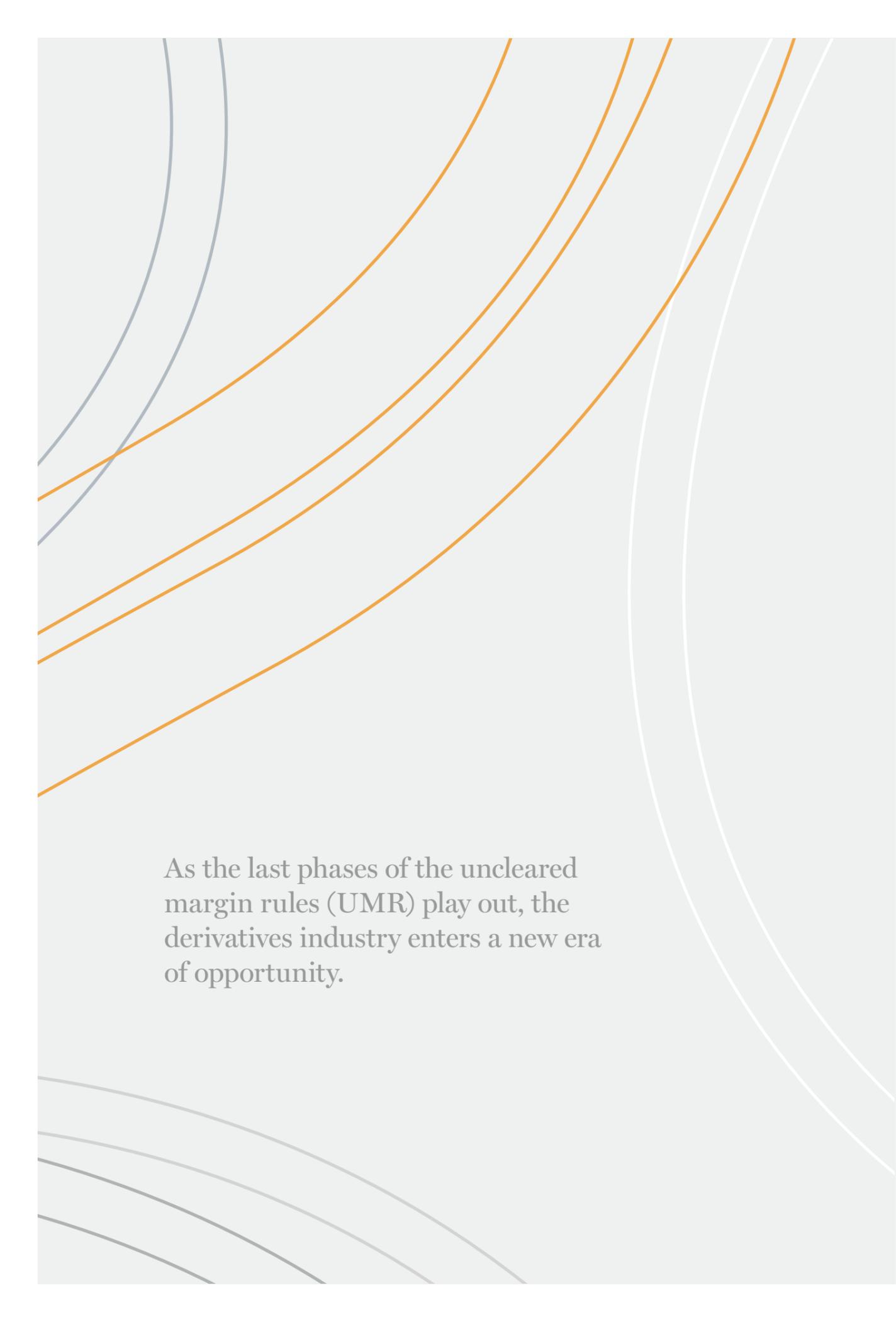


The Future Impact of UMR

The Challenges and Opportunities of Phases 5 and 6

LCH The Markets'
Partner





As the last phases of the uncleared margin rules (UMR) play out, the derivatives industry enters a new era of opportunity.

TABLE OF CONTENTS

- 01. Executive Summary 4
- 02. The Impact 6
- 03. Focus on Forex 11
- 04. ISDA SIMM: A Model Framework? 14
- 05. Optimal Solutions 16
- 06. A Clear Choice 19
- 07. What's Next? 22
- 08. Conclusion 24

This independent study was commissioned by LCH, with work completed by Paragon Public Relations between July and September 2020. LCH would like to acknowledge the support of those interviewed during this process, most of whom volunteered their time with no public recognition expected or requested.

01. Executive Summary

UMR CLEARS ITS FINAL HURDLES

As the last phases of the uncleared margin rules (UMR) play out, the derivatives industry enters a new era of opportunity. The decade-long regulatory journey is now revealing a more transparent and democratic industry, with opportunities for more efficient and effective management of systemic risk. For the individual firms involved, which are now required to collateralise uncleared trades, it has been a costly and burdensome exercise. However, the ripple effects of UMR are starting to show in areas such as foreign exchange clearing, which has seen a sharp increase in activity, in large part due to the increasing cost of collateralising bilateral trades.

