



LSEG

CPMI-IOSCO consultative report "Review of margining practices"

**LSEG RESPONSE TO CPMI-IOSCO CONSULTATIVE
REPORT "REVIEW OF MARGINING PRACTICES"**

January 2022

Introduction

LSEG (London Stock Exchange Group) is a diversified global financial markets infrastructure and data business, headquartered in London, with significant operations in Europe, North America, and Asia. With extensive experience, deep knowledge and worldwide presence across financial markets, we enable businesses and economies around the world to fund innovation, manage risk and create jobs. At LSEG, we help to drive financial stability, empower economies and enable customers to create sustainable growth through three business divisions: data and analytics, capital markets and post-trade.

LSEG has majority ownership of the multi-asset global central counterparty clearing house (“CCP”) operator, LCH Group (“LCH”). LCH has two licensed CCP subsidiaries – LCH Ltd in the UK and LCH S.A. in France. Both are leading multi-asset class and international clearing houses, serving major international exchanges and platforms as well as a range of OTC markets. They clear a broad range of asset classes, including securities, exchange-traded derivatives, commodities, foreign exchange derivatives, interest rate swaps, credit default swaps, Euro and Sterling denominated bonds and repos.



Executive summary

LSEG welcomes the opportunity to respond to CPMI-IOSCO consultative report "Review of margining practices". We would like to make the following key observations:

- LSEG agrees that the report accurately describes key market events, however we do not believe that the report adequately captures market reactions on the uncleared space during the pandemic and we don't find that a direct comparison can be made between cleared and uncleared derivatives given the SIMM model construction, namely that market volatility appears to have a smaller effect on the model vs margin models for cleared risk. We believe that market volatility impact on changes to mark to market must be reflected in the same way in both cleared and uncleared risk and must be agnostic to the way in which the risk of that portfolio is measured.
- Regarding the current level of transparency in our margin practices and our risk framework more broadly, we find that members currently have ample information provided to them through the CPMI disclosures, margin models, credit and stress testing, various volume and transaction metrics etc in line with the report's observations. We believe that attempting to simulate forward looking disclosures will most likely fail to provide an accurate "guess" of the future and can ultimately be unrealistic since past market behaviour is not guarantee of future one. Therefore, we find such scenarios to have limited benefit to members and their clients, potentially providing a sense of false security.
- Although we are strong supporters of standardisation where feasible, we find that standardisation of CCP modelling and/or APC tools can be particularly challenging given the type of markets CCPs operate in, and individual product characteristics as noted in the report. Nevertheless, we believe that if further international work on anti-procyclicality tools was to be considered, it should focus on jurisdictions where the use of APC tools by CCPs is not as prescribed as in the EU and in the UK.
- Regarding markets where pass through VM is not possible, we believe that there are several legal, operational and cost implications that need to be considered both during normal times and stress periods if we were to change existing market practices. Additionally, regarding how quickly a CCP should reduce IM requirements, we find that it's important to maintain a balance particularly when volatility is high and that a CCP should not give back margin too quickly to ensure that the entire CCP membership remains resilient from prolonged stressed market conditions.



LSEG

Questions

- 1. Does the report accurately describe the key market events of the Covid-related period of stress from February to April 2020 and its effects on the magnitude and frequency of the calculation and payment of margin in centrally and non-centrally cleared markets? If not, in what ways are the descriptions not fully representative of the events? Are there any other important events or effects missing? If so, please provide any information or data that are relevant to the missing events or effects to the extent feasible.**

LSEG broadly agrees that the report accurately describes key market events. Despite extreme market volatility we saw, particularly during March 2020, we believe that overall, the level of collateralisation of the market allowed weathering the crisis. G20 reforms have certainly played a key role in markets' reaction to such unprecedented event.

At LCH, our risk models performed as designed, with no adjustment required to accommodate the heightened volatility, and with our IM requirements increasing by about 15% maximum when compared to Business As Usual (BAU). Our risk framework and most importantly our approach to margin requirements during normal times, limited procyclicality effects especially during March. We elaborate on these points in the subsequent responses in this consultation.

