

Leverage ratio treatment of client cleared derivatives

January 16, 2019

Introduction and overview

The International Swaps and Derivatives Association (ISDA), The Global Financial Markets Association (GFMA) and the Institute of International Finance (IIF), collectively “the Associations”, represent the largest participants in national and global banking and financial markets. The Associations appreciate this opportunity to comment on the Consultative Document (CD): “*Leverage ratio treatment of client cleared derivatives*”.

The Associations remain supportive of the endeavours of the Basel Committee on Banking Supervision (BCBS) to implement the leverage ratio (LR) as a simple, transparent and non-risk-based backstop to the risk-based requirements. While the risk-based requirements are intended to be the binding requirements for most banks in order to effectively correlate their capital levels with the actual risks they take, the LR’s objectives are to 1) ensure that an appropriate minimum level of capital is held against a banks’ non-risk weighted assets at all times, in the event that the risk-based measure fails to capture certain risks and 2) restrict the build-up of leverage in the banking sector to avoid destabilising deleveraging processes that can damage the broader financial system and the economy.

The industry welcomes the decision by the BCBS to consult on, and collect data to study, the impact of the LR on client cleared trades, with a view to potentially recognizing the exposure-reducing effect of initial margin (IM). The industry believes that in the context of a bank exposure created by a client cleared derivative transaction, the LR framework should recognize the exposure-reducing effect of IM, particularly as it is not used to increase the bank’s leverage. Not recognizing client IM in the calculation of LR exposure (LRE), as is the case under the current LR framework, unnecessarily and significantly overstates LRE and contradicts the G20 mandate by creating an economic disincentive for clearing brokers to offer clearing services.

Consequently, clearing services have become more expensive and the client clearing service providers’ (CCSP) capacity has been constrained, resulting in a number of CCSPs exiting the market. As evidenced in several papers^{1,2,3}, this has had negative spill-over effects for end-users and their ability to hedge legitimate business risks in the cleared market, potentially pushing activity towards less efficient or

¹ https://www.cass.city.ac.uk/_data/assets/pdf_file/0016/420370/WP-CBR-01-2018.pdf

² <https://www.ft.com/content/b60acaac-2cc2-11e6-bf8d-26294ad519fc>

³ <https://www.bankofengland.co.uk/-/media/boe/files/working-paper/2018/the-impact-of-the-leverage-ratio-on-client-clearing.pdf>

more expensive hedging strategies. In addition, stakeholders such as the *Autorité de Contrôle Prudentiel et de Résolution (ACPR)*⁴ have voiced their concerns on systemic risk stemming from a higher concentration of clearing activity among a smaller number of banks, whereby it will be harder for a clearing member to take on another clearing member's positions (portability) at default, due to the sheer size of the book and the consequent capital consumption.

Recently, the BCBS, CPMI, FSB and IOSCO⁵ report "*Incentives to centrally clear over-the-counter (OTC) derivatives; A post-implementation evaluation of the effects of the G20 financial regulatory reforms*" ("FSB DAT report") concluded that the G-SIBs clear the majority of OTC derivatives client business. While most of the G-SIBs are not currently constrained by the leverage ratio as their binding capital requirement on the consolidated level, that may not be the case in future or throughout the economic cycle. We also note that, depending on firm specific internal capital allocation processes, client clearing as a business line may be bounded by its LR based capital consumption.

In terms of responses to the FSB DAT report, 64.7% of all CCSPs stated that the LR had a significant negative impact and 23.5% of respondents said there is some negative impact. This means that a large majority of 88.2% of responding firms believe that the LR impacts their business negatively.

We also note that the increased LRE feeds into the G-SIB calculation via the "size" indicator, which compounds the impact of non-recognition of IM. The G-SIB framework also does not take the complexity reducing effects of clearing into account and also treats the principal and the agency models of client clearing differently, which is not reflective of the risks involved. Both of these factors will add constraints to client clearing businesses, in addition to the inflated LRE.

As evidenced above, clearing capacity is already an area of systemic concern while the demand is likely to increase further as more end-users are mandated to clear. For example, when European pension funds start clearing in large volumes, requirements for clearing capacity will increase significantly. The study "*Potential demand for clearing by EU Pension Funds*" by Pensions Europe and ISDA⁶ estimated an increase in IM of ca. EUR85bn (or a full range of ca. EUR 58bn to ca EUR111bn depending on varying assumptions) over a number of years when European pension funds start clearing in large volumes. This is a significant increase when compared with ca. EUR 77bn of client IM currently held by the three major CCPs for cleared interest rate swaps of clients.

