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IM phase five

Smaller on bang, bigger on complexity

The initial margin (IM) 'big bang' may have been reined in by last-minute relief, but dealers aiming to get hundreds of buy-side firms over the documentation finish line by September 1, 2020 fear a compliance bottleneck.

Regulatory recommendations issued in July split the final phase of compliance with non-cleared margin rules in two. Firms with more than €50 billion in average aggregate notional amounts (AANA) of bilateral derivatives remain in phase five, while those with AANA down to €8 billion are part of a new sixth phase, scheduled for September 2021.

An additional reprieve allows in-scope counterparties to continue trading without documentation in place, providing margin exchange amounts do not exceed €50 million per counterparty relationship. European Union regulators also granted equity options an additional one-year carve-out from the rules, aligning with the US, where the products are exempt.

The relief helps avoid a cliff-edge, but also introduces an extra layer of monitoring complexity. What's more, the numbers remain alarming and the timeline is short. Although analysis suggests the phase-five cohort has been slashed from 1,000 counterparties to just over 300, this still translates to more than 3,600 counterparty relationships, requiring negotiation of more than 21,000 new documents, including credit support annexes, custody account control agreements and eligible collateral schedules.

In-scope firms need to decide whether to follow sell-side counterparties in using the industry-developed standard initial margin model (Simm) for calculating IM. Those with directional portfolios, which do not benefit from Simm netting, may opt for standard 'grid' schedules. It is also thought alternative buy-side-friendly margin models could emerge as more are caught in the net.

Some of the class of 2020 are unfamiliar with posting collateral against non-cleared trades, but many already post non-regulatory margin in the form of 'independent amounts' (IA). IA calculated by dealers may be higher than regulatory minimums required under Simm or grid. For example, Simm excludes jump-to-default risk for margining credit default swaps. This is usually included in dealers' in-house models and would continue to be charged to clients post-compliance.This can complicate preparations as it requires buy-side firms to set up segregated custody accounts in a way that allows for posting of both regulatory and non-regulatory margin. They must also navigate two similar-sounding but different routes – tri-party and third party.

There's already a precedent to combine both account types. Buy-side firms caught in phase-four set up tri-party segregated custody accounts for regulatory IM, while retaining existing third-party custodians for the net difference between regulatory and IA measures.

The €50 million exchange threshold also presents unique challenges. Analysis by the International Swaps and Derivatives Association shows the number of counterparty relationships to be repapered is further reduced by more than two-thirds thanks to this reprieve. It's a welcome move, but requires continuous exposure monitoring – a major burden for multimanaged accounts. In Europe, using Simm for monitoring purposes could expose firms to the full IM documentation burden as EU rules require firms to gain model approval.

Deadlines have a knack of creeping up quickly. Custodians slapped a June date for account applications on earlier phases. For phase five, there's talk of an earlier deadline to wade through the rush of cumbersome know-your-customer checks. That's yet to be decided but, if there's any chance of avoiding a bottleneck, a preparation big bang will be required in the new year.

Helen Bartholomew
Editor-at-large, *Risk.net*

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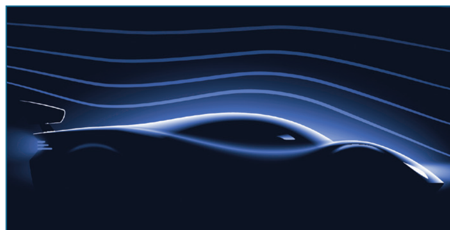
Firms are considering custodian types, documentation and trading strategies to optimise margin



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The IM countdown

Firms are considering custodian types, documentation and trading strategies to optimise margin, writes Ben St Clair

Buy-side firms are far from putting their feet up after international standard-setters eased pressure on the 2020 phase of the non-cleared margin rules, market participants say.

Firms are now starting to size up the challenges as they prepare to post IM under the new regulations. These include choosing the right type of custodian, dealing with existing margin payments and pushing for bespoke terms in documentation where possible. Some are also looking at changing trading strategies with certain dealers to optimise their margin requirements.

"I don't think I've come across a single firm in the last couple of weeks [since the extension was announced] that has said, 'Actually, I'm going to come back and talk to you in six months.' Most of them, because they've invested the time and effort, just want to go ahead and set it up," says Nosheen Amir-Ebrahimi, product head of derivatives, data and valuation services at IHS Markit.

On July 23, the Basel Committee on Banking Supervision and International Organization of Securities Commissions (Iosco) recommended a delay in implementing the IM rules for non-cleared derivatives for smaller counterparties, following concerns about industry readiness.

Previously, all firms with more than $8 billion average aggregate notional amount (AANA) of non-cleared derivatives would have had to post margin from September next year. But following concerns about industry readiness, firms trading more than $50 billion will now start margining their trades from September 2020 – in effect, a new phase five – with the threshold falling in a sixth phase to $8 billion in 2021.

Market participants say the buy side had exhibited a varied degree of readiness, with some firms unsure whether the regulation applied to them. The proposed extension alleviates some of that pressure for the smallest users, but does not remove the need to prepare for the regulation, which between internal processes and external negotiations can take more than a year.

Many buy-side firms in the final phases will be venturing into unfamiliar territory – negotiating a series of documents with dealers and custodians necessary to designate, post and receive collateral.

The regulatory lift has weighed on some buy-siders, says Ron Feldman, a partner at law firm Cummings Fisher.

Need to know

- Two measures this year have given the buy side more time to comply with the incoming non-cleared margin rules.
- However, most firms are pressing ahead with their preparation for the 2020 or 2021 deadlines regardless.
- The alphabet soup of forms needed to document counterparty and custodial relationships means the work ahead will remain extensive.
- Some firms may alter their trading behaviour to avoid posting margin and the documentation requirements that come with it.
- Flexibility on custodian documentation may be restricted, as some may present documents as non-negotiable.
- One possible point of contention may be what to do with the margin posted voluntarily up to now, known as independent amount.

"I think most smaller firms that are caught by the IM obligations, or are nearing the regulatory threshold, have been concerned about the amount of effort required to implement," he says.

Custodians say phase-five firms are broadly on track, but warn that much work remains to be done. "We feel very comfortable with what now is phase five. The firms that are in that €50 billion or above are obviously larger and were very focused on this already," says Ed Corral, global head of collateral strategy at JP Morgan.

"The industry is still going to be staring at a pretty big mountain to climb for phase six from a capacity perspective, and that's why no-one can take their eye off the ball, even though it's been pushed out for a year," he says.

Buried in paper

The Basel Committee-Iosco rules require IM to be posted to segregated accounts at a third-party custodian, so one of the first steps is working out what model to use.

Previous phases have seen dealers use a tri-party model, where eligible collateral is agreed in advance by counterparties and transfers are left to the tri-party providers such as JP Morgan and Bank of New York Mellon. Euroclear and Clearstream also offer tri-party arrangements through a membership-only system.

The other option is the third-party custodian approach, where counterparties have to agree margin amounts and eligible collateral before each transfer.

Tri-party arrangements work best for firms with sizeable and complex derivatives relationships and allow them to outsource many daily processes. Third-party segregation gives firms more control of the collateral management and is best for less complex relationships.

JP Morgan's Corral says clients have a good understanding of what they need to do to prepare, but that there are still "a number of decisions to be made by clients – especially as to which service model is the right fit for them".

The next step is tackling the mountain of documentation needed for these systems to operate. The International Swaps and Derivatives Association (Isda) estimates the final two regulatory phases will cover more than 9,000 bilateral relationships, and each one requires multiple contracts covering different aspects of the margining process.

Broadly, for third-party and tri-party bank custodian arrangements, firms will need to set up separate segregated accounts to post and receive collateral, and enter into three-way agreements with each counterparty and their custodian.

Firms also have to sign regulatory compliant bilateral collateral documentation with each counterparty, known as credit support annexes (CSAs). Euroclear and Clearstream have their own sets of regulatory margin documents.

On top of this, buy-side firms will need to complete documentation to satisfy custodians' anti-money laundering and know-your-customer requirements.

"For any given counterparty relationship, you could have two separate CSAs, two separate security documents, two separate tri-party documents and side letters and things – so a huge documentary burden," says William Sykes, a partner at law firm Macfarlanes.

And then there's the question of technological links so that each counterparty and custodian is able to connect and communicate with one another about collateral exchanges.

Basel Committee-Iosco granted relief on March 5, allowing firms to remain undocumented with counterparties where their IM exposures are less than €50 million ($55.4 million), which will ease much of the documentary burden. Isda estimates that as a result of this 70–80% of firms covered in phases five and six will not post margin for at least two years, if ever.[1] However, this may be affected by how individual jurisdictions choose to implement the relief.

The exemption, combined with the July extension, means just over 1,000 counterparty relationships will be covered by the September 2020 deadline, Isda estimates, if trading behaviour remains constant.

Dominick Falco, BNY Mellon Markets

But for buy-siders trading derivatives in smaller notional amounts, firms may choose to be prepared anyway in case they accidentally cross the €50 million barrier.

"If you are nearing the regulatory threshold – and then the query is what 'nearing' actually means – you should probably be preparing for regulatory IM implementation anyway," says Cummings Fisher's Feldman.

Firms may instead look to reduce their documentation burden by altering trading behaviour, reducing the number of counterparties with which they trade, or clearing trades through central counterparties.

Isda has previously expressed concern that the burden placed on firms to monitor their counterparty exposure will lead them to reduce derivatives trading and "limit their ability to effectively hedge" as they push exposures well below the threshold.[2]

One senior portfolio manager at a large European asset manager says the rules are likely to change counterparty relationships.

"If you would take these margin rules into account, you might rethink some of your strategies and try to optimise," he says. "Are you really going to go through the hassle with all those counterparties? Probably not."

Room for negotiation

Buy-side firms that do have to repaper counterparty relationships will do so with a new CSA, updated by Isda in 2018 for use in the latter regulatory phases.

Still, the documents remain largely non-standard, with various clauses and terms subject to negotiation. These discussions in previous phases have been extensive. Hedge funds and buy-side firms in scope at phase four have found the process "quite laborious", says Feldman.

Even though Isda has been reviewing account control agreements (ACAs) – the three-way agreements between counterparties and a custodian – its review has been limited to specific aspects of regulatory compliance and serves only as advice, not a stamp of approval or industry standard.

But given the number of counterparties dealers and custodians need to process, how much room for negotiation there will be for phase five and six firms' CSAs and ACAs remains unclear.

"Understandably, custodians treat the ACAs as non-negotiable. One factor is maintaining consistency across the sheer number of relationships that they have to document," says Hannah Patterson, a managing associate at Linklaters.

For instance, BNY Mellon is working on a new template ACA that takes into account provisions requested by the buy side in ACAs covering previous margin arrangements not under the regulation.

"We would like to get to a non-negotiable ACA, so that it becomes an easy process," says Dominick Falco, head of collateral segregation product at BNY Mellon Markets.

Will Sykes, Macfarlanes

The non-negotiable ACA would include a number of options already used in practice for clients to select from, effectively streamlining the documentation process, and clients will still be able to raise concerns.

"In any ACA, there are many provisions that can be heavily negotiated," says Ilene Froom, a partner at Reed Smith.

"For example, the terms of the notice of exclusive control provisions and pledger access rights are often negotiated," she says.

Another point of interest will be what to do with IM posted voluntarily up to now. This margin, known as independent amount (IA), is sometimes posted by buy-side firms to reduce counterparty risk and therefore achieve better pricing.

The topic was covered in an Isda webinar held earlier this year, at which lawyers sketched out a few options.[3] Counterparties can choose to continue posting IA as usual, in addition to the IM that firms are required to post under the non-cleared margin rules, known as regulation margin. The method may be simpler for firms posting a set IA instead of margin calculated on a trade-by-trade basis.

Unlike regulation margin, which applies only to new trades above the $50 million threshold, IA in this situation may continue below the threshold. However this IA would not be subject to the same collateral specifications and segregation requirements governing regulation margin.

Firms can also develop hybrid approaches that involve combining or offsetting the regulation margin with the agreed upon IA.

One option requires firms to continue posting both regulation margin and IA, but reduces the IA by the amount of regulation margin posted. For example, $10 million of regulation margin posted could reduce the IA required from $15 million to $5 million. Each amount – the $10 million and the $5 million – would be placed in separate accounts under separate documentation.

Firms can also do away with the IA by calculating the margin under both the regulation and IA arrangements and posting the larger of the two in the regulation margin account. This method creates a degree of efficiency by limiting transactions to a single flow of collateral, but means margin regulation rules will also apply to the IA tacked on top of the regulation margin, if the IA calculation yields a higher value.

Sykes of Macfarlanes says the most time-consuming issues may instead relate to the type of collateral firms are willing to post and receive from the broad menu of securities the regulation sets out. The decision of what to post depends on what a buy-side firm has on-hand, and counterparties may be unwilling to receive what they see as unfavourable assets in case they end up with them in the event of default.