While the operational and legal lift for many smaller buy-side firms that *might* be captured in Phases 5 and 6 has been considerable, UMR has more broadly served to democratise access to clearing as it reaches a wider-ranging and further-flung global client base. It has also helped demonstrate how derivatives professionals can work in lock-step with regulators to mitigate systemic risk, while preserving the essential value of the marketplace to all participants.

These systemic benefits have come at a cost that likely runs into the billions of dollars. This has caused some senior industry professionals to wonder if the first one or two phases of UMR would have been sufficient to capture the lion's share of the systemic risk that is overseen by the world's largest banks. But this overlooks the advantages that are gained through the collateralisation and standardisation of the industry.

To better understand the broader view of the impact of the last two phases of UMR, LCH commissioned a study of the derivatives landscape this summer. This paper reflects the results of more than 20 one-on-one telephone interviews with industry participants around the world, from the largest banks to small buy-side participants; a targeted online industry research poll (with over 80 responses); and curation of much publicly available data and insight.

Any study is at best a snapshot, but it's clear that for many of the estimated 1,100 entities caught by the last two phases of UMR,¹ there has been limited impact from the years-long process. But it's also true that the overall impact on the industry is likely to be greater than the sum of the parts, as many participants take the chance to reassess how they manage their derivatives books. Pension funds, for example, have benefited from the EU clearing exemption to date, which has been extended to June 2021, with the possibility of two further one-year extensions.² Some European banks are moving their clients to an all-cleared model, while others spoken to in Asia Pacific are managing their derivatives portfolios to remain below certain UMR thresholds.

Nowhere are the upcoming changes more pronounced than in foreign exchange, where there has been a palpable increase in clearing (see Figure 4).

As is the case for many FX derivatives, other structured products such as swaptions have also not been mandated for clearing. Even so, CCPs exist to clear these products, and the raised margin requirements for uncleared trades under UMR are only likely to have increased the incentives to take the central clearing route.

The industry as a whole has made a tremendous investment in adhering to UMR. Whether in the millions of dollars spent on legal fees, increased operational overhead or the cost of re-platforming businesses, the outlay associated with any change is high. But the opportunities in improved risk management are even greater, as the industry moves into the next phase of its growth with its reputation as strong as ever and market infrastructure robust — even under systemic pressures, such as the volatility caused by the 2020 COVID-19 pandemic.

¹[ISDA Letter: Margin Requirements for Non-Centrally Cleared Derivatives — Final Stages of Initial Margin Phase-In \(September 2018\)](#)

²[ESMA First Report for Consultation — Central Clearing Solutions for Pension Scheme Arrangements \(Annex 1 – EMIR Refit\)](#)

Figure 1: What's in scope — and what's not?

	Europe	US	Australia	HK	Japan	Singapore
Interest Rate Derivatives	✓	✓	✓	✓	✓	✓
Credit Derivatives	✓	✓	✓	✓	✓	✓
FX Derivatives <i>Except the Following:</i>	✓	✓	✓	✓	✓	✓
Physically Settled Forwards, Swaps and Principal Payments on Cross-Currency Swaps	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Equity Derivatives <i>Except the Following:</i>	✓	✓	✓	✓	✓	✓
Equity Swaps	✓	✓	✓	✓	✓	Yes, from 29/2/2020
Equity Options	Yes, from 29/2/2020	Exempt	✓	✓	Yes, from 29/2/2020	Yes, from 29/2/2020
Equity Forwards	✓	Exempt	✓	✓	✓	Yes, from 29/2/2020
Commodity Derivatives	✓	✓	✓	Yes, under conditions	✓	Yes, only for trades not for commercial purpose
Physically Settled Forwards	Yes, under conditions	Exempt	✓	Exempt	✓	Yes, only for trades not for commercial purpose
Physically Settled Options	Yes, under conditions	✓	✓	Exempt	✓	Yes, only for trades not for commercial purpose
Others (e.g., Weather Derivatives)	Yes, if instrument defined as a derivative under MiFID	Yes, under CFTC No, under SEC	Yes, if defined as a derivative under local rules			

Source: ISDA — Derivatives Subject to Non-Cleared Margin Rules

02. The Impact

The genesis of UMR stretches back to the 2007/08 financial crisis and the September 2009 G20 Pittsburgh Summit. The actual UMR implementation began in September 2016, with exchange of variation margin (VM) phased in over September 2016 and March 2017. The roll-out of initial margin (IM) payments, however, has been staggered across six phases over six years, based on a firm's aggregate average notional amount (AANA) of uncleared derivatives over specified three-month periods.³

ISDA estimates that Phases 5 and 6 will cover 1,100 entities: 315 in Phase 5 and 775 in Phase 6.⁴ Between these entities there will be 9,000 separate counterparty relationships (each of which needs two segregated accounts): 3,600 covered under Phase 5 and an additional 5,400 coming into scope in Phase 6. This is a different order of magnitude to the earlier phases, although a large percentage of these entities will not have to post IM.