Therefore, the industry strongly supports the initiative of the BCBS in considering options for recognising the benefits of IM within the LRE calculation. The results from our industry LR Quantitative Impact Study (QIS)⁷ are presented in table 1, which shows the aggregated results of data provided by

⁴ https://acpr.banque-france.fr/sites/default/files/medias/documents/acpr_discussion_paper_-_lr_and_client_clearing.pdf

⁵ <https://www.bis.org/publ/othp28.pdf>

⁶ <http://www.fsb.org/wp-content/uploads/ISDA-Pensions-Europe-joint-response.pdf>

⁷ Please refer to Appendix 1 for further details.

11 international banks who are active in this market and demonstrates the impacts of the options under consideration.

Chart 1:

Client Cleared Trade Leverage Ratio Exposure under CEM and Current Approach (Option 1)

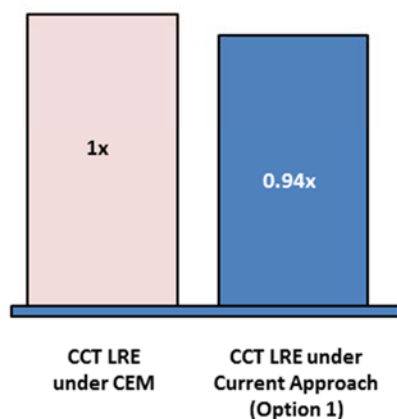


Chart 2:

Client Cleared Trade Leverage Ratio Exposure under Option 2 and Option 3 compared to the Current Approach (Option 1)

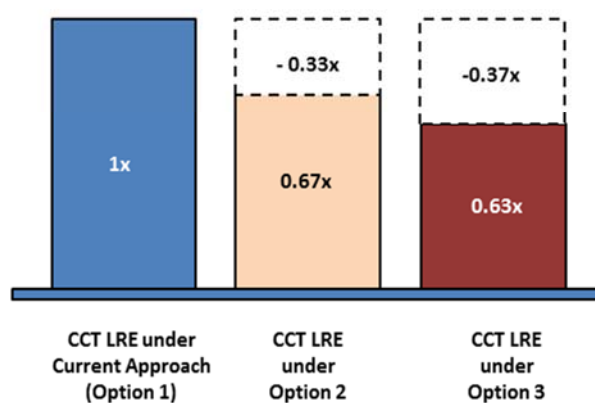


Table 1: Total Leverage Ratio Impacts

Description	Impacts in % (and in bps)
LR (with CCT under Current Approach ⁸) minus LR (with CCT under CEM)	-0.010% (-1 bp)
LR (with CCT under Option 2) minus LR (with CCT under Current Approach)	0.020% (2bps)
LR (with CCT under Option 3) minus LR (with CCT under Current Approach)	0.022% (2.2bps)

The industry believes that option 3 provides the appropriate incentives for clearing, while also addressing the wider systemic capacity concerns as well as those evidenced in the way the markets currently function. We believe that option 3 has a number of important advantages over the other two options proposed:

1. Option 3 would reduce the cost of providing client clearing services, enabling more firms to build profitable businesses and to provide more clearing capacity.
2. Option 3 correctly considers and balances between the treatment of IM and VM, reaching the most realistic and risk appropriate counterparty exposure.

⁸ Current Approach refers to modified SA-CCR as specified in the BCBS d424 – Dec 2017 – Section Leverage Ratio

3. Option 3 recognises non-cash variation margin (VM), providing flexibility for clearing members to accept non-cash VM from clients and thus reducing the need for connected repo transactions. Irrespective of this greater flexibility with respect to what the client can post to the clearing member, the industry believes that CCPs should continue to only accept VM in cash from clearing members.
4. Option 3 would simplify the treatment of counterparty credit risk exposure methodologies across the prudential regulatory framework, by aligning risk-based and leverage ratio exposure (LRE) calculation for client clearing. It avoids introducing an additional calculation methodology for banks that treat derivatives as off balance sheet exposure on top of risk-based and other derivative calculations in the leverage ratio.
5. In case the SA-CCR is updated or recalibrated (see below), those changes would feed through to the LRE calculation, as option 3 does not use a tailored version of SA-CCR.