"It is likely that [the buy-side firm is] willing to receive a broader category of securities than those you are able to post. [But] there is a buy-side fear that if you're a bank who is sitting on rubbish, then that's what they're going to want to post to you as collateral," says Sykes. ■

Previously published on Risk.net

[1] *S O'Malia and E Litvack (March 2019), Isda,* Letter to M Draghi, P Hernandez de Cos, R Quarles and A Alder, *Margin requirements for non-centrally cleared derivatives, https://bit.ly/365EVut*
[2] *S O'Malia (March 2019), Isda,* Tackling the IM challenge, *https://bit.ly/34Tmp8m*
[3] *Isda (March 2019),* Isda IM documentation webinar series, *https://bit.ly/34NOZIi*

How pre-trade IM calculation can optimise and reduce collateral drag

With firms under pressure to make their systems compliant with uncleared margin rules, the increase in margin requirements has put further strain on the availability of high-quality liquid assets. Mohit Gupta, senior product specialist at Cassini Systems, explores how pre-trade optimisation can help streamline margin requirements, impacting funding and collateral requirements

The advent of the uncleared margin rules (UMR) has not only put pressure on firms to make their systems compliant with the regulations, but also put a drag on real returns as a result of the increased need to post margin on products that were previously not collateralised. The increase in margin requirements has begun to put a strain on the availability of high-quality liquid assets, which must be sourced to meet the margin needs.

Pension funds, asset managers and traditional long-only funds are those more severely impacted because, with directional books and growing notionals, the margin will continue to increase due to lack of any considerable offsets between positions.

This means trading derivatives in a world of regulation is not only about looking at returns, but also about reducing the cost of trading and reducing this collateral requirement and consequent funding costs.

Traditionally, traders and portfolio managers have only been concerned about the slippage or bid/offer as the dominant source of costs but, with regulations imposing stricter clearing and margin rules, the cost of funding the collateral for margin has to be taken into account as well.

This funding of collateral has a twofold impact on returns, typically known as collateral drag:

- The cost of funding this collateral at the firms' funding rate
- Opportunity cost constrained to trade because of lower unencumbered cash levels.

The good news is that there are solutions to optimise margin requirements, which reduce the associated costs. As with using bid/offers to determine the slippage before a trade, there are solutions that can help the least expensive clearing brokers or bilateral dealers understand taking the associated margin costs into account. The importance of pre-trade optimisation is illustrated in figure 1.

Cassini Systems simulated a relative-value hedge fund clients' historical cleared book from the start of the year – with an empty book – to the end of the year. During this period, the client would regularly trade cleared swap trades in euro, US dollar and sterling. The client had three clearing brokers; however, instead of allocating the trades to the cheapest broker, the client used an operationally simple allocation rule of allocating all euro trades to one broker, all US dollar trades to another and all sterling trades to a third. Clearly, the fund gets offset between the trades of the same currency but loses out on offsets among currencies. Here, being a relative-value fund is one of the most common trading strategies.

Using pre-trade optimisation, the current currency allocation underperforms considerably as the trading activity builds over the course of the year. Utilising pre-trade optimisation helps save around 40% margin, on average, over the course of the year.

The savings are lower to start with, but grow significantly over the course of the year. The average margin requirement over the course of the year is roughly $150 million lower, which means $150 million less collateral to be funded. This saving has a twofold benefit:

- $150 million less collateral to be funded by the treasury – a direct reduction of the costs in the bottom line
- $150 million of collateral freed, which can be used to put more trades or size up on trades to generate higher returns if within the risk limits.

This is just one of many use cases in which pre-trade optimisation has proved helpful. Other use cases include:

- **Liquidity add-ons** – Clearing houses affix liquidity add-ons when a firm builds significant concentrated positions in certain risk buckets. Understanding this can help with optimising margin, as liquidity add-ons have been known, in extreme cases, to increase margin by as much as 50%.
- **Futures cross-margining** – Some exchanges offer cross-margining the futures against available over-the-counter positions. This cross-margining can lead to tremendous savings, especially in cases where a bond future is traded against a matched maturity swap or, more generally, short-term futures against matched swaps (convexity trades).
- **Bilateral margining** – The same optimisation techniques can be used for bilateral margining. Assuming execution price equivalency, margin optimisation can bring significant savings as the threshold available under bilateral agreements can optimally utilise.
- **Strategic clearing and backloading** – Bilateral and cleared trades have different liquidities and margins, and only new trades after the UMR phase-in dates are in scope for bilateral margin. This offers some firms the opportunity to choose between trading certain trades bilaterally or cleared depending on cost-benefit analysis. Assuming liquidity – and therefore execution price – is the same in the bilateral and cleared worlds, factors at play that might make one option better than the other include:
  - Threshold available in bilateral agreements
  - Cleared trades generally cheaper than bilateral trades in margin terms for standalone risk quantum
  - Cross-margining with futures in cleared world
  - Liquidity add-ons in cleared world.

Mohit Gupta

As these factors highlight, pre-trade optimisation can help streamline margin requirements, with all the margin saved directly impacting funding and collateral requirements.

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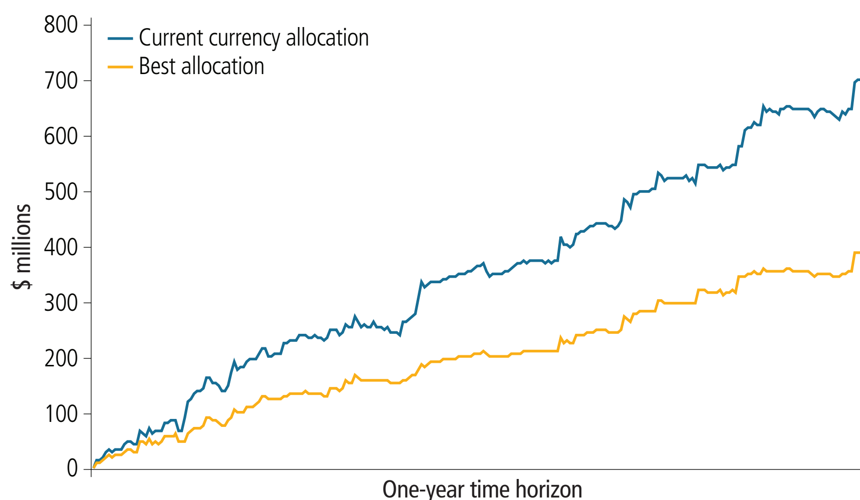
1 Savings from utilising pre-trade optimisation



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Buy side seeks non-cleared margin relief

Sifma AMG calls for the $50 million IM exchange threshold to be set annually. By Ben St Clair

Asset managers are still finding problems with the non-cleared margin rules, even after regulators deferred the final phase of the regime and eased some operational requirements.

The latest hazard concerns separately managed accounts (SMAs).

Under the rules, counterparties need only exchange IM if the aggregate amount due exceeds $50 million. When asset managers run SMAs for large investors such as pension funds and insurers, the relevant counterparty is the end-client. As a result, asset managers could face surprise margin calls if other firms running accounts for the same end-client trip the threshold.

"It's a whole big nightmare," says a regulatory expert at a hedge fund. "You might think that you don't need to exchange margin because you're only doing a small amount of non-cleared derivatives for a client. But, unbeknown to you, the client has an account with another asset manager that does a lot of non-cleared derivatives, meaning you might have to exchange margin."

The Securities Industry and Financial Markets Association's asset management group (Sifma AMG) wrote to regulators on September 13 urging them to tweak the rules for SMAs. The current requirements governing IM exchange are "unduly burdensome from an operational and documentation perspective, create uncertainty and may result in unworkable deadlines and trading disruptions", the lobby group said in its letter.

As things stand, if the $50 million threshold is breached or close to being breached on any given day, "then the SMA client's asset managers must immediately work with the same SMA client, SMA client's IM custodian, and the swap dealer (and any affiliates) and the swap dealer's tri-party agent to get all of the documentation and accounts in place by the relevant regulatory IM deadlines".

According to Sifma AMG, asset managers are also worried that in such a scenario, swap dealers may "selectively choose to prioritise the legal and operational setup with a subset of the SMA client's asset managers, therefore effectively shutting down trading with the smaller managers or with managers doing less trading".

Among its proposals, Sifma AMG called for the $50 million threshold to be fixed annually, rather than daily, so investors can identify the dealers they need to exchange margin with over the next 12 months and get the necessary documentation and accounts in place ahead of time.

Asset managers have already been granted a series of reprieves from the rules. Firms with more than $8 billion average aggregate notional amount (AANA) of non-cleared derivatives were due to begin posting IM from September next year. But following concerns about industry readiness, regulators agreed to a delay in July. Firms with more than $50 billion of non-cleared exposures will now start margining their trades in September 2020, with the threshold falling to $8 billion in 2021.

Previously, in March, firms that did not meet the $50 million threshold for exchanging IM were exempted from the documentation and operational requirements of the rules.

> "You might think that you don't need to exchange margin because you're only doing a small amount of non-cleared derivatives for a client. But, unbeknown to you, the client has an account with another asset manager that does a lot of non-cleared derivatives"
>
> Regulatory expert at a hedge fund

So far, only a handful of buy-side firms – mostly large hedge funds, such as Brevan Howard, Citadel and Millennium – with $750 billion or more of non-cleared derivatives are in scope. According to the International Swaps and Derivatives Association, an estimated 314 funds and buy-side accounts will become subject to the rules when the AANA threshold drops to $50 billion next year.

Fund managers say some of their clients are struggling to determine whether they are even in scope, let alone which dealers they have to exchange margin with. "These pension funds have no idea," says the head of derivatives trading at a US asset management firm. "They can't just go to their custodian and ask what their gross notional is in the non-cleared space. Those reports don't exist at an aggregate level for our clients to tap into and they might have 30 to 40 asset managers to look across."

Under Sifma AMG's proposal, the IM exchange and AANA thresholds would be calculated at the same time each year, based on a firm's exposures between June and August, with much of the heavy lifting falling to swap dealers.

"Once an asset manager for an SMA client receives notice from the applicable swap dealer that the SMA client's simulated IM threshold and AANA threshold were both exceeded during the calculation period, they would proceed to put in place required documentation for regulatory IM," the lobby group wrote in its letter to regulator. "If the thresholds were not exceeded, then the parties would know with certainty that the SMA client would not be subject to regulatory IM requirements at least until the next annual calculation period."

Regulators have not yet responded to Sifma AMG's request.

Some technology firms say they may have a solution if regulators insist on daily IM threshold calculations. For example, Bloomberg's collateral management system allows investors to monitor IM levels across separate accounts. "There needs to be some level of IM monitoring involved," says Joseph Streeter, collateral management product manager at Bloomberg. "We're giving our institutional clients the ability to view each of the IM numbers at their individual asset managers, per broker-dealer, and allowing them to see where they come up against the IM threshold." ■

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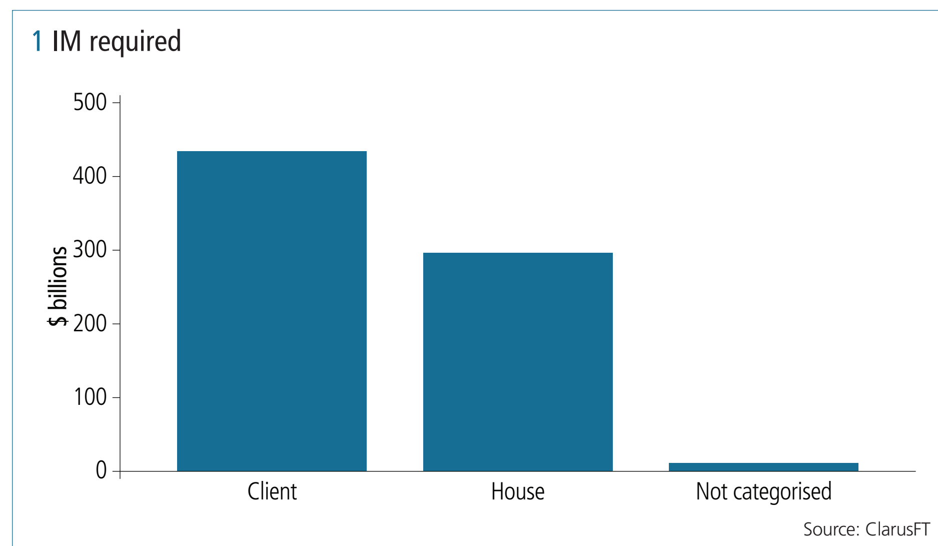
$1 trillion systemically important market infrastructure

There are more sources of over-the-counter derivatives data available today than at any point in the market's history. Amir Khwaja, chief executive of Clarus Financial Technology, analyses trends in the data

With more than $1 trillion of financial resources backing cleared trades, and billions of dollars of cash flowing daily between members and clients, clearing houses today are systemically important market infrastructures.

The latest set of quantitative disclosures show $740 billion held as IM – the largest weapon used by central counterparties (CCPs) to protect against risk. Almost half of this is held as cash. Default resources account for another $210 billion.