Adding to the challenges faced is the requirement under UMR for IM to be segregated into bankruptcy-remote arrangements. This leaves a weighty choice for buy-side firms between a tri-party or a third-party model. The tri-party mechanism is generally more expensive because the agent custodian handles more of the processing.⁵ It also requires the client to maintain a 'longbox' of its collateral at its custodian.

The third-party structures are generally less costly because they require clients to 'own' more of the operational workflow steps involved in collateral selection and settlement. Under the third-party structure, firms and their counterparties must first agree to the IM call amount and then to the collateral to be pledged, before instructing settlement to the custodian.

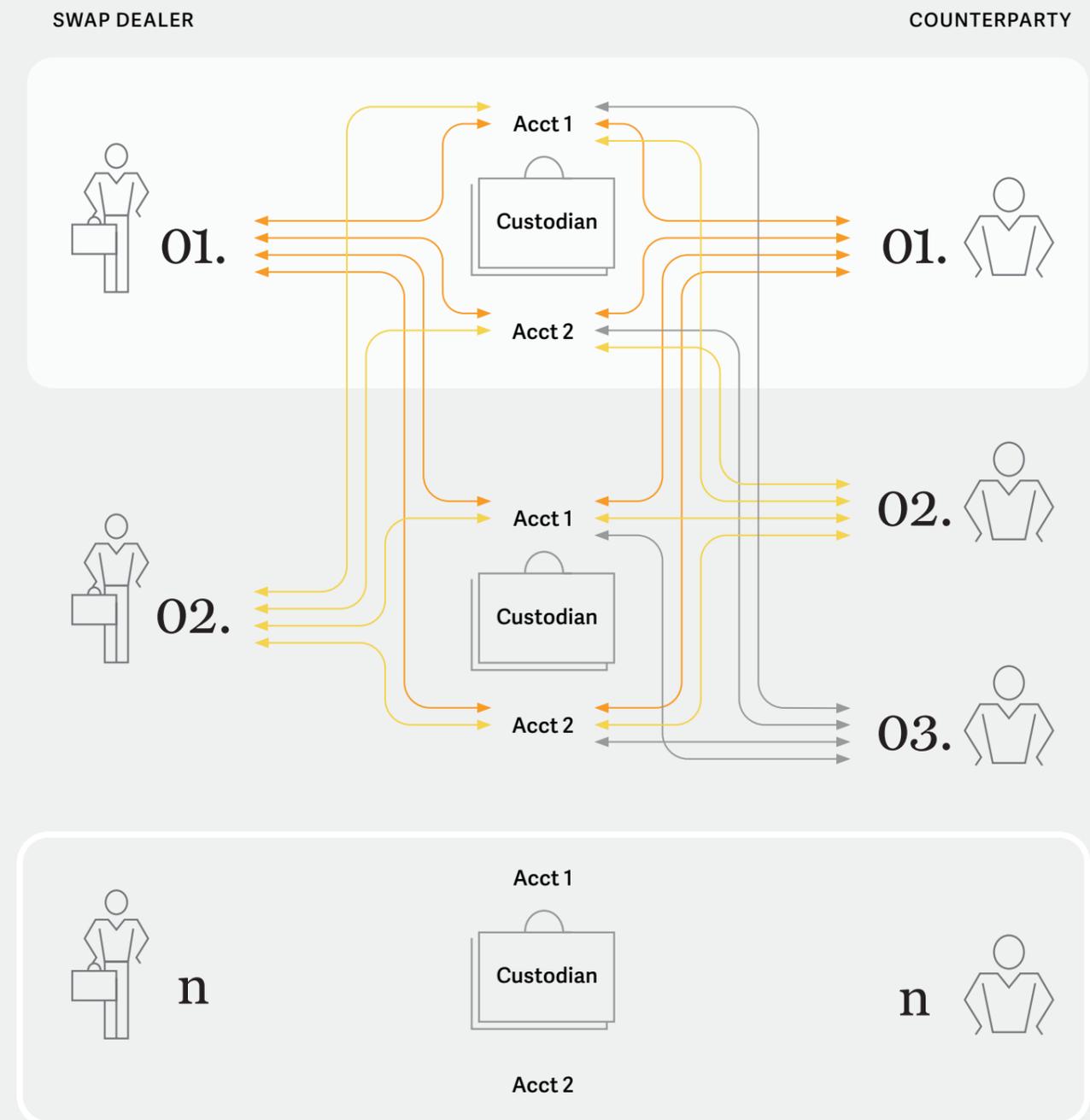
³ [SIFMA Non-Cleared Derivatives Initial Margin \(IM\)](#)

⁴ [Euroclear: UMR 5 and 6 — This Time Is Different](#)

⁵ [TriOptima: It's Not All About SIMM vs Schedule](#)

⁶ [Initial Margin for Non-Centrally Cleared Derivatives: Issues for 2019 and 2020](#)

Figure 2: With more newly in-scope counterparties, the complexity involving custodial accounts increases dramatically



Resource constraints will be intensified by the large number of counterparty relationships that will have to be repapered even though such relationships may not exceed applicable IM thresholds.