However, the report does not adequately capture market reactions during the pandemic in the uncleared space and we don't believe that a direct comparison can be made between cleared and uncleared derivatives. Differences in risk management practises for cleared and uncleared risk mean that comparing their margin models is not a like-for-like comparison. For example, lower levels of IM for the SIMM model are a result of its construction namely that market volatility appears to have a smaller effect on the model vs margin models for cleared risk. In our view that lack of a common denominator to compare cleared vs uncleared models is not correctly reflected in the report. Therefore, we find that the report treats uncleared markets with more leniency, for example by noting that *"While both centrally and non-centrally cleared markets saw comparable increases in volatility, the corresponding adjustment in IM requirements for noncentrally cleared derivatives was much smaller, primarily due to the low reactivity of SIMM to volatility changes."*

We believe that CCPs' risk frameworks which are developed and tested regularly against very strict standards further enhancing financial stability and by design are far more reactive in times when most needed as we saw during Covid. IM during such periods will naturally increase to reflect market volatility and such increases should be treated as "features" of central clearing not an anomaly. Instead, we find that a potential absence of reaction of models would be considered an anomaly as it could relate to an under-collateralisation of the market in stressed periods.

Finally, we believe that the paper did not stress enough the impact of trade volume in the driver of IM increases. An internal analysis¹ published in Q3 2021 on March's IM increases, demonstrates that the volumes processed at both LCH Ltd and SA increased dramatically. At LCH's OTC interest rate swap market specifically, when comparing portfolios during March 2020 over the same period if the member portfolios had been "frozen" we observe the following:

- At the end of February 2020, the total margin requirement stood at £149 billion.
- By 5 March 2020, the total margin requirement had increased to £153 billion, while the frozen portfolios stood at £148 billion.

¹ [Stability During Market Uncertainty 0.pdf \(lch.com\)](#)

- The biggest total margin increase happened between 5 and 11 March 2020, where the actual total margin requirements for members increased by 8.3% while over the corresponding period, the total margin requirement for the frozen portfolios increased by only 3%.
- This demonstrates clearly that approximately 67% of the total margin increase over the most volatile period in the service was due to members repositioning their portfolios to adapt to the changing risk environment, with the remaining 33% due to data-driven effects (i.e., the automatic introduction of new, volatile market data into the initial margin models, which are Value-at-Risk models based on historic simulation).

We feel the report cannot conclude without looking in more details in this crucial distinction which would undoubtedly produce different results.

2. Does the report draw appropriate conclusions from the presented observations and analysis of the various aspects of centrally and non-centrally cleared margin during the 2020 stress period? If not, in what cases do you feel the conclusions are not justified by the included analysis? Are there any areas or specific topics of analysis you consider to be missing? If so, please provide any information or data that are relevant to the extent feasible. Please set out your views across the following sections:

a. The drivers of margin calls during the period of market stress covered by the report.

We broadly agree with the drivers of margin calls during the period of market stress covered in the report. In March 2020, all major asset classes experienced large, abrupt moves²:

- Equities: On 12 March, the FTSE 100 fell by 10.87%, the CAC 40 fell by 12.28% (worst single day fall since 1987).
- Interest Rate Swaps (IRS): The USD LIBOR swap rate fell from 160 bps in mid-February to around 60 bps by the end of March.
- Bonds: Bond yields saw significant swings, with moves reaching magnitudes of 50-60 bps on core Eurozone bonds and 125 bps for peripherals on five days; the core peripheral Eurozone spread spiked at 279 bps on 17 March.

At LCH, our conservative approach to margin requirements in less volatile times resulted in a moderate increase of margin levels over the Q1 stress period: the largest increase in total margin requirements, driven by the risk model, at the CCP level on any one day during March occurred on 6 March in LCH Ltd and 12 March in LCH SA — both were less than 8%. LCH's standards for mitigating and managing models' potential procyclical behaviour ensured those low levels of margin increases. To ensure that individual members do not experience an increase in initial margin of more than 25%, we require our initial margin models to be built to a standard in which no member would experience an increase of more than 25% over the MPOR in the hypothetical future (generated by a re-run of historical events, including previous crises).