We aggregate data for more than 50 clearing houses or services, ranging from global firms such as CME, Eurex, Ice and LCH to small regional firms such as AthexClear, KDPW and Keler. A clearing house can operate one or more clearing services and while the distinction is 'clear', as it were, some disclosures are provided for a clearing house, while others are for a clearing service. So the 50 figure is an understatement if we refer to clearing services and an overstatement if we discuss clearing houses.



Futures and options together account for the largest IM amount by product type, but LCH SwapClear emerges as the largest single clearing service with $159 billion of IM. Clearing can be a lumpy business – the top three services together account for 43% of IM.

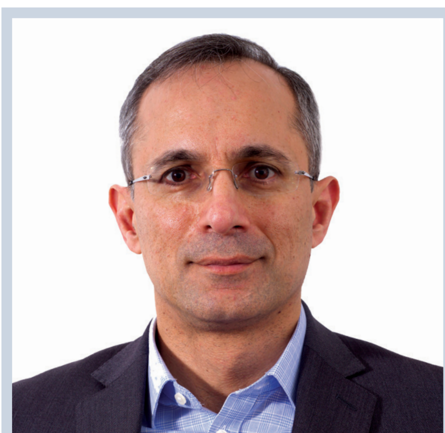
Crucially, estimated stress losses as a peak day amount for the default of two participants stood at $56 billion at the mid-point of 2019 – significantly lower than the $98 billion of pre-funded default resources. Capital provided by clearing house owners, so-called 'skin in the game', totalled $16 billion – 7.6% of all default resources.

IM

Let's start with the largest financial resource, IM. We aggregate it for all the clearing services we have and separate into 'house', meaning member firms, and 'client', meaning firms that do not mutualise losses by contributing to the default fund (DF).

Figure 1 shows:

- Aggregate IM required from client firms is $434 billion, while that required from house (member firms) is $296 billion.
- A split of 59% to 40% with 1% not categorised.
- A grand total of $740 billion as of June 28, 2019.



Amir Khwaja is chief executive of Clarus Financial Technology

Next, let's try to segment this IM by product type. We use product type in a loose sense, so we assign each clearing service to one product type. Often that is obvious from the name of the clearing service but other times we have to plump for one as there is no split available.

Figure 2 shows:

- Futures and options is by far the largest product type with $337 billion.
- Interest rate swaps with $204 billion.
- Bonds and repos with $101 billion.
- Credit default swaps with $44 billion.
- Equities, meaning cash equities, which as they settle on T+1 or T+2 attract low margins, with $26 billion.
- Foreign exchange and commodity are those clearing services with one of these in the name, and consequently look small as they do not include forex or commodity futures and options that are cleared at the global clearing houses such as CME or Ice.

The three largest clearing services by IM required as of June 28, 2019 were LCH SwapClear with $159 billion, CME Base with $97 billion and B3 (Bovespa) with $59 billion. These three represent 43% of the overall IM, a chunky share indeed.

Default resources

Next, let's look at the second-largest financial resource, the default fund resources that clearing houses require from members and their owners to mutualise losses. We aggregate all 50 services and show by type of default resource.

Figure 3 shows:

- Member contributions that are pre-funded, so the cash or securities have been provided to the clearing service, are by far the largest at $92 billion.
- Next are member contributions that are committed to address the default of one or more members at $62 billion.
- Then member contributions required to replenish a default fund, which has been drawn down in a default, with $37 billion.
- Own capital – capital provided by the owners of the clearing service, which are either private companies or member-owned companies – is $11 billion to address a default and $3 billion and $2 billion pre-funded before and after member contributions.
- Total default resources come to $210 billion.

It would be easy to calculate ratios and say that 'skin in the game' is a low percentage of aggregate resources and should be much higher, even a fixed percentage as proposed recently by a group of financial firms. However, I think that is a massive oversimplification of a complex topic and best left to an article where time and space permits a consideration of the arguments. One point to highlight is that pre-funded resources total $99 billion or 47% of total resources, a healthy percentage that highlights the readily available funds to address defaults.

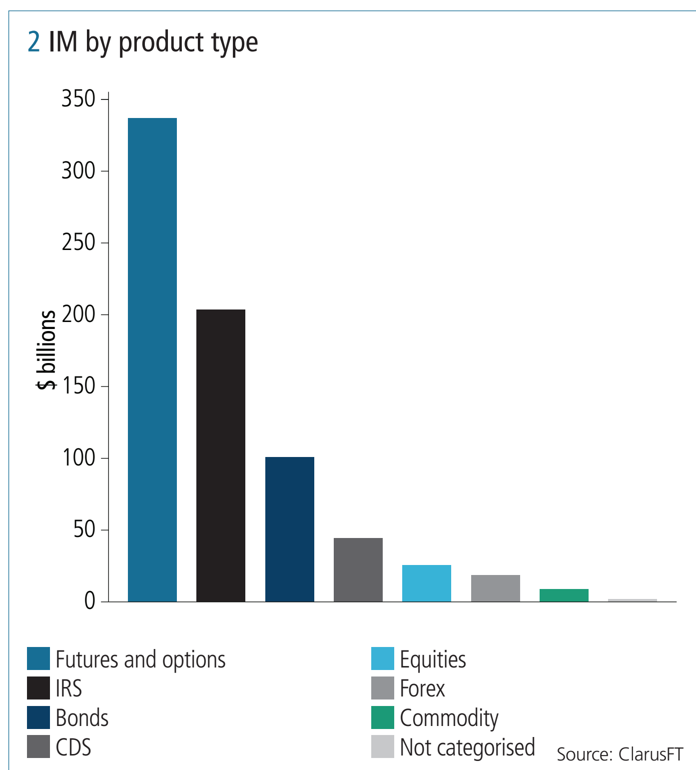
Cash for IM and default funds

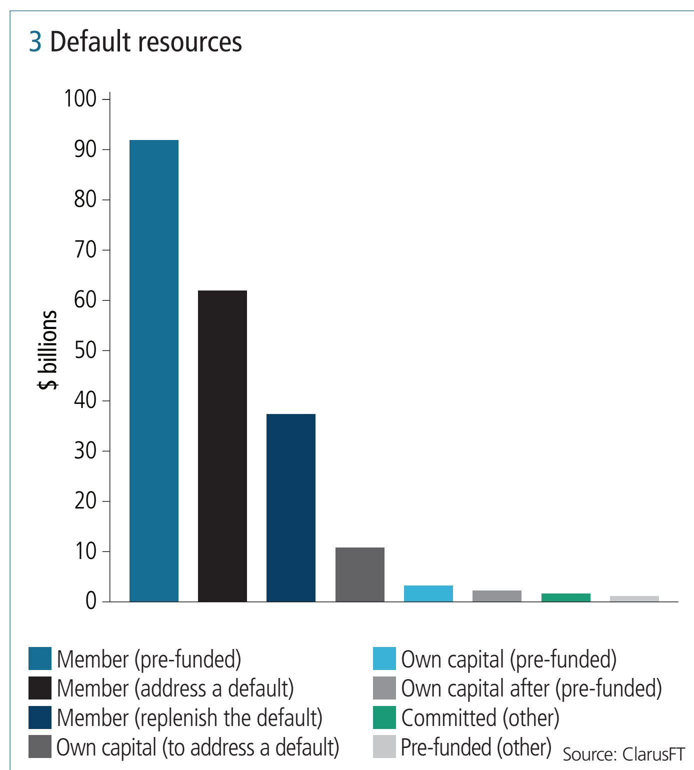
In fact if we look at the disclosures of how much cash (not securities) is held by clearing houses for IM and default resources, we see the following:

Figure 4 shows:

- $360 billion of the IM required of $740 billion is cash.
- $49 billion of the pre-funded DF of $97 billion is cash.

This is a lot of liquid cash resources to utilise in the event of market stress and defaults, while a quick look at the largest holders shows that LCH SwapClear held $68 billion cash for IM required, and CC&G held $10 billion cash for DF contributions.





Stress loss

Given that we have highlighted the size of financial resources held by clearing houses, it is appropriate next to consider disclosures on credit risk and stress losses in extreme but plausible market conditions.

Figure 5 shows:

- Estimated stress losses, as a peak day amount for the default of a single participant or any two participants of $37 billion and $56 billion; each of these are figures in excess of the IM of the participant.

Importantly, the $56 billion figure is much lower than the pre-funded default resources of $98 billion, let alone the total default resources of $210 billion.

Margin calls

And last but not least, let's take a peek at the aggregate size of margin calls.

Figure 6 shows:

- Average total variation margin (VM) paid in the quarter ending June 28, 2019 was $20 billion.
- The maximum VM – an aggregate from each clearing service and that will have occurred on different days – was $52 billion.
- The maximum aggregate IM call, again on different days, was $35 billion, and we know some services include intraday VM calls within this disclosure.

That's it for now: $740 billion of IM, $210 billion of default resources, average daily variation margin calls of $20 billion, oodles of cash; clearing houses really are a $1 trillion systemically important market infrastructure. ■

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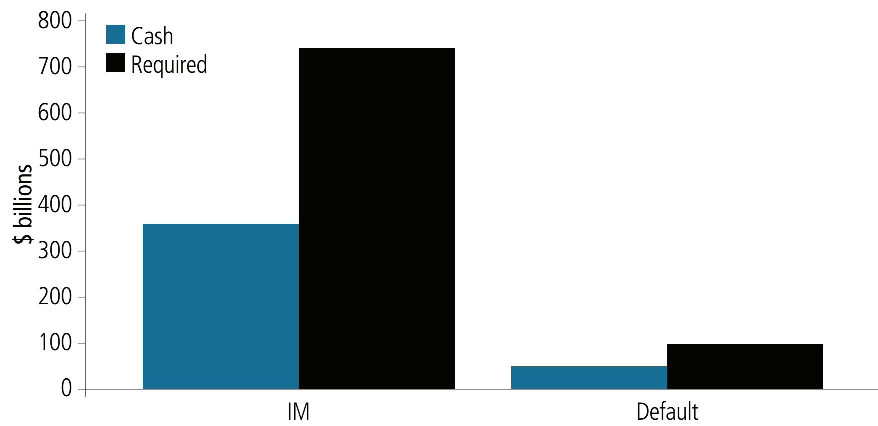
4 Cash for IM and default fund



Source: ClarusFT

5 Stress losses

Disclosure	
Estimated stress loss on default of a single participant, peak day amount	$36.679 billion
Actual credit exposure to a single participant, peak day amount	$2.699 billion
Estimated stress loss on default of any two participants, peak day amount	$56.164 billion
Actual credit exposure to any two participants, peak day amount	$3.428 billion

Source: ClarusFT

6 Margin calls

Disclosure Q2 2019	
Average total variation margin paid to the CCP by participants	$20.099 billion
Maximum total variation margin paid to the CCP on any business day	$52.524 billion
Maximum aggregate IM call on any business day over the period	$35.407 billion

Source: ClarusFT

Regulatory relief, but the pressure is still on

As the new compliance schedule for IM requirements on non-cleared derivatives comes into force, IHS Markit's director, derivatives data and valuation services, Kashyap Sheth outlines what to expect next

Given the complexity and costs involved in meeting IM requirements, it's not surprising the industry's lobbying drive succeeded in postponing the implementation of the rules for firms with an average aggregate notional amount (AANA) of non-cleared derivatives below certain thresholds.

Under the revised schedule approved by the Basel Committee on Banking Supervision and the International Organization of Securities Commissions, phase-four firms with an AANA of non-cleared derivatives above $750 billion remain in scope as of September 2019 – while phase-five firms have been further classified into two distinct segments. As per the changes, phase five will apply to firms with an AANA threshold of $50 billion in September 2020, and firms with an AANA of $8 billion–50 billion are part of a new phase six, which will be effective from September 2021.

Now this regulatory overhang has been lifted, the pressure is on firms to step up their preparations.

Understandably, phase-six firms are happy with this grace period, as they will have more time to evaluate systems and establish new custodian relationships. However, phase-five firms must now act to prepare for IM requirements.

Learning from the delay

The debate around the deadline extension has shown that it may have been unrealistic to expect that smaller buy-side firms would be able or willing to allocate a portion of their scarce resources to non-commercial tasks such as IM calculations. After all, many asset managers still rely on spreadsheets to assess collateral requirements, generate valuations and negotiate with counterparties.

Some buy-side firms have asked their sell-side partners to perform IM calculations for them, but this approach comes with substantial risks beyond conflicts of interest. Few banks are willing to incur the extra liability and additional workload – especially as it involves managing different methodologies across counterparties. Even if a bank were to perform IM calculations for a buy-side firm, the firm would still need to periodically validate these calculations, while responsibility for backtesting the model would need to be addressed.

Firms unable to invest in building up their IM capabilities should consider outsourcing this responsibility to an independent third party such as IHS Markit. By doing so, they can rely on a best-in-class solution to create efficiencies across the IM workflow, from monitoring to pre-trade analytics, calculations and backtesting. This will also ensure their best interests are being carefully considered.