Source: ISDA Initial Margin for Non-Centrally Cleared Derivatives: July 2018⁶

The majority of in-scope firms in earlier phases chose to use tri-party agents because of their innate ability to simply manage same-day pledge/release movements. Under the tri-party model, the Triparty Required Value (RQV) is agreed between the counterparties before the instruction is sent to the custodian to execute.

The segregation model discussion is vital for Phases 5 and 6 because, unlike Phases 1 to 4, a tri-party solution is not necessarily the best for all types of buy-side entities, as it is new, more complex and more costly for many clients.

Significant amounts of legal contracts and additional documentation work is required in various areas, including repapering existing credit support annex agreements; implementing new margin calculation methodologies; identifying and acquiring suitable collateral; and developing a collateral workflow that includes an auditable custodial segregation process that can be completed daily.⁷

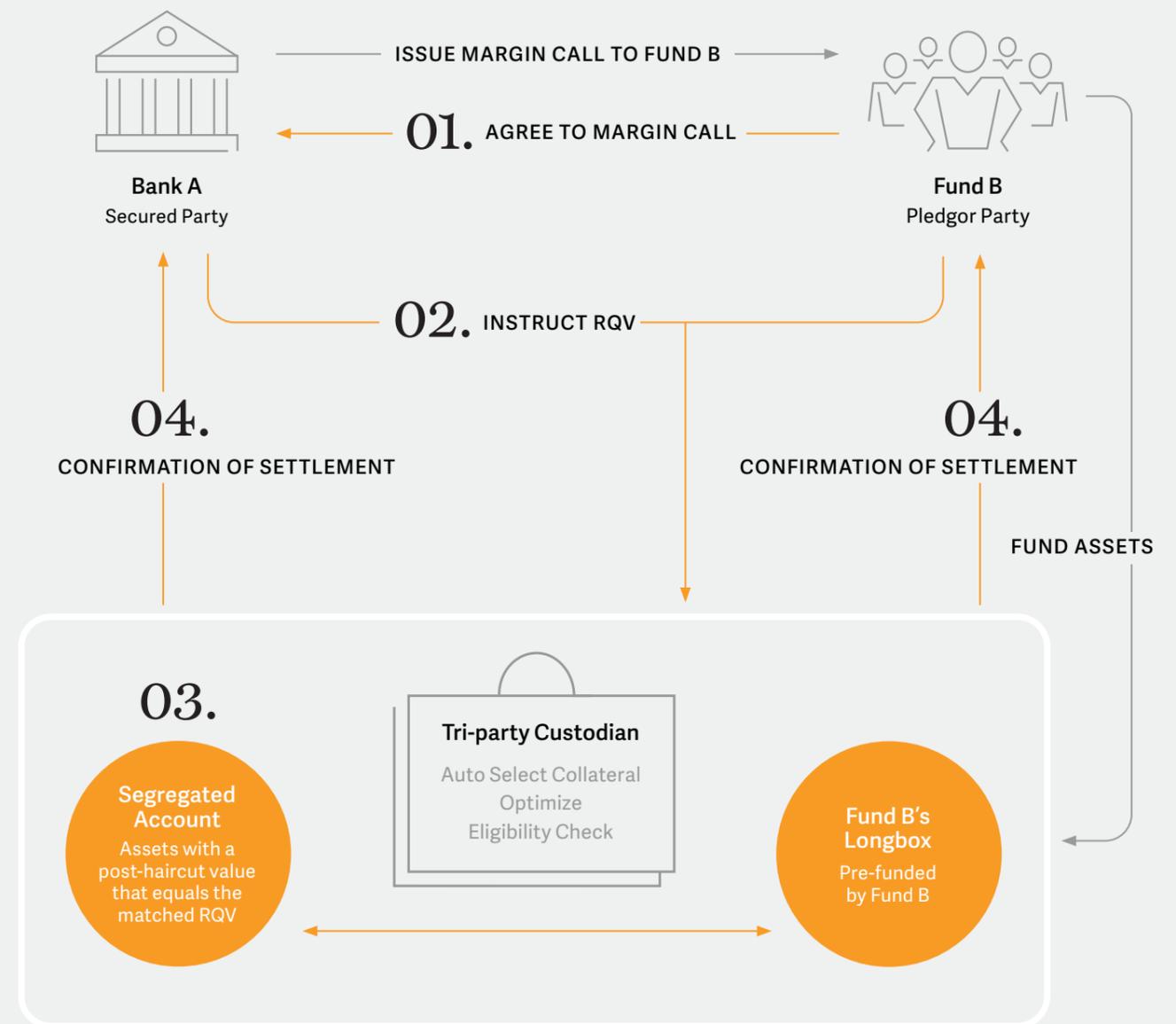
For buy-side institutions, preparing for UMR can be very costly. One major North American investor said it incurred \$2 million to \$4 million in set-up costs, in addition to the use of internal resources, and this did not include recurring costs. If this is extrapolated across the sector, then the cost of implementing UMR globally may have run into billions of dollars.

The onboarding process has also been onerous for banks, which have to deal with not only the lack of client familiarity with the process but also the sheer numbers of institutions involved.