While option 2 is considerably preferable to option 1, neither of these two options have all the advantages of option 3. More details and a comparative analysis can be found in the section “Comparison of the proposed options” of this response.

Furthermore, other elements in the LR framework, such as the 1.4 alpha factor in SA-CCR need to be properly addressed at a globally consistent level. In particular, the replacement cost (RC) component of the LR exposure is a simple sum of balance sheet exposures, therefore we do not believe that the 1.4 alpha factor should be applied to RC.

As the Industry has described before, the SA-CCR has other shortcomings and should be recalibrated holistically. Other than the two issues above, we have made the following recommendations in relation to the SA-CCR:

- Evaluation of the appropriateness/calibration of the 1.4 alpha factor
- In line with the legal structure and form, allowing netting between multiple credit support annexes (CSA) under one qualifying master netting agreement
- Reviewing the recognition of IM, which currently is calibrated too conservatively
- Allowing recognition of diversification across IR hedging sets and FX hedging sets

We do not believe that a recalibration of SA-CCR would impede or delay other prudential initiatives and, in fact, the recalibration of SA-CCR could be undertaken in parallel with the revision of the leverage ratio for cleared exposures.

1. Cost of Clearing and Clearing Capacity

As identified in the FSB DAT report, the risk of porting of contracts failing is exacerbated by the fact that several banks have left the client clearing business⁹. These banks cited capital costs as weighting on the profitability of the clearing business¹⁰ as the fundamental reason for exiting clearing business.

While a capital charge that significantly increases the cost of providing client clearing is clearly a disincentive to providing clearing services, the end-users will often bear the increased cost of clearing services. Clients of clearing members might also suffer from a restriction of the risk they can clear at their clearing broker.

2. Concentration Risk: Client Clearing Service Providers

Increased cost, 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 exposures¹¹.

This increased concentration, together with the constraints put upon CCSPs by the leverage ratio, will restrict access to clearing for smaller clients. This is particularly the case for clients with a profile that might not be profitable for a CCSP, for instance by less frequent trading and large, directional portfolios.

The FSB DAT report states that "five firms, all bank-affiliated, account for over 80% of total client margin for cleared OTC derivatives in the United States, United Kingdom and Japan". This is in line with the publicly disclosed numbers by CCPs.

Should one of the biggest CCSPs default, each of the other four would have to increase capacity by 25%¹² on average to absorb and accept between them porting requests from clients of the defaulted CCSP. Accepting these additional client exposures will challenge the risk appetite of these firms and

⁹ 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/>

¹⁰ <https://www.ft.com/content/2392bc42-ee47-11e6-930f-061b01e23655>

¹¹ From LCH's Q4 2017 Data: April 2018 Disclosure at <https://www.lch.com/resources/rules-and-regulations/ccp-disclosures>

¹² This assumes that five CCSPs with 80% of concentration is split equally between them with each CCSP having 16% market-share. If the four non-defaulting CCSP were to absorb the 16% capacity of defaulting CCSP equally, then their concentration would each need to increase by 4%, going from 16% to 20% market-share. This is equivalent to a 25% increase in their market-share.

could increase their capital requirements significantly. As these large CCSPs are large banks, or are affiliated with large banks, they are the ones expected to bid in an auction for any residual house portfolio of the defaulted CCSP. The current leverage ratio requirement can make this very difficult especially considering that porting would likely occur during a period of market stress.

3. Porting and clearing member capacity – a client perspective

We believe that clients' reduced confidence in porting stems from reduced clearing capacity to be a key issue, which is driven by the incentives created by the capital framework. This is a fundamentally important consideration in ensuring that confidence in the cleared market does not evaporate during crises.

Porting is necessary for continuity of clearing during a member default and is instrumental to building confidence in a cleared market model. The choice of CCP account structures has increased over the last few years to offer greater asset protection and segregation, fulfilling a necessary condition to ensure the feasibility of porting. Clearing member default is likely to coincide with stressed market conditions. In such a scenario, other clearing members are less likely to want or be able to increase risk and capital allocation to this business, which increases the risk of porting failure.

One way of minimising the risk of porting failure is to increase clearing member capacity. Increased capacity can be achieved by revising capital treatment for the risks associated with carrying client accounts, especially the leverage ratio.