Breaching the threshold

Phase-five and phase-six firms with calculated IM amounts below the $50 million threshold face a significant regulatory overhang. As their IM exposure grows, they will need to know where they stand. IHS Markit understands that firms are concerned about breaching the $50 million threshold. To ensure they can continue trading without interruption, it introduced an IM monitoring service.

This service – which doubles as best practice for funds that have not yet breached the $50 million threshold – can also be provided on a one-off basis to assist with regulatory compliance. It's configurable at the fund and counterparty levels and can run at various frequencies and threshold levels. Once a firm reaches the threshold, it can seamlessly migrate to our full IM calculation service.

In addition to delivering accurate IM calculations across asset classes, the threshold monitoring results deliver deep insights into how each asset class contributes to the overall IM exposure of clients, enabling a better understanding of IM-related risk. As the service is fully hosted, it is an efficient, convenient and cost-effective solution for clients.

The emergence of specialised services?

IHS Markit is confident a progressive need for specialised services will emerge. It is unavoidable, given the diversity of its client base, which ranges from large global banks to niche hedge fund managers. The breadth of IHS Markit's data, cutting-edge technology and deep functional expertise means it is uniquely positioned to leverage its existing capabilities to create off-the-shelf solutions that work for different clients.

For example, not all managers need to deploy IHS Markit's standard International Swaps and Derivatives Association standard initial margin model (Simm) calculation, including risk sensitivities. However, some may prefer to receive risk sensitivities exclusively. Given the range of potential use cases, IHS Markit's specialised services are flexible to the unique needs of clients, including their preferred approach for delivery.

Another case in point is the new IHS Markit Simm Backtesting Service, which can help satisfy regulatory requirements in multiple jurisdictions. For smaller firms, developing an in-house backtesting solution is cost-prohibitive, so IHS Markit developed a specialised service that integrates its computational power, simulation capabilities and historical market data to help clients compare and validate their IM in a fully hosted environment.

Understandably, there are many other scenarios in which IHS Markit can help firms comply with IM requirements. Heading into phases five and six, IHS Markit remains in close collaboration with clients and partners to ensure its services continue evolving in step with global requirements.

IHS Markit welcomes the opportunity to discuss how it can be of service to your firm. ■

A buy-side bonanza

Depositories offer access to automated margining in different ways, each of which face challenges. By Ben St Clair

With hundreds of funds due to be caught by new derivatives margining rules over the next two years, many are looking at ways to lighten the load – for example, by automating collateral transfers. The problem is that only four custodians offer this service. Two of them – Clearstream and Euroclear – have traditionally focused on banks and make onboarding demands that funds may baulk at.

The two international central securities depositories (ICSDs) hope to grab a chunk of this new business, but each is using a different approach. Clearstream insists clients will need to onboard directly, while Euroclear is looking to service buy-side firms indirectly, through their existing custodians.

"The preferred route is to allow buy-side firms – which wouldn't have needed a direct relationship with Euroclear prior to the IM regulation – to maintain their existing custody relationships while still fully benefiting from the automation and [straight-through processing] provided by tri-party services," says Olivier Grimonpont, global head of collateral management for Euroclear Group.

This would require the custodians, rather than the funds, to sign up with Euroclear. Bank of New York Mellon, one of the world's biggest custodians, is understood to have already ruled out participating in Euroclear's solution.

International rules requiring IM to be posted to segregated accounts at a third-party custodian have been rolling out in phases since September 2016.

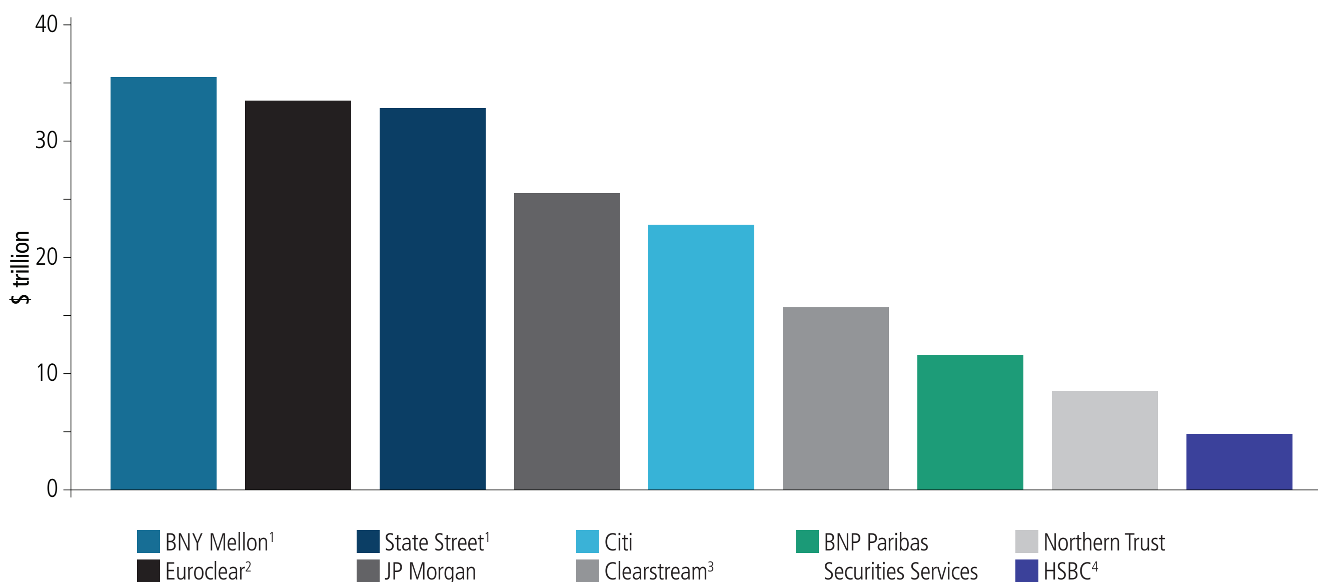
Market participants have two similar-sounding but quite different choices when it comes to custody – tri-party and third-party. Tri-party requires eligible collateral to be agreed in advance by counterparties, while the actual transfers are left to the tri-party providers such as BNY Mellon and JP Morgan. This highly automated approach works best for firms with large, more complex derivatives books. Clearstream and Euroclear offer tri-party arrangements through a membership-only system.

The higher-touch, third-party model requires counterparties to agree margin amounts and eligible collateral directly before each transfer. Most bank-owned custodians offer a third-party model, but only BNY Mellon, JP Morgan and the two ICSDs offer tri-party.

Dealers in the first four phases of the margin rules have opted for a tri-party model. One custody source says they were initially expecting buy-side firms to opt for the third-party model as that is what they are most used to, but has been surprised at the number of clients opting for tri-party instead.

Euroclear's Grimonpont says the sell side had initially thought it would be able to stick with the third-party approach when the buy side came into scope for IM, but "they now realise it might not be as simple as they initially thought".

1 Assets under custody



1 Includes assets under administration
2 "More than €30 trillion"
3 €14 trillion
4 HSBC data from Nov 2018

Source: Company disclosures

Onboarding barrier

One barrier for buy-side firms to using the ICSDs is the onboarding requirements. Euroclear's process, for instance, is said by one party with knowledge of it to involve regular examination of a client's profit-and-loss statements and a twice-yearly know-your-customer review.

Euroclear believes it can ease this burden for the buy side – and allow funds to continue using their existing custodian – by offering two alternatives. The first would see the paying and receiving accounts reside on the existing custodian's books, with Euroclear's tri-party service managing the collateral between those accounts.

The second sees the buy side hold accounts directly at Euroclear in the name of their existing custodian, which serves as the firm's intermediary into the Euroclear platform.

Both options remove the need for the buy-side firm to become a Euroclear member and submit to the platform's extensive onboarding process. Know-your-customer checks and other requirements are handled by the buy-side firm's custodian in their existing relationship, which Euroclear sees as eliminating duplication for the industry.

That route solves several issues at once, says Grimonpont: "It gives tri-party access to clients of custodians that do not offer the service; allows custodians to service their client without having to build their own tri-party services or risk seeing clients move to the competition, and reduces the cost for the industry by avoiding lengthy and expensive admission to multiple custody platforms."

The alternative options would cost buy-side firms much less than direct membership, he adds.

Of course, in Euroclear's case, if firms elect not to join the ICSD directly and opt for the bank's representational model, Euroclear would still need custodian buy-in.

Risk.net understands BNY Mellon – which holds $35.5 trillion of assets under custody or administration, making it one of the largest custodians in the market – is not looking to represent buy-side firms on Euroclear's platform, as the bank sees its own tri-party offering as a suitable alternative for clients (see figure 1). BNY Mellon declined to provide an official comment.

JP Morgan did not respond to requests for comment on its plans. But JP may be more open to the arrangement, says the custody source, because it will allow it to service client trading relationships that include the bank's broker-dealer arm. The IM rules require a custodian to be independent of the parties involved, meaning margin covering trades involving JP Morgan and an external counterparty cannot be sent to the US bank's custody arm.

Meanwhile, Clearstream is focusing on onboarding buy-side firms directly.

"To receive reporting, to ensure you have collateral and it has been segregated in favour of you, you will need to connect to your counterpart's custodian. If that counterpart's custodian is Clearstream, you will need to be onboarded," says James Cherry, a senior vice-president in Clearstream's collateral management team.

A buy-side firm could elect to have its existing custodian manage the applicable account, but both parties would need to be onboarded. Cherry says they have already onboarded buy-side members and he sees that trend continuing in the upcoming phases.

More than 9,000 bilateral relationships and nearly 1,100 firms will be caught in the final two regulatory phases, according to the International Swaps and Derivatives Association. But with regulators alleviating documentation and custody needs for relationships that generate less than €50 million of IM, just under 2,000 relationships will need to post collateral within the first two years of coming in scope.

Even with the reduced numbers, Clearstream's Cherry suggests leaving sufficient time to smoothly complete the onboarding process.

"There's a huge amount of resource being put in – on our side and on the client side – in terms of onboarding, opening accounts and getting familiar with the tri-party setup," he says. ■

> "The preferred route is to allow the buy side to maintain their existing custody relationship while still fully benefiting from the automation and [straight-through processing] provided by tri-party services"
> Olivier Grimonpont, Euroclear Group

Previously published on Risk.net

A regulatory bottleneck

With the recent announcement of an extended preparation period for those smaller entities needing to post IM under the uncleared margin rules, the new timetable could cause a bottleneck for firms busy repapering derivatives contracts linked to the discredited Libor benchmark at the tail end of 2021. As the threshold for compliance reduces and more buy-side firms are caught, a panel of experts examines the key preparatory steps required, including documentation, custody account setup, margin calculation and the backtesting of IM models to smooth the process and ensure compliance

Mohit Gupta
Senior Product Specialist
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How will the extension of the implementation phase affect firms' preparations?

Mohit Gupta, Cassini Systems: The extension has helped firms of between $/€50 billion and $8 billion average aggregate notional amount (AANA)[1] get an additional year to prepare for the roll-out of uncleared margin rules (UMR). This extension gives firms more time to operationally prepare and seek solutions that are holistic and can provide consistent margin calculation and controls across bilateral trading and the cleared world. This extension is not a reason to postpone projects for a year. Even the regulators have emphasised that the extension is intended to give firms enough time to act diligently to comply with the regulations. The delay also offers opportunities to firms slightly above but close to the threshold to look at solutions and alter trading styles to delay their roll-outs by another year.

Neil Murphy, TriOptima: For firms not impacted by the increase in the phase-five AANA threshold, nor by the introduction of the new phase-six timeline of September 2021, it's very much a case of business as usual. With less than one year to go, they should be in the throes of implementation. In fact, for some phase-five firms it may have given extra momentum to their preparations by removing any lingering questions with regard to possible change or further delays.

Firms falling into the new extended phase-six timeline are faced with the choice of mothballing their projects – and dusting their plans off in mid-2020 – or ploughing on. Delaying the project risks firms losing valuable momentum and knowledge – and potentially finding themselves at the back of the queue with custodians, vendors and even counterparties when they resume. Instead, most firms I work with have adopted a more pragmatic approach to their preparations – albeit working towards a later go-live date. This way, they leverage the analysis and planning completed to date, give themselves more lead time to better understand the full impact of IM on each of their portfolios and have a longer window to evaluate and test the new systems they will likely need to implement. The sentiment for many firms is: 'Let's just get on with it – get UMR finished and move on to the next thing.' With the number of firms in phase six expected to be significantly greater than prior phases – and amid concerns about being at the back of the queue – this argument makes very good sense.

Firms' perspectives on whether recent regulatory guidance – which confirms that firms are only required to have legal and custody documentation in place if their IM exposure is above the regulatory $50 million threshold – is a case of either 'glass half full' (by reducing the overall operational burden) or 'glass half empty' (by potentially complicating matters and creating bifurcated processes), which will vary for each client.