While documentation can be a costly business, there is an obvious alternative for some buy-side firms: staying well below the \$50 million IM counterparty threshold. In the case of one major bank, in scope for Phase 2, UMR has strained resources because its 800-plus institutional clients all need to be monitored in case they approach the threshold. To do this, the bank monitors all clients that reach \$30 million in IM exposure to the bank, which enlarges the effort considerably but is a prudent course of action, even though it expects that less than 10% of its clients will ever have to exchange IM under UMR.

Few equity derivatives market participants were caught in Phase 4, but a significant number will be captured in Phase 5, and these clients are aware of the potential challenge this poses. For example, in the first two phases of UMR, OTC equity derivatives only accounted for 1.3% of notional in scope for UMR but a third of IM — but historically there has been nowhere to clear equity swaps. This is set to change, however, with the launch of a cleared alternative to equity swaps by Turquoise NYLON™, an equity derivatives trading platform, owned by LSEG plc (LCH's parent) and cleared on LCH's EquityClear service. Even without UMR, when clients run pre-trade analytics, the concern is not so much their own market impact or transaction cost analysis (TCA) but the impact of their trades/swaps on their dealers' balance sheets. They were already having to price the capital impact of trades on counterparties, but with UMR it becomes even more expensive.

Figure 3: Tri-Party



Source: TriOptima — It's Not All About SIMM vs Schedule

⁷Traiana Risk White Paper: Uncleared Margin Rules: The Traps, Tricks and Tools

“Documentation was an issue. Counterparties would say it’s market standard but it was designed for banks, not us. It took extensive negotiations to get change requests accepted and we often had to push back, especially with tri-party agents.”

North American Pension Fund Manager

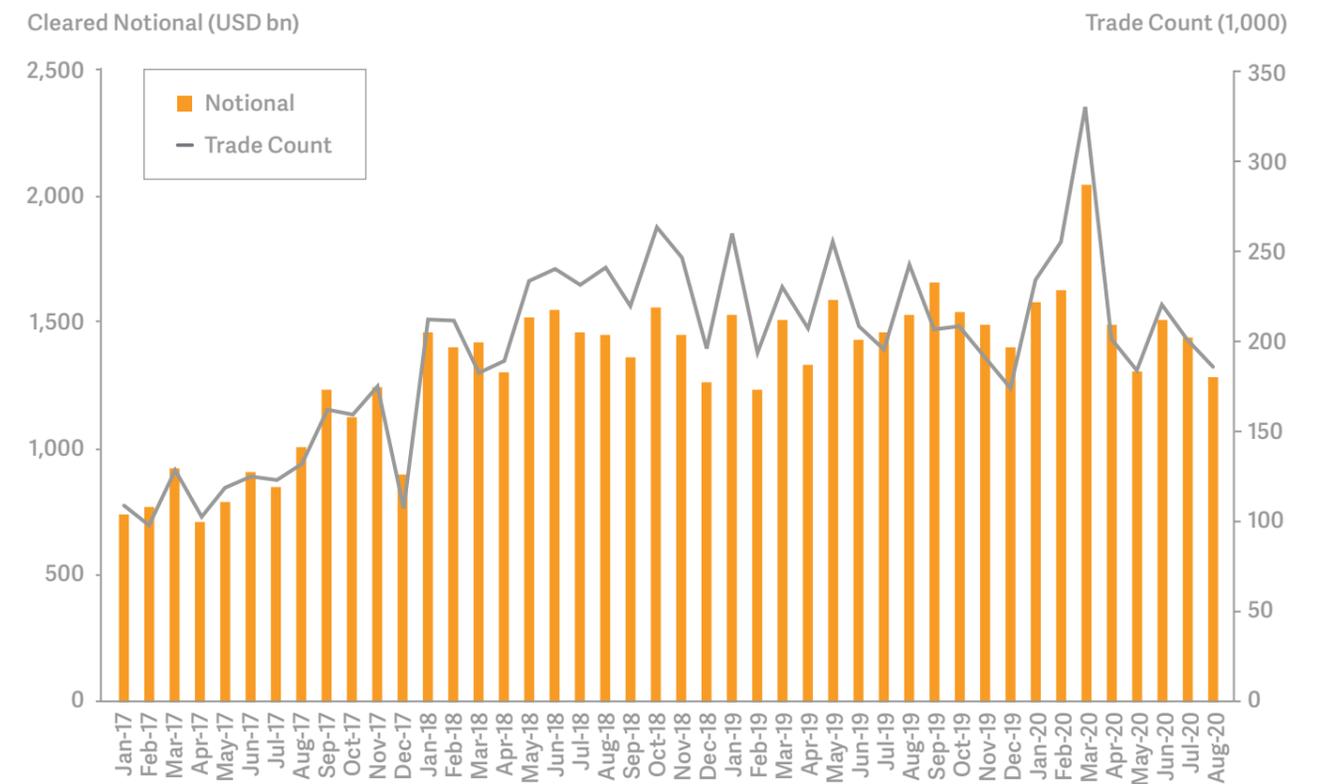
“Even the most sophisticated clients have initially needed help from their dealers to handle UMR requirements, but they are building more capability over time.”