Regarding the analysis on the drivers of IM, we don't find that the report is missing key elements, however, as noted in question 1, we believe the 'effect of volume increase on the level of IM is insufficiently taken into account and we don't believe that a direct comparison can be made between cleared and uncleared markets particularly given intermediaries' feedback on market volatility being

² [Stability During Market Uncertainty_0.pdf \(lch.com\)](#)

the number one factor affecting margin calls and their size. Market volatility impact on changes to mark to market, i.e., to the size of variation margin, is reflected in the same way in both cleared and uncleared risk, since it is a function of the change in the valuation of the portfolios and must be agnostic to the way in which the risk of that portfolio is measured.

In line with the CPMI-IOSCO report, we would once again highlight the existing limitation of the SIMM model to accurately capturing volatility changes naturally making it less reactive during such stressed market conditions and therefore driving lower margin calls. From a risk perspective however, we believe that it is important to emphasise that margin calls are part of the collateralisation process and react according to market volatility ensuring that credit risk is sufficiently covered at all times, which is why IM fluctuations were higher in the cleared space.

b. The current level of transparency in margin practices by CCPs and intermediaries.

Although we cannot opine on behalf of intermediaries, we agree with the report's observations on the level of transparency in margin practices by CCPs. Regarding the current level of transparency in our margin practices and our risk framework more broadly, members currently have access to the following:

- a) CPMI IOSCO quantitative & qualitative disclosures.
- b) Rulebook regulations.
- c) Risk governance structure and terms of reference.
- d) Margin models and back testing disclosures.
- e) Credit stress testing and the likelihood of guarantee fund assessment disclosures.
- f) Various volume and transaction metrics.
- g) Disclosures recommended by the Fed Reserve Payments Risk Committee 2013 comprising:
 - Governance.
 - Composition/Value of Initial Margin and Guaranty Fund.
 - Collateral Structures.
 - CCP Investment Balances and Policy.
 - Evaluation/Monitoring of Clearing Members.
 - Initial Margin/Guaranty Fund Methodologies.
 - Default Procedures.
 - Legal Opinions.

In addition, and on a regular basis, we provide various white papers explaining CCP topics of interest such as recovery and resolution, portfolio margining and stress testing.

Regarding transparency of our risk modelling, and in addition to the information available through our online simulators on how margin is calculated and called, our APC tools and approach is carefully documented and approved by LCH Risk Committee. Furthermore, the above-mentioned public disclosures, due diligence processes and frequent one-to-one interactions between CCP and its members provide an additional layer of transparency. Finally, our margin calls are scheduled at set times whether in quiet or stressed markets conditions to provide predictability not only to our members but to their clients as well. We would highlight that, during March 2021, we did not have the need to perform any ad-hoc margin calls. Therefore, we do not believe there is a need for additional transparency to CCP's margin practices.

c. The preparedness of intermediaries and clients for meeting the increased margin calls seen during the period of market stress covered by the report.

Although we cannot opine on behalf of intermediaries or clients, from our perspective we did not observe any incidents involving an intermediary or client being unable to fulfil its margin requirements. Notwithstanding that, aligned with the report, we observed that margins levels gradually increased due to the increased market volatility as well as to increased volumes, and our members had no issues in fulfilling their obligations.

d. The relationship between margin demands and other liquidity demands during the period February–April 2020.

N/A

3. Do you agree with the proposals for further international work regarding good practices, metrics and disclosures concerning procyclicality in CCP IM models? Are there other aspects of CCP IM where additional disclosures should be prioritised for further work?

We do not necessarily agree with the proposals for further international work regarding good practices, metrics and disclosures concerning procyclicality in CCP IM models. Regarding CCP IM modelling, we believe that areas for further international work are limited, and to a certain extent standardisation in CCP modelling is very hard to be achieved and might have unintended consequences.