Hiroshi Tanase, IHS Markit: The extension benefits the firms whose AANA is between $8 billion and $50 billion, or the equivalent in other currencies. These are the new phase-six firms to come into scope in September 2021. The International Swaps and Derivatives Association (Isda) estimates 775 counterparties and 5,443 relationships in this phase. These counterparties now have the opportunity to observe and learn from the experience of phase-six firms to implement an optimal solution. Having said that, they are advised to make the most of the extended implementation period without halting the UMR project within their organisations. For the new phase-five firms, there is no time to waste to achieve compliance in time for the September 2020 deadline.

Paddy Boyle, LCH: Splitting the original phase five across two years extends the time available for market participants to prepare for and implement their compliance plans for UMR. While this provides all parties with enough time, market participants subject to the final phase in 2021 should not slow down their internal UMR preparations, which require a great deal of work – including managing straight-through processing (STP) and workflows upstream, as well as engaging all relevant counterparties. Despite the extra time, it is essential to stick closely to an implementation plan, given the challenges of including legal, structural – order management systems, for example – and back-office implementation modules. An extension also gives participants time to consider and implement strategic alternatives, such as voluntary clearing of in-scope products, which reduces the scope of eligible sub-accounts.

Tobias Bergholdt, Nykredit: It will give phase-six firms more time but, since everybody was preparing for 2020, I think most will try to keep to the timeline rather than put the project on hold. This will mean more time to analyse the flow and some phase-six companies will view it as a chance to learn from phase five.

Everyone agrees that the sooner you start, the better. But there are very few tri-party agents, and the buy-side firms will hit the same counterparties at the same time so you will have this bottleneck of legal work and system preparations.

Nykredit's exposure is just under the €50 billion notional mark, so we are tracking it right now and have discussed what we would do if we're edging closer to the threshold.

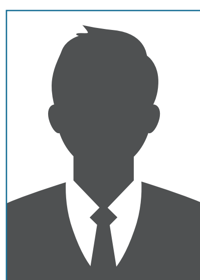
[1] *Or equivalent currency based on jurisdiction.*

Chetan Joshi, Margin Reform: In July 2019, the Basel Committee on Banking Supervision and the International Organization of Securities Commissions proposed guidance for a one-year extension of the final implementation phase of UMR. Global regulators have agreed with the guidance and have started to change their regulatory technical standards.

On December 5, 2019, the European Supervisory Authorities published their final report and public statement on bilateral margin amendments and statement on introduction of fallbacks in over-the-counter (OTC) derivatives contracts. The revised margin regulatory technical standard addressed the following topics:

- Variation margin (VM)
- IM phase-in
- Intra-group derogation
- Equity options derogation
- Amendments to legacy contracts.

The challenge has always been the the number of firms in phases five and six – around 1,100 newly in-scope counterparties (NISCs). This will create a squeeze on the resources that negotiate the legal documentation and on custodians who may be required to set up new accounts. Regulatory IM is a new process for all phase-five and phase-six firms, and implementation is complex.



IHS Markit

Hiroshi Tanase, Executive Director, Product Management
www.ihsmarkit.com

What are the key challenges for firms approaching UMR?

Hiroshi Tanase: The key challenges are mainly in three areas:

1. Determining AANA and communicating that back to counterparties in a timely manner
2. Negotiating new IM credit support annexes (CSAs)
3. Putting a mechanism in place to calculate IM.

Compared with, for example, one year ago, NISCs are in a better position as there is much more clarity about the requirements and there are more solutions on offer for all the aforementioned key elements. However, a firm still needs to make an objective assessment of its specific situation and needs, so that the implementation project can be driven with the right objectives.

Neil Murphy: The multitude of compliance challenges can be consolidated into two broad types: calculation-related and collateral-related – each of which create their own set of associated technology challenges. Calculation challenges centre on the choice of IM model – which you might expect to be an easy decision for firms not yet in scope, given the near-universal use of the standard initial margin model (Simm) in earlier phases – the associated calculation of Simm's inputs (trade sensitivities) and potential IM validation requirements.

Collateral challenges haven't been in the spotlight as much as calculation challenges, but firms must be certain not to overlook them. These challenges encompass legal documentation, margin call communications, IM reconciliation and a choice of collateral segregation options.

Mohit Gupta: The challenges UMR presents for buy-side firms fall into two buckets. On the operational front, firms need to understand if they will be affected by UMR. This depends on whether they are above or below the AANA threshold at each phase: phase five ($/€50 billion AANA) on September 1, 2020, and phase six ($/€8 billion AANA) on September 1, 2021. Once a firm knows it is in scope, it needs to speak with its respective dealers and repaper agreements along with accord on the margin calculation model to be used. This model also must be approved by the firm's respective regulators. Additionally, if firms believe they will exceed the margin posting threshold – up to $/€50 million per group relationship – they need to set up custodians who will manage the collateral on their behalf. Based on the experience from previous phases, this can be a lengthy process.

Equally important is the challenge UMR presents to firms in capital consumption and collateral liquidity. Firms must understand how to manage and reduce the amount of new collateral required to reduce the impact of carry cost on firms' profit and loss.

Paddy Boyle: Market participants preparing for UMR face a demanding and highly complex process with numerous steps – as Isda has highlighted[2] – and must tackle two distinct sets of work. The first involves setting and running compliance with the new rules. Uncleared derivatives users must calculate their AANA; determine when they are in scope in each jurisdiction, and for which entities; agree new credit service agreements and custody relationships; and then run those credit service agreements, potentially with third-party assistance. In the second, changes to behaviour can minimise the burden of operating within the new framework. Compressing more portfolios, clearing new trades and backloading old ones into clearing can significantly reduce the number of entities in scope. Clearing more flows will also reduce the amount of margin that needs to be paid.

Tobias Bergholdt: A lot of legal work is needed. The first obstacle, especially with the additional step in the timeline, is to decide whether you want to do the full legal onboarding so you are 100% prepared, or if you want to stay in the slipstream where you only calculate the IM and wait to see what happens.

This project affects the whole business. Some buy-side firms see it as a collateral issue and pass it down to the back office, yet they will be surprised how much the front office needs to be involved and how much legal work is required. Some of the legal templates have been standardised from phases one to four, but it's still a huge challenge.

Even if you choose monitoring, it is important to contact all your counterparties to confirm whether they are using the schedule approach or Simm to calculate IM – as those numbers can differ a lot – as well as agreeing the threshold on the IM. It's worth going into depth to get the right resources and technology in place. Nordea Asset Management, where I worked previously, was caught in phase two – having the IM monitoring task down to almost five minutes a day. We only checked that the IM was calculated correctly and the bonds for the IM were moved.

Chetan Joshi: As well as the squeeze on documentation and custodian relationships, the other main challenge is that of the new IM model. In the EU particularly, model development, implementation, governance, and ongoing monitoring and performance measurement are critical. The IM models will be scrutinised by your counterparties and the regulator, so you need to constantly upgrade, maintain and ensure proper controls around your model validation, backtesting and benchmarking environment.

Another potential challenge will be around the upcoming European Market Infrastructure Regulation refit and model validation, as we wait to see the requirements of the forthcoming technical standards in Europe.

[2] *Isda (2018),* Getting ready for IM regulatory requirements – What steps do I need to take?, *https://bit.ly/2JrPiPr*

Neil Murphy
Business Manager, triResolve
www.trioptima.com

What impact will the rules have on firms' trading strategies?

Neil Murphy: A key thread that links calculation and collateral challenges is technology. These varied challenges may mean multiple systems – but it's not enough to think about each system in isolation. Firms should view their IM solution as a single entity, ensuring seamless connectivity between each component. Implement new technology without this and your daily IM process risks being a costly operational headache. Get the connectivity right and you will be well placed to navigate the new path ahead.

Tobias Bergholdt: Everyone will do all they can to avoid posting IM. The implications in terms of the volume and cost are huge. Firms that are close to the threshold might clear some of the products or expand the range of counterparties.

The portfolio managers I speak to don't even hold many of the eligible securities. So a change of strategy is needed, including looking into clearing and even asking why you are trading a certain product. Is there a cleared or exchange-traded substitute available? Or can you go to a prime broker with another product? As I understand it, the level of IM required can be two or three times more for uncleared, so it will take a lot from the portfolio.

We may also see pressure from the buy side for regulators to expand the range of eligible securities to include, say, mid-range bonds and mortgage bonds.

Paddy Boyle: Prior to UMR, firms took a relatively simple approach to execution, with the view that the best price delivered the best execution. However, participants trading bilaterally under UMR face the daunting challenge of who to trade with to optimise IM, as not all equal prices have equivalent collateral implications. Post-trade, there is the secondary economic impact of needing to pay for optimisation vendors, third-party custodians and other consultants – costs not captured in 'price' but linked to execution decisions.

Where it is more efficient to do so, prepared firms will now switch from an uncleared to a cleared strategy, which removes the need to think about who to trade with. But LCH does not anticipate that firms will change what they trade, except in very limited circumstances.

Chetan Joshi: The sell side is working towards margin valuation adjustment and where it is negatively impacted you can expect the costs of funding to be passed back to the end-client through their derivatives pricing.

This will impact a few areas. Firstly, for derivatives users wanting to explore pre-trade analytics options, would it be cheaper to hedge using a cleared derivative or an exchange-traded instrument? The business may not be 100% hedged but this could be an acceptable risk versus the cost.

Then there is the issue of collateral drag. IM exposure needs to be covered by eligible collateral assets and these will be locked up in a segregated account and therefore not available for re-hypothecation, which means collateral costs will go up. Will organisations choose to allocate those costs back to the trading desk or centralise them as a cost of business?

Hiroshi Tanase: Understandably, the current focus for most firms coming into scope in phases five and six is to have a solution in place to avoid forced and unwelcome disruption to the execution of their trading strategies. Recently, more attention has been paid to the issue of incorporating the impact of IM cost in the trading decision-making process. That is the task of pre-trade analysis, which is often coupled with complementary effort of post-trade optimisation. While it may take some time and the evolution may not follow a straight line across different types of institutions in the industry, it is conceivable in the long term that the impact of IM will be considered in some fashion even by relatively small firms. Importantly, UMR have further spurred the interest in increasing the use of cleared and exchange-trade derivatives.

How will the need to post IM affect firms' choice of products?

Chetan Joshi: There are certain product exemptions depending on which regimes you and your counterpart fall under. In Europe, for example, the exemption on equity single stock options has just been extended until January 4, 2021. Additionally, you may want to consider the cost of a trade before you execute it and, therefore, pre-trade analytics may also be something to consider.

Mohit Gupta: Simply put, it is beneficial to find ways to trade required risk exposure that have lower IM requirements. One way is to trade using cleared products – OTC or exchange-traded derivatives (ETDs) – that offer the required risk exposure. This can help some firms avoid being in scope or delay until phase six by reducing their AANA. It also helps in-scope firms reduce overall IM and may keep them under the $/€50 million posting thresholds. A second approach is broadening the number of counterparties firms trade with. This extends the total IM exposure firms can have before having to post – $/€50 million per counterpart. The biggest impact of the rules, however, will be firms' awareness of margin and amending trading styles to consider margin requirements and collateral drag *ex ante*.

Tobias Bergholdt: In my experience, firms that are hit by IM mainly trade vanilla, with some cross-currency derivatives that are outside the scope of clearing. If your firm is big enough to be hit by IM, then you'll have to clear your derivatives either way.

Firms need to understand that it only applies to trades going forward. You've probably already been caught by mandatory clearing, so a lot of products you have in your AANA will not go into the uncleared world going forward. Where you'll be hit is more likely the exotics, such as cross-currency.

Paddy Boyle: For firms taking longer-dated or large positions in in-scope products, LCH expects a significant move to clearing, which is even more efficient once bilateral trades are also subject to uncleared bilateral IM. This efficiency accrues not only to the end-client, but their bank trading counterparties will also derive benefits, both in the form of reduced IM via clearing and from the superior balance sheet treatment of cleared versus bilateral risk exposures; risk-weighted assets and leverage ratio calculations attribute lower capital obligations for cleared trades, making dealers even more inclined to see clients clear trades.

Hiroshi Tanase: Once a fully fledged IM solution is in place, the in-scope firm can, in theory, continue to trade any type of uncleared derivatives. But the cost of IM may influence the preference for different products. The standard Simm offers a general solution across the entire spectrum of instrument types – together with schedule IM for certain esoteric types – and therefore no products would be off limits. The relative attractiveness of cleared derivatives and ETDs may increase for firms for which the IM funding cost is a material factor.

LCH The Markets' Partner

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What tactics are firms using to reduce IM exposure?

Paddy Boyle: There are two approaches for firms looking to reduce margin exposure. First, they can reduce their OTC derivatives notional below the $50 billion or $8 billion threshold, as applicable. Where this can be achieved through more compression of bilaterally held portfolios and more voluntary clearing, entities can be kept out of scope entirely. Alternatively, for in-scope entities, more voluntary clearing will significantly increase the margin efficiency of most portfolios.