Indrajit Bardhan
Industry Consultant

03. Focus on Forex

Foreign exchange prime brokerage (FXPB) has been the subject of fierce debate between the major clearing brokers who are supportive of clearing foreign exchange derivatives, and those with large prime brokerage businesses that are looking to keep clients trading bilaterally. However, there is no doubt that UMR has already had a marked impact on FX derivatives, and clearing has been a major beneficiary. While FXPB still has an important role to play, some participants argue that there needs to be a reassessment of the economic model.

Figure 4: ForexClear NDF Volumes Over the Past Three Years by Month



“The clearing paradigm is better than FXPB, if it’s done the right way and there’s an effective equilibrium between the clearing house and its members. ... A well-regulated, balanced, cleared market is better than a bifurcated (cleared and non-cleared) market.”

Head of OTC Clearing
Top-Tier Global Bank

One active participant in the discussion has been Citi. In a widely circulated paper⁸ it made the case that FXPBs have traditionally mispriced their business and that in the new market paradigm, the value and cost of their services will increase for all market participants, including executing brokers.

Citi argues that UMR requires market participants, including FXPBs, to post and segregate IM for uncleared trades at levels far exceeding those of centrally cleared trades and previous bilateral collateralisation regimes. As a result, other market participants, including LCH, argue that central clearing can play an important role in helping to increase margin efficiency compared to uncleared trades under UMR.

On the surface, UMR seems like a potential threat to the FXPB business model that could drain liquidity from what is already a capital-intensive business through the introduction of IM payments (to both clients and executing brokers) and segregation models. However, there is good news for CCPs. Both FXPBs and executing brokers ‘will increasingly seek to clear the dealer leg of a client transaction (whilst leaving the clients’ FXPB transaction intact) since cleared IM is generally lower than that under UMR’, according to Citi.

While hedge funds are familiar with the FXPB business model, the same is not true for most asset managers. Asset managers that wish to continue trading bilaterally under UMR will face posting IM to each executing broker, adding cost while also tying up collateral that cannot be offset through netting. It’s no surprise, therefore, that there has been a sharp rise in interest both in central clearing and FXPB services from asset managers. This trend may well surface in other asset classes.

The impact of UMR on asset managers is not limited to initial margin payments. There will also be operational overhead in calling the FXPB or executing brokers for IM based on the ISDA standard initial margin model or SIMM (see Section 4); ensuring the accuracy of the calls; and maintaining collateral in a segregated custodial account.

There are a number of reasons why clearing could be compelling for asset managers captured in Phases 5 and 6 of UMR. As well as reducing the likelihood of being captured by UMR thresholds, clearing allows clients to net down exposures against a single counterparty across products and delivers compression opportunities.

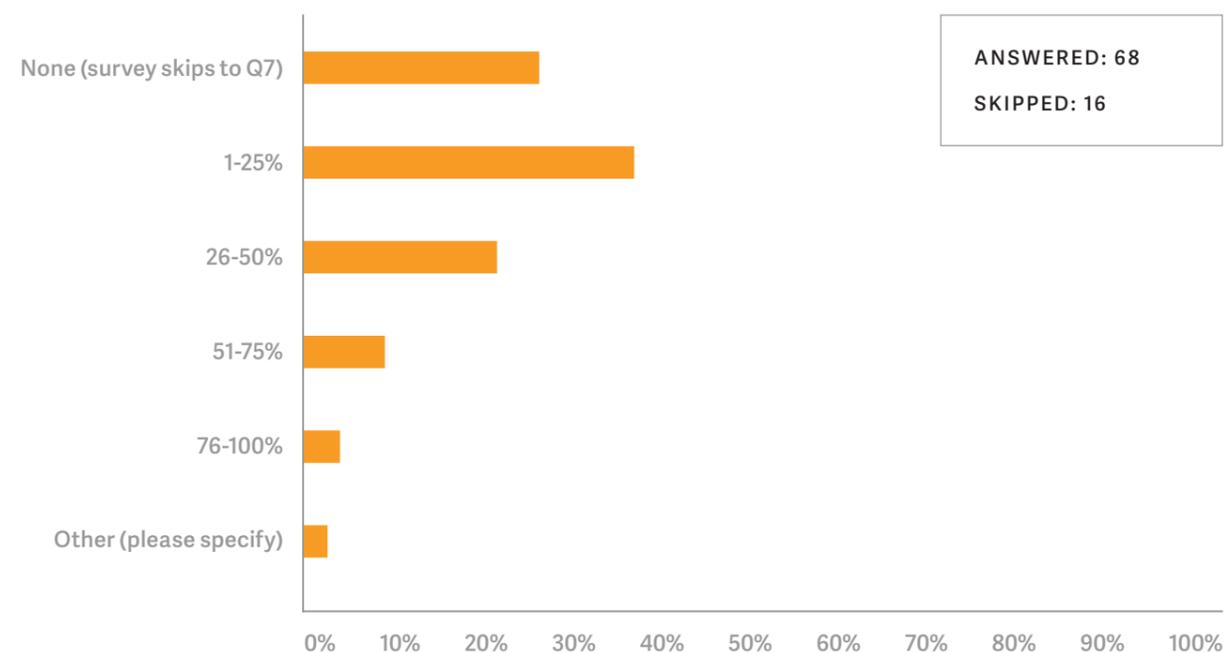
However, if asset managers opt to continue trading in-scope products bilaterally, the increased operational burden could be dramatic. To avoid performance drag, optimisation of the collateral management process will be key, and it is already resulting in increased interest in the growing number of third-party collateral optimisation services.