As noted in our previous responses, and following feedback received from intermediaries and clients, we find that the information available to them through online tools, public disclosures and due diligence processes are sufficient to give them the predictability they need on existing market conditions. Attempting to simulate forward looking disclosures will most likely fail to provide an accurate “guess” of the future and can ultimately be unrealistic since past market behaviour is not guarantee of future one. Therefore, we find such scenarios to have limited benefit to members and their clients, potentially providing a sense of false security. However, we believe that regulators have a prime position to provide guidance to members on how CCPs might behave in a set of well-defined stressed market environment through the information and findings compiled through the regulators’ stress testing exercise on CCPs.

In addition, standardisation of CCP modelling and/or APC tools can be particularly challenging given the type of markets CCPs operate in, and individual product characteristics as noted in the report. Full standardisation of CCPs’ models may also have unintended consequences. For example, this would lead to CCPs reacting in the same way to market stress, potentially amplifying the pro-cyclical effects at the international level. In addition, there is no one size fits all model and full standardisation might limit the capacity for CCPs to adapt to emerging risks in this space in the long-term. Nevertheless, we believe that if further international work on anti-procyclicality tools was to be considered, it should focus on jurisdictions where the use of APC tools by CCPs is not as prescribed as it is in the EU and in the UK, through the EMIR regulation. Finally, transparency in the workings of APC tools could be considered giving members and their clients a more detailed picture of how their portfolio might get affected based on each tool is applied by any given CCP.

- 4. Does the report identify appropriate aspects of transparency in centrally and non-centrally cleared markets for further international work, including identifying data gaps, enhancing disclosures to clearing members and increasing margin model transparency?**
- a. What specific areas of transparency would be most helpful? What (if any) are the barriers to providing those points of transparency?**
 - b. Should any other areas of increased transparency be considered?**

We believe that some further standardisation in uncleared markets would provide additional transparency. For example, we note that the amount of information that is disclosed in the uncleared space tends to be limited with no PQD or any other disclosures being mandatory to either party on an uncleared transaction. We believe that UMR phase 6 will compound this issue, as we could have 1000 additional firms caught under the new lower threshold.

- 5. Do you agree with the proposals for further international work to enhance liquidity preparedness in the NBFIs sector, including the development of appropriate liquidity metrics and disclosures, analysis of liquidity provision robustness and expanded information sharing between intermediaries and clients? Have the proposals identified all key aspects of NBFIs sector liquidity preparedness which should be included?**

We agree with the proposal for further international work to enhance liquidity preparedness in the NBFIs sector, including the development of appropriate liquidity metrics and disclosures. We believe that to improve the liquidity preparedness, direct participants, intermediaries and clients should have adequate liquidity stress testing capability. This can size the potential VM calls, which is always the first driver of the margin call and based on the report the largest driver of liquidity drawdowns (peaking at \$140bn per day p11 of CMPI's report).

- 6. Do you agree with the proposals for further international work to evaluate data gaps in regulatory reporting by banks and non-banks? Are there particular data gaps you would identify as being of material importance? If so, please provide any supporting information and data to the extent feasible.**

Although we cannot opine on regulatory reporting data gaps by banks and non-banks, we believe banks and non-banks disclosures could be improved through a liquidity stress test on their VM requirements i.e., what is the most I can be called in 1-5 days given my portfolio on both cleared and uncleared exposures. In line with our response to questions 5, we find that such tests could be a useful tool to regulatory authorities further improving the preparedness of the sector and leading to more transparency in the uncleared space.

- 7. Does the report identify appropriate proposals for further international work on streamlining VM processes in centrally and non-centrally cleared markets? Should any other aspects of VM processes be included in this work?**

We do not agree that further international work aiming on streamlining VM processes in centrally cleared markets is necessary. As noted in previous responses, our margin calls are scheduled at set times, whether in a quiet or stressed markets, to provide predictability not only to our members but to their clients as well. Existing practices established globally, show there is no one size fits all model. Some CCPs provide at least one fixed point of the day (in addition to EOD) to pay members excess collateral, based on an approximate Mark-to-Market process.