Mohit Gupta: Firms can reduce margin exposure, either by altering their trading style or investing in technology systems. Altering trading style includes trading products that require less margin to be posted or trading them on exchanges, which have lower margin requirements. This is not always possible and is dependent on availability of such products and comparable liquidity.

UMR provides a threshold per relationship where only margin exceeding the threshold has to be posted. Some firms are adding dealers to achieve a higher aggregate threshold. However, this approach is not without its own constraints.

When using technology to help reduce IM exposure, firms are looking for systems that:

- Monitor IM exposure at their respective dealers
- Explain the margin requirements at CSA and trading book level
- Provide pre-trade decisions on the best dealer to trade with, depending on the marginal cost of collateral.

Neil Murphy: For firms already in scope, the volume of IM being exchanged is sizeable – $140 billion or more. It should be no surprise to learn then that firms are actively prioritising steps to reduce the cost – and both portfolio compression and optimisation are hot topics among dealer banks.

TriOptima's triBalance service can allow in-scope firms to minimise IM costs through multilateral IM optimisation cycles. Specific sets of risk-reducing trades rebalance counterparty exposures while keeping the overall portfolio market risk-neutral. Capital costs are minimised by using the minimum possible amount of notional.

Firms have also leveraged triReduce's compression cycles to reduce overall gross notional, with the goal of minimising overall IM exposure.

Not solely linked to a goal of reducing IM exposure, but combined with a wider desire to potentially remain out of scope for as long as possible, some

firms are looking to pre-trade optimisation to ensure they efficiently manage their IM and exposure across a broad set of counterparties. In doing so, they seek to take advantage of the maximum $50 million regulatory threshold per relationship, hence delaying or even avoiding having to post IM.

Tobias Bergholdt: Firms will look to compress and net as much as possible to reduce notional. It's a relatively easy calculation and there's a lot of technology available to help.

Some compression trades are easily executed with your counterparty OTC. Then there are vendors such as TriOptima – they have most derivatives trades already in their ecosystem, so they will take a portfolio of trades such as interest rate swaps with different counterparties, and recommend which can be offset against others via novation, and then compressed.

Hiroshi Tanase: Large sell-side firms in early phases have largely completed IM reduction and optimisation exercises. Techniques include risk transfer across IM netting sets – such as counterparties – and between bilateral, cleared and exchange-traded (where applicable) positions. IM is reduced if more risk offsets are achieved within a netting set. IM can be reduced – within limits – for both pre- and post-trade. For large broker-dealers, the emphasis is on post-trade optimisation/reduction. As with derviatives valuation adjustment – known as XVA –a decade ago, optimising IM requires not only the establishment of tools and processes but also developing understanding within an organisation, which is often a challenging and slowly evolving process – even at tier one banks with highly skilled staff. For phase-five and phase-six firms, reducing overall exposure by clearing more trades is currently the main tactic. The next step will be to maintain an optimally low level of IM through active use of IM optimisation tools pre- or post-trade. Pre-trade, firms will look to identify counterparties with the lowest incremental IM. Post-trade, firms will look to put additional risk-reducing trades or novate trades, for example, to optimise IM. IHS Markit anticipates that to be a gradually evolving process.

Chetan Joshi: Beyond clearing, they'll look at portfolio compression to reduce their risk profile and to bring down the notional outstanding of derivatives – via novations – which drives the AANA calculation. Another option could be ETDs, while some firms are ceasing trading in certain products altogether. There are also tactical ways firms can split their $/€50 million threshold – across subsidiaries for example – to reduce overall IM exposure.

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How will the rules affect relationships with bilateral counterparties and prime brokers?

Tobias Bergholdt: If we are moving to a cleared world, we will need more counterparties to be eligible clearing brokers. But I don't think you will see a huge shift because a lot of firms will figure out how not to be hit by IM and will keep their trades non-cleared. We'll see similar numbers of counterparties, but probably fewer and smaller portfolios.

Hiroshi Tanase: The impact depends on the current arrangement in place. Most hedge funds have historically posted independent amounts (IAs) to their counterparties. It follows that, for those firms that are currently posting an IA, the margin arrangement after the introduction of UMR will be a dual-margin regime where both the non-regulatory IA and the regulatory IM will be posted under a bilaterally agreed complex protocol.

The introduction of UMR will also have some notable implications for the relationship between buy-side firms and prime brokers. Since the regulatory IM under UMR will be exchanged on a gross basis, the funding cost for prime brokers will increase because they must post IM for the benefit of clients and the executing brokers. The increased funding cost may be passed on to the prime brokers' clients.

Second, certain buy-side firms, such as real-money firms that traditionally did not use prime brokers, may consider using them instead of trading directly with executing brokers – bilateral counterparties, for example – because of the benefit of having a centralised counterparty to net positions and minimise IM amounts.

Chetan Joshi: Clients might find their liquidity providers have a prioritisation list; equally, they might want to consider reducing the number of liquidity providers they execute through to make compliance more manageable – in particular the documentation and monitoring requirements, especially in the European Union, where the regulator wants you to be able to validate Simm numbers.

Prime brokers already have a critical role in a functioning market, and UMR does not change that. The collateral upgrade trade will likely become more prevalent alongside front-to-back solutions for calculation, documentation, settlement, dispute management and ongoing monitoring. Naturally, this will come at a cost.

Mohit Gupta: Under UMR, firms are required to repaper their agreements with bilateral counterparties and prime brokers. Previously these counterparties would generally only request margin or an initial amount for bilateral trades from clients, but both sides of the transactions now need to post margin independently in segregated accounts. This not only increases the operational overhead on the dealer side but also the additional burden to have collateral inventory for margin requirements. Furthermore, dealers can offer clients the threshold – up to $50 million at the top level – which can differ depending on the client and factors such as their trading styles.

Post go-live, counterparties and clients need to keep a process in place for dispute resolution to tackle scenarios when margin requirements are widely different. An inability to post the required margin can lead to disruption of trading with the counterparty and, in extreme cases, termination of the relationship.

Paddy Boyle: For bilateral counterparties, maintaining some positions may become very expensive. We expect these to move to clearing and, if foreign exchange follows the pattern of other asset classes, we'll see a significant increase in accompanying market volume too.

Over the past three years, LCH has seen huge growth in the voluntary clearing of in-scope products – mostly non-deliverable forwards – among the groups caught in the early waves of UMR. We expect to see the same behaviour from most entities coming into scope next year and are working with many of them on clearing projects. Most – but far from all – forex prime brokers (FXPBs) are part of business units that include clearing brokers. Some of these FXPBs expect and intend to move a large amount of their client business from FXPB to cleared forex, as there are significant cost savings for FXPBs, clients and also executing brokers.

Furthermore, given that clearing creates a new phase in the evolution of the forex market, this creates a new chance for early adopters on both the dealer and clearing side to become market leaders and thought leaders in the space. In short, the transition to clearing will likely open an opportunity for new leadership and a revamped league table, which will in turn change the dynamics among counterparties, dealers and their clearing brokers.

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What pressures are UMR placing on firms' resources and technology?

Chetan Joshi: There are a number of pain points created because of margin rules. New resources and technology are required to implement and process new legal documentation, custodian connectivity, risk models, collateral management workflows and treasury management. A number of firms will need to utilise new technology providers and, if these firms have not previously been through the UMR process, this creates a level of delivery risk that you must be comfortable with.

Timeframes are also shrinking – due to the larger volumes, the custodial deadlines for guaranteed onboarding are likely to be at the end of the first quarter of 2020. There's a lot of planning and testing involved for legal data, custody, Simm calculation, IM processing and then ensuring your business-as-usual playbooks are all complete and everyone knows what they are doing when you go live. You do not want any major surprises.

Neil Murphy: A recognition that calculation and exchange of IM is largely a new requirement for firms coming into scope has meant a technology gap for many firms. Universal adoption of the new Isda Simm methodology has increased the market's requirement for new technology – not simply in terms of IM calculation but, crucially, to facilitate IM reconciliation. Phase-one to phase-four firms prioritised this technology gap – adopting the same market infrastructure to solve the problem. Rather than shoehorning IM calculation into old platforms, they've looked to adopt new systems built specificically with UMR capability.

Unfortunately, a small number of in-scope firms have faced a wider technology gap, requiring new tools to calculate underlying risk sensitivities in the necessary common risk interchange format, and to exchange IM margin calls. While this – for only the smallest firms – has been the exception to date, I expect this to become more the norm in phase five and, in particular, phase six. On the point of sensitivity calculation, firms have a wide number of vendor options to choose from, but a more restricted choice in terms of margin call exchange. Firms need to choose well, ensuring not only that the underlying technology has the capability to support their required calculation models, but that it can also be plugged seamlessly into the overall IM architecture.

Firms coming into scope need to view technology as a key UMR enabler, critical to meeting IM calculation requirements, call negotiation and dispute resolution. Underpinning this new technology approach, firms must ensure they implement an efficient STP approach to manage the uptick in volumes.

A recurring theme is firms taking advantage of UMR not only to implement a new IM-compliant approach but, where possible, to review and upgrade current VM processes. This is more pertinent to phase-five and phase-six firms that may not traditionally have had the same margin capabilities as larger firms. Given the bilateral nature of the margin process, any improvement to legacy VM processes by NISCs will surely be welcomed by the broader market.

Mohit Gupta: The new rules have created a need for firms to implement operational and system changes to move two-way collateral and be able to calculate IM. This requires changes to systems infrastructure, new operational processes and potentially selecting new operations or technology partners.

However, this challenge is also being used as an opportunity by many firms to implement a front-to-back margin transparency and optimisation solution. The regulatory mandate and budget/resource assigned to that project can deliver a lot more 'bang for the buck' across the firm. The changes required can provide additional benefits such as consistent workflows across asset classes, net margin reduction and front-office cost transparency.

Tobias Bergholdt: The technology is out there and it works well. My hope is that firms will use this process positively – to present the business case to management that the investment is needed, but the technology can also be used for day-to-day activity around VM. Since you have to agree IM on an electronic platform – Marginsphere or AcadiaSoft – you may as well manage VM on that platform rather than via email, which a lot of smaller buy-side firms do. This can save time on collateral management. The IM process is very similar to that of VM so you may as well pull those two together and make it efficient.

It will take time to oversee the project and implement the systems but the benefits on the other side are really positive, so it's money well spent.

Hiroshi Tanase: It is true that firms need to invest capital to achieve UMR compliance. However, the competitive market pressure has resulted in the availability of cost-effective solutions that address key elements such as IM calculation. Phase-five and phase-six firms should take a long-term view and obtain a solution that will prove future-proof. Different solutions have different overall impacts on in-scope firms' resources and the cost to run the daily process.

Key considerations include not only the salient service features, but other important features that may be overlooked at first. For example, the reliability and accuracy of calculation is not an academic concept, but something that would directly affect the operational costs as IM disputes would directly translate into operational burden.

Adequate and timely customer support is another important consideration as many phase-five and phase-six firms will be relying on the service provider to augment their internal staff to manage the complexity of the IM calculation process. Last but not least, the service provider's awareness of and readiness to provide adequate support for implementing model risk management, or model governance, is another key point to consider when assessing the overall viability of the solution and impact on the firm's resources. ■

>> The panellists' responses to our questionnaire are in a personal capacity, and the views expressed herein do not necessarily reflect or represent the views of their employing institutions

Morgan Stanley's swaps clearing unit boosts client margin by $4.8bn

Futures commission merchants see required client margin increase 18% quarter on quarter. By Alessandro Aimone

Required client margin held by Morgan Stanley's swaps clearing unit jumped by $4.8 billion (28%) in the third quarter of 2019 – the most of the 17 reporting US futures commission merchants (FCMs).

Data from the Commodity Futures Trading Commission (CFTC) shows Morgan Stanley held $21.9 billion from clients to cover their swap trades, the highest level since Q2 2018.

Citi posted the second-largest quarterly increase, with required margin up $3.6 billion (13%) to $31.9 billion.

Of the remaining top eight FCMs, Wells Fargo saw required margin surge $2.6 billion (30%) to $11.2 billion; JP Morgan's increased $1.8 billion (13%) to $16.1 billion; BofA Securities' $1.7 billion (23%) to $9.1 billion; Credit Suisse's $1.5 billion (14%) to $12.6 billion; Barclays' $1.1 billion (17%) to $7.6 billion; and Goldman Sachs' $532 million (7%) to $7.8 billion.

Citi remains the largest FCM, with a 26.1% share of total required client margin, down from 27.1% quarter on quarter. Morgan Stanley consolidated second place, with a share of 17.8%, up from 16.3%. JP Morgan follows with a 13.1% share, down from 13.7%.

Combined, the top eight FCMs account for 96.3% of total required client margin, flat on the previous quarter and barely changed from 96.2% the same quarter a year ago. Total required client margin stood at $122.7 billion at end-September, up $18.3 billion (18%) quarter on quarter, and $34.2 billion (39%) year on year.

In total, 17 FCMs reported client cleared swaps margin for September 2019, the same number as a year ago.

What is it?