In the future state of UMR, the current trading models could shift towards a new paradigm of re-priced FXPB, enhanced portfolio compression and central clearing. This would certainly be the optimal approach for facilitators of credit, dealers and end customers. Although OTC FX clearing is still in the relatively early stage of its evolution compared to the rates market, relatively costly IM rates for bilaterally traded derivatives are likely to drive increased clearing volumes. There will also likely be an evolution toward clearable products, as liquidity migration in interest rate and credit default swaps has demonstrated.

⁸ [Citi, Collateral Damage – How Uncleared Margin Rules Will Revolutionize The FXPB Business Model](#)

Figure 5: Survey question

What additional portion of your derivatives portfolio do you anticipate moving to a cleared model over the next two years?



48 out of 68 survey respondents (70%) anticipate moving a portion of their derivatives portfolio to a cleared model over the next two years, with 10 respondents expecting this figure to exceed 50%.

Source: LCH Survey Data (2020)

04. ISDA SIMM: A Model Framework?

ISDA SIMM is the industry standard for uncleared margin calculations. Some of those involved from the outset in the creation of SIMM point to the cooperation between regulators and market participants as creating a blueprint for future regulatory roll-outs. Specifically, SIMM was not created and then taken to the regulators for approval; it was designed in conjunction with the regulators. More than half a dozen firms were engaged in the development of SIMM and collaborated closely on the project.

ISDA SIMM provides simplicity and predictability, and it delivers 'what's on the tin'. Like any model, SIMM has limitations, and some market participants have expressed frustration at the speed at which the model adjusts to market volatility and its treatment of non-linear risk. The impact of these vulnerabilities may not be seen for months or years.

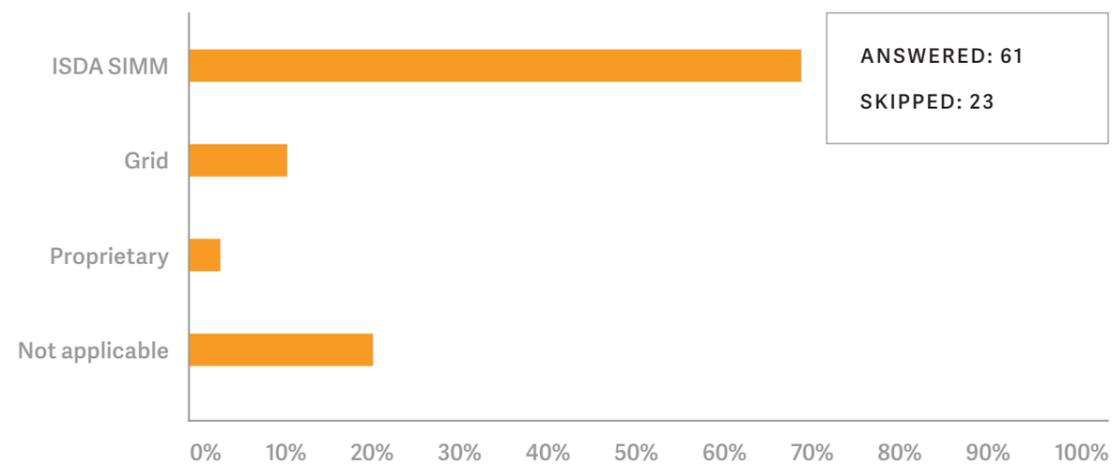
The model will next be recalibrated in 2021 as part of its biennial check-in. While it has broad acceptance from the industry, politics is never far from the surface. Users of SIMM are also CCP members and often want the lowest possible margin. Given that the industry is calibrating the rules with ISDA, this will impact the likelihood of any change in the model's construction.

Some firms, particularly those with long-dated exposures or single asset portfolios, will use the ISDA Schedule, which has the advantage of computational ease compared to SIMM. A further trend is the emerging use of proprietary IM models at the major dealer banks, according to one clearing head. In addition, some firms are using the grid model approach, which may be operationally similar to SIMM but results in higher IM.

In the cleared world, LCH has its own proprietary IM models for each service, which are described as conservative but risk-sensitive by executives. LCH margin is calculated on a net basis with portfolio margining, unlike SIMM, which is on a gross, per-counterparty basis.

Figure 6: Survey question

Which model do you use to calculate IM?



ISDA SIMM remains the calculation model of choice for the vast majority of market participants surveyed (40/61).

Source: LCH Survey Data (2020)

“ISDA SIMM provides a standardised, conservative calculation model that is easy to replicate across counterparties, and it worked during the COVID-19 crisis.”

