb-briefing-paper-final1.pdf> for further details on the impacts deriving from a study conducted on the Basel Committee's own hypothetical portfolios.

4. Finally, collateral volatility is currently reflected through collateral haircuts where no diversification benefits are reflected across different collateral securities or collateral and derivatives. To increase risk sensitivity, in particular in an environment where IM is increasingly exchanged (majority is in the form of securities rather than cash) we recommend that banks should have the option to reflect the volatility of collateral together with derivatives in the add-on calculation rather than separately as a haircut. Thus, we suggest allowing banks to remove collateral haircuts and instead incorporate the volatility estimate into the add-on calculation together with all derivatives.

The need to replace CEM and SM with a more up-to-date, risk-sensitive methodology is clear, and we fully support the Basel Committee's objectives in developing SA-CCR. However, the results of the Industry QIS clearly confirm that implementing the framework as currently calibrated is likely to have far-reaching negative consequences.

Complexity of Rulebooks

CCP rulebooks vary significantly in their drafting, content and even language. This is something clearing members and larger clients will have the legal resource and experience to deal with. For many clients however it is a proportionately larger burden to assess and understand the provisions in the rulebook that affect their business and risk, for instance rule around default management, porting and recovery rules.

We recommend greater standardisation, alignment and comparability of CCP rulebooks where possible – in particular in respect of default management process and porting and recovery and resolution. This would enable clients to better on-board with more CCPs and make the process less cumbersome.