The CFTC requires FCMs to file monthly financial reports with the Division of Swap Dealer and Intermediary Oversight.[1] Selected data from these reports is made available publicly, including information on FCMs' net capital, customer segregated funds and required margin.

Figures 1 and 2 use data extracted from the 'customer amount cleared swap segregated – required' field in the monthly reports. This data denotes the amount of funds an FCM is required to segregate for customers who trade cleared swaps.

Why it matters

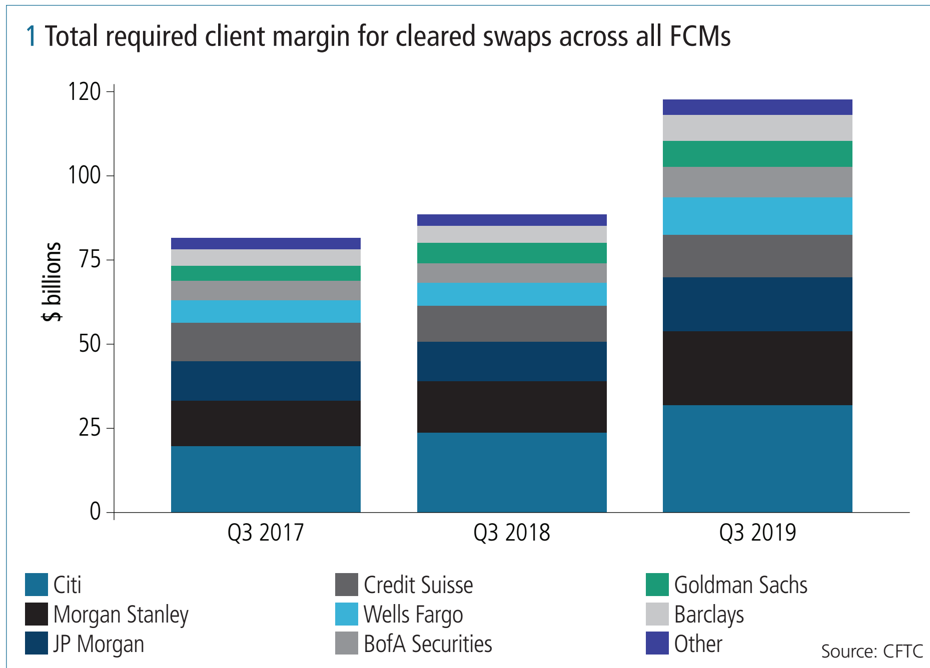
The top eight clearing brokers continue to hog the client clearing wallet. The concentration of required margin among this elite climbed from 88.8% in 2014 to around 96% by mid-2017 and has stayed roughly at this level ever since.

Although mandatory margin requirements are an imperfect indicator of client activity – since movements in risk levels and netting agreements also have an impact on their level – an aggregate 18% jump in total required margin over the past three months would suggest FCMs are taking onboard more client trades and therefore risk.

The CFTC is keeping a close eye on the risks inherent in the system. In May, it published the findings of its reverse stress test of LCH Ltd and CME Clearing, two key central counterparties, which found that both would survive even if all their clearing members with losses defaulted on a day of extreme market chaos.[2] This implies that the concentration of client clearing activity among a small cadre of firms does not, by itself, imperil clearing houses. ■

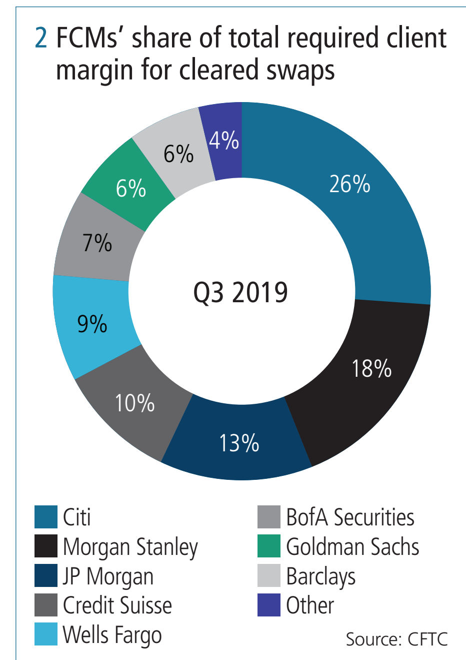
Previously published on Risk.net

1 Total required client margin for cleared swaps across all FCMs



Source: CFTC

2 FCMs' share of total required client margin for cleared swaps



Source: CFTC

[1] CFTC, Financial Data for FCMs, *https://bit.ly/37vOnZs*
[2] *CFTC (May 2019)*, CFTC Staff Issues Clearinghouse Supervisory Stress Test Report, *https://bit.ly/2XBbltX*

Trading non-cleared derivatives tougher in Q3

Twelve per cent of respondents said trading conditions worsened for interest rate products. By Abdool Fawzee Bhollah and Louie Woodall

Bank counterparties had a harder time trading non-centrally cleared derivatives in the third quarter of 2019, a European Central Bank (ECB) survey shows.[1]

Of the dealers surveyed by the ECB, 9% said that they somewhat increased IM requirements for foreign exchange derivatives over the three months to end-September. Six per cent said the same for commodity derivatives, 5% for interest rate derivatives and 5% for equity derivatives.

When asked if liquidity and trading had changed, 12% said they had deteriorated for rate instruments, 10% said the same for equity derivatives and 4% for forex.

Credit limits, referring to maximum amounts of exposure extended to counterparties by banks, were mostly unchanged. Eight per cent of respondents said they had increased and 4% that they had decreased over Q3 for forex instruments. For interest rate derivatives, 8% said they had decreased and 4% increased, and for equity derivatives 5% said they had decreased.

What is it?

The ECB conducts a quarterly qualitative survey on credit terms and conditions in euro-denominated securities-financing transactions and over-the-counter derivatives markets. This is part of a global effort to collect information on variations in credit conditions and the drivers of these trends.

There were 28 large bank respondents for the latest survey, comprising 14 euro area banks and 14 banks with head offices outside the euro area.

Why it matters

As non-cleared products are typically more complex than their standardised, centrally cleared cousins, they are tough to trade even under normal conditions. Gyrating markets can make it even tougher.

Interest rate shifts and geopolitical uncertainty over Q3 may have factored into banks' decisions to tighten margin requirements – and contributed to the deterioration in trading liquidity.

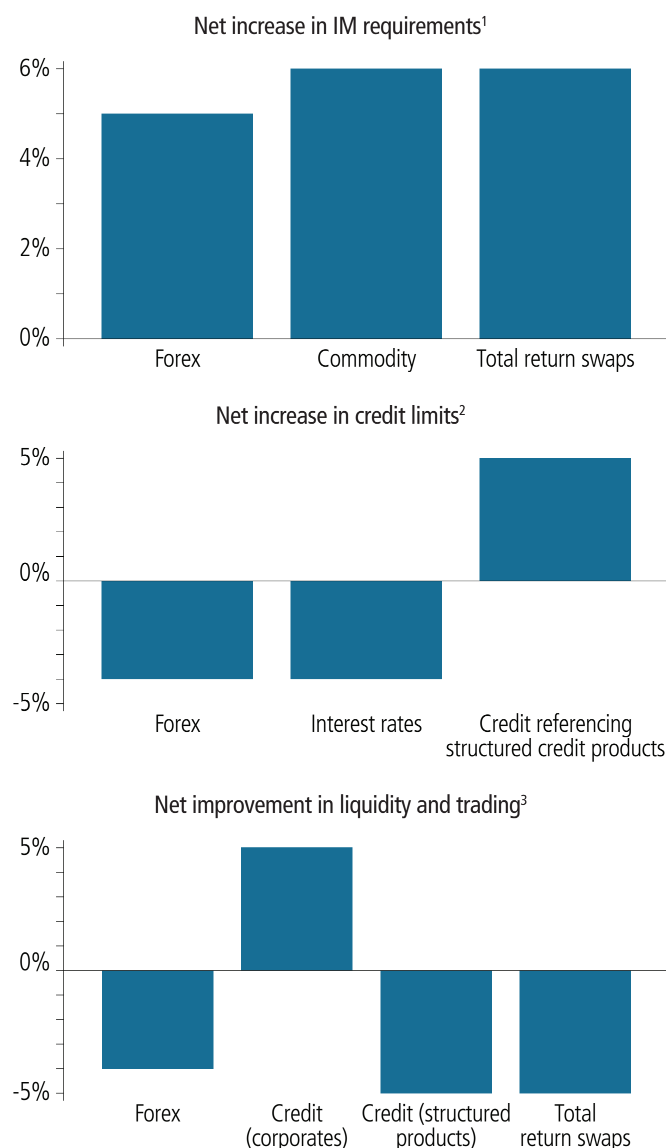
The non-cleared market has suffered since the advent of clearing mandates and IM requirements, which has increased the cost and complexity of the products traded. This has had the effect of pushing more trades into clearing houses.

As of 2018, only 25% of all interest rate derivatives traded outside of clearing houses, demonstrating just how effective these regulatory changes have been.[2]

One consequence of a smaller non-cleared market is a shortage of instruments able to hedge complex, idiosyncratic risks. This could in turn deter firms from making certain investments, as they would not make economic sense without the appropriate hedges. ■

Previously published on Risk.net

1 In Q2 2019, how have IM requirements, credit terms, and liquidity and trading conditions changed?



1 Net percentage is the difference between the percentage of respondents reporting "decreased considerably" or "decreased somewhat" and those reporting "increased somewhat" and "increased considerably".
2 The difference between the percentage of respondents reporting "decreased considerably" or "decreased somewhat" and those reporting "increased somewhat" and "increased considerably".
3 The difference between the percentage of respondents reporting "deteriorated considerably" or "deteriorated somewhat" and those reporting "improved somewhat" and "improved considerably".
Source: ECB

[1] *ECB (September 2019),* Survey on credit terms and conditions in euro-denominated securities financing and OTC derivatives markets, *https://bit.ly/35rOnrP*
[2] *Bank for International Settlements (May 2019),* OTC derivatives statistics at end-December 2018, *https://bit.ly/2KJGVQY*

EU gives one-year margin reprieve on equity options

Regulators point to possible systemic risk in margin loophole, as the industry urges parity with the US. By Samuel Wilkes

European Union regulators have proposed giving non-cleared derivatives users a one-year exemption from posting margin on equity options – essentially keeping the bloc in alignment with US rules, but only until the end of 2020.

The EU regulators explained their decision by cautioning that the more generous margin treatment could pose dangers to the financial system. Industry sources, however, argued that the exemption should be made permanent due to US inaction on incorporating the instruments into their own margin rules.

"We will have to go back to them in 2020 for a further extension, but it might be difficult to get," says an industry source. "In principle, European prudential regulators don't like exemptions from the margin requirements because they always feel that it is creating the conditions for increasing risks in the system."

The global derivatives margin rules written by the Basel Committee on Banking Supervision and the International Organization of Securities Commissions (Iosco) require counterparties to post initial and variation margin against non-cleared trades. The European Market Infrastructure Regulation (Emir), which brought those margin rules into EU law, granted firms a three-year grace period during which they would not have to post collateral against single-stock options and index options. This was done to give European firms parity with US firms subject to more forgiving rules.

The exemption in Europe would have ended on January 4, 2020. But, as anticipated, the three European Supervisory Authorities (ESAs) – the European Securities and Markets Authority (Esma), the European Banking Authority (EBA) and the European Insurance and Occupational Pensions Authority (Eiopa) – proposed putting off the deadline by a year.

The proposal, dated December 5, could not have moved through Europe's bureaucracies in time to reset the deadline.[1] So regulators asked that relevant authorities apply the EU framework in a "risk-based and proportionate manner" until the exemption becomes effective – essentially bringing it into force immediately.

The European authorities gave only a year's extension due to concerns of creating regulatory fissures that could expose firms to greater counterparty risk.

"The ESAs reiterate the view that, from a prudential point of view, the international framework agreed on by all the participant authorities in the Basel Committee and Iosco discussions is a crucial pillar in ensuring safer derivatives markets, limiting the counterparty risk between counterparties trading derivatives, and thus that its co-ordinated implementation is key in reaching this objective."

Pauline Ashall, a partner at Linklaters, says that for market participants a permanent exemption is unlikely to create systemic risk.

"I understand that some supervisors were concerned about extending the derogation even for 12 months because of concerns about systemic risk," says Ashall. "But I think the view of the industry was that shouldn't be a significant concern because the scale of the market is small, and if there were defaults it wouldn't create systemic problems."

> "In principle, European prudential regulators don't like exemptions from the margin requirements because they always feel that it is creating the conditions for increasing risks in the system"
>
> Industry source

Opposite interpretations

However, another reason supervisors were reluctant to extend the exemption was because it would take the EU out of alignment with other jurisdictions that do require firms to post margin on equity options. Those include Australia, Brazil, Canada, Japan and Singapore.