4. Incentives drive market behaviour

Many CCSPs restrict the business of their clients in order to manage their LRE or charge their clients for the capital required.

As a result, some CCPs have developed special membership models (hybrid model) where firms access the CCP directly, with some features being similar to that of a classic clearing member. Other firms may decide to become full clearing members themselves to avoid restrictions put upon them by their clearing member.

By becoming either a Hybrid or a Full Client, the restrictions of the LR fall away under these scenarios. In most 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 remaining clearing members. Therefore, the overall system has become less



safe as a consequence of end-users trying to manage the clearing member restrictions stemming from the LR. From a systemic risk viewpoint, such an outcome is highly undesirable.

5. Comparison of the proposed options

In the following, we compare the three proposed options:

- Option 1: No change
- Option 2: Allows some recognition of IM in the leverage ratio
- Option 3: Aligns with EAD as determined by SA-CCR

We propose the following criteria, which have implicitly already been introduced at the beginning of the document:

- **Constraint of client clearing:** The extent to which a particular option will be suitable to remove current constraints on client clearing service provision.
- **Simplicity:** Whether a particular option will make regulation more or less complicated.
- **Appropriateness:** The extent to which a particular option captures on and off-balance sheet sources of leverage ratio and the extent to which a particular option produces outcomes appropriate to the underlying risks
- **Flexibility:** The extent to which a particular option allows inclusion of a wide range of business practices

Please find below a table that sums up how each option performs according to these criteria:

Criterion	Option 1	Option 2	Option 3
Constraint of client clearing	Significant – cost of client clearing is increased and clients might be restricted in terms of portfolio size or amount of risk they clear.	A key constraint on client clearing service provision is partially removed.	A key constraint on client clearing service provision is removed.
Simplicity	Adds complexity by introducing an additional exposure calculation.	Adds complexity by introducing an additional exposure calculation.	Very simple as it does not introduce additional exposure measure calculations but relies on standard SA-CCR.
Appropriateness	Little, as the LRE ignores an integral part of a cleared transaction (IM).	IM is recognised only for PFE.	Client margin is fully recognised.
Flexibility	Only VM under strict conditions is recognized in RC.	Recognition of IM but does not remove strict rules around VM recognition in RC.	Recognition of both VM and IM aligned with risk-based capital rules.

Considering the above table, the Industry strongly believes that option 3 provides the right incentives for clearing and will properly meet the criteria in terms of simplicity, appropriateness and flexibility.

6. Potential forward-looking behavioural dynamics of the client clearing industry that could occur as a result of possible changes to the leverage ratio treatment of client cleared derivatives

In our view, improving capacity to clear should be the focus of revisions to the leverage ratio. This is because increasing capacity to clear is the most direct way to address current risks in the existing framework, such as the availability of porting or the ability for the industry to handle member or client defaults. In such instances the ability and flexibility to absorb large market positions at short notice is critical to financial stability. Increasing member's capacity to take on such positions, and reducing barriers to build that capacity should therefore be a significant policy objective.

While we cannot discuss what business decisions our members might take if the leverage ratio restrictions were lifted. The FSB DAT report states that 64.7% of all CCSP responded that the leverage ratio had a significant negative impact on their ability to offer client clearing services and 23.5% of respondents said there is some negative impact. A large majority of 88.2% of responding firms see negative impact of the leverage ratio. One would assume that removing a significant negative impact or even a somewhat negative impact would have a positive effect on the ability of firms to providing clearing services.

It is also a reasonable expectation that once constraints on a business are removed, this business will become more attractive, potentially even for new entrants.

In addition, expanding clearing capacity may naturally result in other benefits, such as increased competition among CCSPs.

7. Initial margin segregation criteria

The CD suggests “*segregation criteria so as to ensure that those amounts will be available in the event of a client’s default. Such segregation criteria could include requirements that initial margin be recorded as separate from the clearing member bank’s own assets and be legally segregated in the event of default of the entity that holds the margin, and could specify limitations on the permitted uses by clearing member banks of initial margin received from clients.*”¹³

We question whether such criteria are required. The CD suggests segregation criteria for two reasons:

- To ensure margin is available in the event of a client default
- To protect the client margin in case of the default of the entity that holds the margin

Regarding protection of client margin in case of clearing broker default, we note that in most jurisdictions the segregation requirements for IM are laid down by market regulations. These can be different between jurisdictions. US regulations for instance require a uniform Legally Segregated but Operationally Commingled (LSOC) model for swaps clearing whereas European regulations provide clients a choice as to what segregation arrangements, and therefore what level of credit risk to their clearing broker they want. Segregation arrangements – driven by clearing regulation and local insolvency laws - in the context of client clearing are meant to protect the client and should not have any bearing on the capital requirements of its clearing broker. The client’s choice of a segregation arrangement does not affect the risk or leverage of the clearing broker.