In markets where pass through VM is not possible, we believe that there are a number of legal, operational and cost implications that need to be considered both during BAU as well as during stress periods if we were to change existing market practices:

- **Legal implications:** Legal constraints become explicit in some jurisdictions like the US, where Designated Clearing Organisation (DCO) cannot pass through customer property (client margin) unless it is settlement proceeds (i.e., it is the result of settle-to-market or STM³ – which occurs once per day). Setting up several settlement proceeds per day, with the involvement of all relevant infrastructures, would require smaller members and clients having the ability to manage those flows and reinvest the cash which can be a complex process to manage. All cleared customer OTC trades in the US have been STM since 2017.
- **Operational constraints:** Pass through VM could potentially require multiple Realised Variation Margin (RVM) runs intra-day with associated controls around market pricing – it may not always be possible to design the pricing controls as robustly as at end of day and if this process creates Profit and Losses (P&L) it could create unexpected market behaviours. Furthermore, it could potentially lead to operational implications for members with flows both in and out on the same day, particularly if underlying clients demand the benefit of profits paid. When considering the USD swap market CCPs would need to move to a twice daily STM to 'settle' and pass through the USD settlement proceeds. We find that this can become overly complex to manage.
- **Costs:** There will be additional transaction costs due to increased flows through settlement banks which would also lead to an increase in daily liquidity lines required, potentially used later in the day, increasing costs for the market.

Finally, regarding how quickly a CCP should reduce IM requirements, we find that it's important to maintain a balance particularly when volatility is high and that a CCP should not reduce the amount of margins it holds too quickly. This is crucial to ensure that the entire CCP membership remains resilient from prolonged stressed market conditions.

8. Does the report identify appropriate proposals for further international work on the degree and nature of the responsiveness of CCP IM models to market stress? Should any other aspects of CCP margin models be included in this initiative?

We don't believe that further international work on the degree and nature of the responsiveness of CCP IM models to market stress is appropriate.

As noted in our response to question 2, LCH models performed as intended and the evolution of the total margin requirements for all member portfolios across all services in LCH Ltd and LCH SA

³ Where VM is treated as a settlement payment, upon payment of amounts due in respect of such VM, the outstanding exposure of the relevant contracts is discharged

during March including cash balances posted is a perfect illustration of our models' reaction to March's market volatility.

The peak total margin requirement for the period across LCH Group occurred on 12 March, when LCH Ltd total margin requirements reached €221 billion, up from €200 billion at the beginning of March. This represents a 10.3% increase in total margin requirements across the board, with the total margin requirements having risen incrementally, helping to avoid any further drain of cash from the economy during this period. In fact, the largest daily increase in total margin during March happened on 6 March and was only an increase of 3.5%.

Regarding LCH SA, and in line with the figures published last year in our paper⁴, the peak total margin requirement occurred on 13 March, when LCH total margin requirement incrementally increased to €67 billion, up from €57 billion at the beginning of March.

In both cases, these total margin increases are mainly explained by the significant increase in new risk entering the CCP. In line with our response to question 1, when looking at portfolios during March 2020 over the same period if the member portfolios had been "frozen" at LCH's OTC interest rate swap market, approximately 67% of the total margin increase over the most volatile period in the service was due to members repositioning their portfolios to adapt to the changing risk environment, with the remaining 33% due to data-driven effects (i.e., the automatic introduction of new, volatile market data into the initial margin models, which are Value-at-Risk models based on historic simulation).

Ultimately, we did not have to adapt our models during market volatility and our APC tools managed to sustain liquidity members' liquidity requirements to single digits alleviating pressure from the market.

9. Do you agree with the proposals in the report to evaluate the degree and nature of responsiveness of non-centrally cleared IM models to market stresses, remediation of IM shortfalls and the level of disclosure of non-centrally cleared IM model performance? Should any other aspects of non-centrally cleared IM models be included in this initiative?

N/A

10. Are there any other important aspects not covered by the report which should also be prioritised for further international work or policy development?

N/A

⁴ [Stability During Market Uncertainty_0.pdf \(lch.com\)](#)