In contrast, Hong Kong, Switzerland and South Korea all have temporary exemptions in place for equity options. The exemptions expire within the next year, but could be extended if local regulators want to follow the EU's lead. Katalin Dobranszky, a director in the European public policy team at the International Swaps and Derivatives Association, has noted that authorities in South Korea have indicated they would emulate the EU.

In their proposal, the European authorities hammered home the idea that all countries should be using the same playbook. In their summary on the extension for equity options, they drew on a passage in the legislative update of Emir, known as the Regulatory Fitness and Performance Programme (Refit).

The Emir Refit explained legislators' rationale for exempting physically settled foreign exchange forwards from the margin rules as being due to the US exempting the trades – which they objected to: "International regulatory convergence should also be ensured with regard to risk management procedures for other classes of derivatives."

In the proposal, regulators quoted this passage to bolster their goal of full implementation of the margin rules, including on equity options: "… the same Recital 21 of the Emir Refit text that mentioned in the section on physically settled forex forwards and swaps also comes in support of this objective of an implementation of the international framework across the range of derivatives."

But some market participants interpret the Emir Refit's position the other way around – that equity options should be exempt from the EU's margin rules so as to remain aligned with the US.

"You could read that statement in the Emir Refit either way," says Ashall. "I had read it and the industry had read it as almost giving support to an exemption for equity options to the extent it applies in other jurisdictions, and notably the US, and therefore to make the current exemption permanent.

"I certainly don't think that statement was intended by legislators to indicate that the exemption for equity options should be taken away," she adds.

Staying aligned

Despite Japan and Singapore applying margin rules to equity options, it is more important the EU aligns itself with the US, as the two jurisdictions have the largest markets of equity options, the industry source maintains.

"The fact is that in terms of market share, the EU and the US are more than 95% of the equity options market," he says. "So the other jurisdictions are very incidental, and the EU should focus on staying aligned with the US."

A legal expert at a global investment bank claims the need to stay aligned with the US is beyond evident.

"I can't see why it would be in anybody's interests not to extend the equity options derogation further," complains the legal expert. "Any exemption that is product-specific and is being done with a view to creating consistency with other jurisdictions seems to be a no-brainer to me."

The cost to firms from the exemption's lapse could be significant for some EU firms. Equity derivatives may represent only 1.3% of total derivatives notional, but these trades are particularly expensive to margin. In fact, a recent analysis showed equity derivatives have become the biggest consumer of IM, despite interest rate and forex derivatives being a much bigger portion of the underlying market.

The proposal on margin rules would normally need to be approved by the three European bodies – the European Commission (EC), European Parliament and Council of the EU – to become law. However, the proposal's call for "risk-based and proportionate" implementation, pending the completion of the exemption, has been used in the past and is viewed as a form of forbearance.

The December 5 release contained other changes to margin rules, among them an extended exemption on firms having to post margin on intragroup trades between an EU entity and a non-EU entity in the same company. If a non-EU entity is in a jurisdiction with rules not deemed equivalent to Emir by the EC, then an intra-group trade would otherwise be subject to margin requirements. The exemption will now end on December 21, 2020, instead of January 4, 2020.

The statement also gave smaller buy-side firms more time before they face IM 'big bang' rules, in keeping with the Basel Committee and Iosco revisions to phase-ins of different-sized firms. Firms with exposures of more than $50 billion in average aggregate notional of non-cleared derivatives will be caught in phase five in September 2020, in line with the original schedule. But smaller firms, with exposures down to $8 billion, will not enter the newly minted phase six until 2021, a full year later than previously planned. ■

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[1] *Esma, EBA and Eiopa (December 2019),* Final report – Emir regulatory technical standards on various amendments to the bilateral margin requirements in view of the international framework, *https://bit.ly/38QlV5h*

Margin Xchange iced after regulators lift IM burden

A&O-backed platform quits two-horse race, leaving Linklaters-backed service with a clear run. By Helen Bartholomew

Two law firms have been vying to create a service that would help derivatives users comply with new margin rules. Now, after regulators cut the industry's workload by an estimated 90%, only one is left.

"Due to a dynamic regulatory environment, the market has not evolved as quickly as we envisioned, and we did not feel it was economical to support a platform that delivers more than the market requires right now," says an Allen & Overy spokesperson in an emailed statement.

Margin Xchange – backed by A&O, IHS Markit and SmartDX – had been locked in battle with Isda Create, a platform backed by Linklaters and the International Swaps and Derivatives Association (Isda). The latter now appears to have a clear run, after what the A&O spokesperson says was a mutual decision by the Margin Xchange group to shelve its product.

The rival groups had their eyes on September 2020, when more than 1,000 firms – many of them small and medium-sized asset managers – were due to

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> Doug Donahue, Linklaters

Doug Donahue

be caught in the final phase of the new regime, which requires the posting of IM on non-cleared derivatives. An estimated 9,000 counterparty relationships would have been caught in next year's 'big bang', leading to the negotiation of more than 50,000 new documents including credit support annexes, custody account control agreements and eligible collateral schedules.

Automation was seen as one way to ease the burden. Regulatory forbearance was the other. Isda tried both: partnering with Linklaters to develop Isda Create, while also leading an industry lobbying effort to slash the scope of new rules.

In July, the Basel Committee on Banking Supervision and the International Organization of Securities Commissions (Iosco) raised the 2020 compliance threshold from €8 billion to €50 billion in outstanding notional of non-cleared derivatives and added a new compliance wave in 2021 for firms with notionals down to €8 billion. Instead of ending with phase five, they tacked on a phase six.

Earlier in the year, the Basel Committee and Iosco also said counterparties could continue to trade without IM documentation in place providing their margin exchange amounts did not exceed a €50 million limit.

By Isda's estimates, the two-part relief cuts the September 2020 documentation burden by 90%. There was no longer room for two digital platforms – if there ever had been.

Format wars

At launch, cost and clout were highlighted as a likely differentiator between the two platforms. Here, Isda Create had the edge. With an annual price tag that sources put at $100,000 for banks – and free for buy-side firms – the platform came in at about half the price of estimates for its rival.

When it came to functionality, though, Margin Xchange seemed to have the upper hand. After initial testing in late 2018, some sources singled out Margin Xchange as their preferred platform, being more advanced in its development and offering broader functionality. This gap has been closing, however.

In July, Bank of New York Mellon made its custody documentation available on Isda Create, enabling users to negotiate bilateral custody agreements, which govern the terms under which a client pledges assets with a custodian. Tri-party account control agreements, which govern terms of collateral segregation and management between a custodian and two trading counterparties, will be available later this month.

The three-way negotiation process opens the door for eligible collateral schedules to be agreed via the platform – a capability that had been omitted at the service's launch in January, initially putting Isda Create behind its more complete rival.

"The custodian functionality is a big milestone because it's bringing a missing piece of functionality and a missing player in the regulatory IM space onto the platform to complete the full regulatory IM picture," says Doug Donahue, structured finance and derivatives partner at Linklaters.

Crucially – and perhaps central to Isda Create's survival in the face of a dwindling pool of potential IM clients – the addition gave the service a role that extends beyond the margin regime. Isda and Linklaters argue it can become a broad contract negotiation platform, part of plans for a wider clean-up of the derivatives lifecycle, from contract negotiation to post-trade processing.

"We look for this platform to be broader than just IM – and that's what we have said to market participants. Our plan from the beginning is to put the full suite of Isda documentation on to the platform. We've spoken to other associations to get non-Isda documents onto the platform and many of those have been open to that," says Andrew Kayiira, director of product development at Isda.

Isda Master Agreements, which underpin over-the-counter derivatives trading, are next in line for the digital makeover, while products away from derivatives could be added in the future.

"My real hope is that, on a longer-term basis, we are going to see everyone using a digital platform; in the same way that we see everyone using the published paper documentation in this market today," says Linklaters' Donahue.

Battle with bilateral

Isda Create may have seen off Margin Xchange, but its success is not guaranteed. AcadiaSoft, which is co-operating with Isda Create for connectivity, also offers standardised contract creation tools, which some view as a potential competitor.

The bigger hurdle may lie in wrenching counterparties away from tried-and-tested bilateral negotiations. Document negotiations for phase four of the margin rules, which brought 24 firms into scope on September 2, were largely completed the old-fashioned way, with emails, Microsoft Word documents and PDFs flying back and forth between counterparties.

At least one buy-side firm caught in phase-four implementation in September 2019 is believed to have used Margin Xchange for live negotiations early in the year, later reverting to bilateral negotiation.

One margin official at a European bank told *Risk*.net he struggled to see the benefit of the platforms after using Margin Xchange. "I am a fan, but it's not adding any efficiencies to the negotiation process."

Isda Create was also used by at least one buy-side client ahead of phase-four compliance. The firm completed its negotiations offline, however, due to internal technology issues that left it unable to hook up to the platform in time to ensure compliance with the September 2 start date.

According to Isda, more than 50 buy-side and sell-side entities have signed up to use Isda Create for IM contract negotiation and the platform has been trialled by 160 firms. In late August, Isda Create confirmed its first fully electronic negotiation between Commerzbank and Nomura, ahead of phase-four compliance. ■

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CCPs dismiss bank, buy-side criticisms

CME, Ice bat away suggestions of flaws in clearing house risk management. By Robert Mackenzie Smith

A white paper – co-signed by nine banks and large asset managers, including JP Morgan, Citi and BlackRock – on reforming central counterparties (CCPs) "lacked credibility" and was "poorly written", according to clearing house chiefs.[1]

Speaking at a Futures Industry Association conference on October 30, CME chief executive Terry Duffy shrugged off disapproval of how his Chicago-based CCP and others manage risk, saying that many of the criticisms in the paper were "five or seven years old" and were simply being "rehashed".

The white paper, which was also co-signed by Allianz, Goldman Sachs, Societe Generale, State Street, T Rowe Price and Vanguard, proposed nine recommendations to improve CCP resilience, seven suggestions to help facilitate CCP recovery, and four proposals for CCP resolution.

Beyond taking issue with the paper's tone, CME's Duffy singled out three recommendations for particular criticism: higher 'skin in the game' for CCPs, limiting clearing to liquid products, and a voting mechanism that would decide whether members would continue to support a CCP before it could "require clearing members to contribute additional resources".

"If the intent was to re-engage the dialogue, yet quietly introduce three new topics that I believe have an inherent conflict of interest for the participants, then I think it was a bad way to do it," said Duffy. "We want to have a dialogue, but I think the approach to the dialogue was poorly written at best."

The CME chief said that the largest participants should contribute the most amount of money to a clearing house, and that clearing new products was what part and parcel of what CCPs did.

He also questioned if those members voting on whether to participate in a waterfall after a default had already happened would have an "inherent conflict of interest – because they have massive positions in the market and they could be voting to decide if they want to participate".

Jeff Sprecher, chief executive at Ice, was just as dismissive in his riposte: "It's very easy for buy-side firms to say: 'Of course I'd like more security, of course I'd like more safety, and not take any kind of a loss.' But what if I triple or quadruple the cost of you doing business? Does it still make sense to you?"

"Because there was no cost-benefit [analysis] to it, it kind of lacked credibility in my mind," he added.

Sprecher suggested that any of the proposals could in theory be adopted by CCPs, but said there would need to be a way for the market to cough up the cash.

"All of that can be done … but we'd need to figure out how we pay for that. There seemed to be a transfer of risk, but not a transfer of funds to pay for that risk. And that's where I think it broke down," he said.

Eurex chief executive Thomas Book agreed there were flaws in the industry's proposals: "The difficult part starts when there are calls for weakening the mutualisation that CCPs do. That's when you go into conflicts that are not good, because they have the potential to weaken the default capabilities of CCPs and have the potential to weaken CCPs themselves."

CME Group, Chicago

Speaking on a separate panel, Citi's global head of futures, clearing and collateral, Jerome Kemp, took a slightly different tack, arguing most of the conversation around CCP 'skin in the game' would be irrelevant if there was greater transparency around IM models.

"There's a very important feedback loop between this issue on margin and skin in the game. If IMs are set at an appropriate level, then skin in the game becomes very much a secondary issue," he said.

Some futures commission merchants privately admit they have a triple incentive in IMs being set higher: it serves as a counterparty credit risk mitigant for them; this, in turn, keeps their costs of funds lower; and third, it directly affects their revenues, since many charge clients a fee tied to their total IM exposure.

Kemp added that margin breaches – in which a client doesn't have enough margin on account with its clearing broker to cover its marked-to-market exposure – could happen on a daily basis. Citi was happy to wear these for its clients on an intraday basis, he said – but smaller firms might not have that luxury.

"I represent a large firm with very deep resources, and we actually capitalise that gap out of our own funds, and it costs money to do that. And that's something a firm like mine can handle. But events like that, which happen on a daily basis, make it very difficult for smaller participants in the market," he said. ■

Previously published on Risk.net

[1] *Allianz, BlackRock, Citi, Goldman Sachs, JP Morgan, Societe Generale, State Street, T Rowe Price and Vanguard (October 2019),* A path forward for CCP resilience, recovery, and resolution, *https://bit.ly/2Y3ifrV*

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