The other proposed driver suggested for segregation criteria, was to ensure margin is available in the event of a client default. We do not believe this is necessary. At the time of a client default event the clearing broker will be operating as normal, including with its liquidity management requirements to ensure it can meet any potential stressed market demand. Even if the clearing broker had rehypothecated (“reused”) the margin, closing out the defaulter’s position would not require the margin to be instantaneously available. The client margin is a risk mitigant independent of the consideration whether it is segregated or not, and should therefore be taken into account, even if it is not segregated.

We also note that any rehypothecation (“reuse”) or any other use or investment of the client’s margin would attract LRE itself. Segregation requirements on the recognition of IM for LRE of the client positions would therefore double count any leverage that emerges through reuse of the margin.

In the context of the leverage ratio from the point of view of the clearing member, we therefore do not see any reason for imposing segregation requirements. We also note that there are no segregation requirements for received margin when calculating risk based capital requirements.

¹³ Page 2 of the CD

There are segregation requirements in the context of bilateral margin of non-cleared derivatives. These requirements are necessary as otherwise posting of margin would increase counterparty risk for the posting party. The segregation requirements were however not meant to ensure the margin is available when required.

8. Conclusions

We believe that revisions to the leverage ratio as proposed under option 3 in the consultative paper would reduce systemic risk by significantly mitigating the existing disincentives for banks to act as clearing members. Removing these disincentives could also foster more competition in the CCSP market. Were the rules to be amended to allow the recognition of client IM in the calculation of the LRE, we expect clients to more easily find clearing members or get ported in a clearing member default situation. The cost of clearing for end-users would also be reduced. In addition, better access to clearing means that one part of the G20 Leaders' policy objectives of promoting central clearing of standardised derivative contracts would be met.

We believe that client clearing does not introduce excessive leverage for two reasons:

- Margin is an integral part of a client cleared transactions and is not optional for either the client or the CCSP. The risk of a cleared client transaction is therefore always reduced by the available margin.
- Client cleared IM usually must be segregated and cannot be rehypothecated. In situations where this is allowed, there are strict rules around reinvestment, and that in and of itself attracts additional leverage exposure for the bank.

For these reasons we believe that revisions to the leverage ratio would adequately meet the G20 Leaders' policy objectives of strengthening the resilience of the banking system by preventing excessive leverage and promoting central clearing of standardised derivative contracts.

We believe segregation of margin could be a helpful protection for clients. As there is already regulation on margin segregation in most jurisdictions, we believe no additional segregation requirements in the LR calculation are warranted, especially as segregation regulation is not uniform across jurisdictions. Strict segregation requirements in the global regulatory standard could reduce choice and diversity of product offerings for clients in some jurisdictions where they can choose between different segregation models.

Annex 1: Details of the Industry Leverage Ratio – d451 Quantitative Impact Study

Below the main ratios analysed are reported in the Industry LR QIS:

Ratio Description	Values
LRE CCT under Current Approach compared to LRE CCT under CEM	0.938
LRE CCT under Option 2 compared to LRE CCT under Current Approach	0.675
LRE CCT under Option 3 compared to LRE CCT under Current Approach	0.634
Leverage Ratio under Current Approach compared to Leverage Ratio under CEM	-0.010%
Leverage Ratio under Option 2 compared to Leverage Ratio under Current Approach	0.020%
Leverage Ratio under Option 3 compared to Leverage Ratio under Current Approach	0.022%

Annex 2: Details of ISDA’s Leverage Ratio Quantitative Impact Analysis as part of the DAT response

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 industry 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 impact 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 recognized, 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 J30917 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
- $LRE1 = 2.09 \times LRE2$

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 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 following specific 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	Increase
Investment funds	101.1%
Asset managers	169.6%
Pension funds	140.4%

Given the headline impact of 109% increase in LRE if IM cannot be recognized under SA-CCR, we assume the other categories where we do not 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 do not 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%).



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