Senior Executive, Top-Tier Global Bank

05. Optimal Solutions

Banks are increasingly focused on optimising their use of liquidity and collateral, as capital efficiency moves to the top of the management priority list. While not directly linked to the roll-out of UMR, it is an important indirect result of the evolution of market structure. In particular, the velocity of collateral has become a focal point, and the ability to move assets in real time is an important consideration for both the front and back office. After all, execution speed is linked to the ability to move collateral; it takes longer to price a deal where the specific eligible collateral has a bearing on the execution price.

“UMR gets people to think about more efficient allocation of capital and collateral, and the type of business they do.”

Fred Shen,
Head, Global Treasury
Business Management,
OCBC Singapore

Faced with the possibility of having to hold greater liquidity buffers, some firms are using this opportunity to enhance their collateral optimisation and transformation capabilities by implementing more efficient systems and processes across a wide range of collateral services.

Participants may also consider market data from the moves associated with the COVID-19 pandemic, to test liquidity buffers and hold more collateral on their books. This could raise funding and capital costs further under UMR, which requires two-way margin to be posted. This is in contrast to clearing, where the execution dealer can net off positions with the same counterparty (the CCP) to reduce their IM liability.

Furthermore, clearing brokers can recognise only client-cleared IM for the Leverage Ratio. This is beneficial as the move to the Standardised Approach to Counterparty Credit Risk (SA-CCR) for Leverage Ratio and risk-based capital requirements will increase exposures for long and directional clients. However, unlike previous models, SA-CCR acknowledges the increased netting benefits that moving to clearing enables for neutral clients.

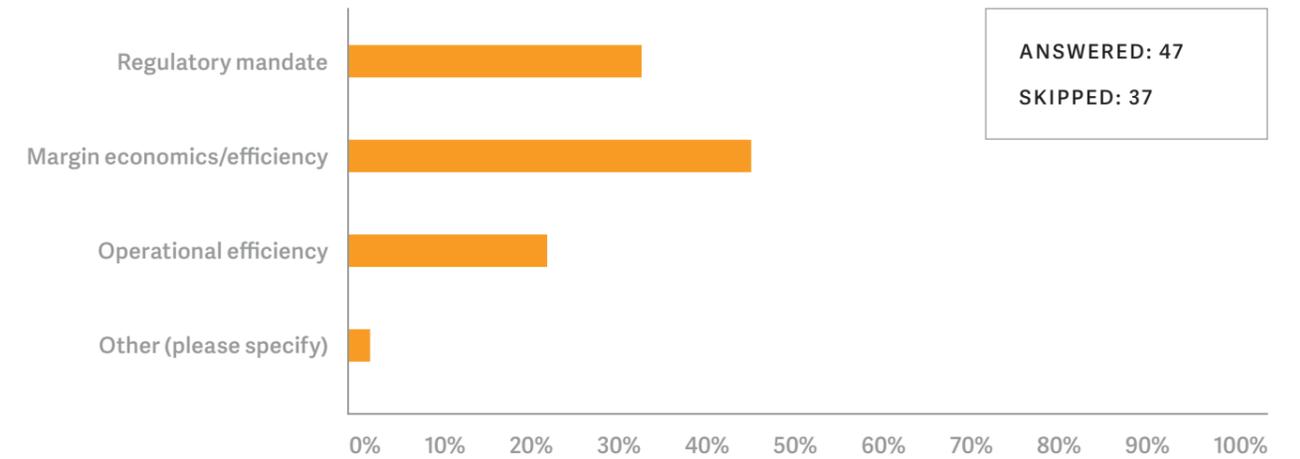
For clients, collateral management brings its own challenges. The inability to use securities as collateral for variation margin is a key reason why pension funds have not made a wholesale move to clearing (securities can be used as collateral for bilateral trades). As one pension fund manager explained, he needs to use the repo market to clear swaps, but if it is stressed and dries up, a lender of last resort (a central bank) is required.

Within the Eurozone, according to a recent European Commission paper,⁹ Dutch pension funds are the most involved in derivatives, with 89% of all pension fund interest rate swaps entered into by them. The analysis found that the actual liquidity needs of Eurozone pension funds in the event of a 1% shift in rates would be manageable (i.e. below 2%), as compared to the overall size of the European repo market (proxied by the outstanding amount of reverse repos).

Another solution to this is to use a service such as LCH RepoClear that can help source the cash for VM. Regardless, the firm needs enough collateral to fulfil its margin requirements and, since the dominant risk factor is interest rates, an obvious solution would be for CCPs to accept securities as collateral, as in the uncleared space. But this is not, unsurprisingly, as straightforward from a risk management perspective.

Figure 7: Survey question

What is the primary reason you expect to be clearing more trades following the introduction of UMR?



Following the introduction of UMR, margin economics/efficiency is expected to be the most important driver of clearing for nearly half (47%) of survey respondents.

Source: LCH Survey Data (2020)

⁹ [Report from the Commission to the European Parliament and the Council COM/2020/574 final](#)

“Clearing offers standardisation, operational simplicity and efficiency, and is easier. ... Strategic, longer-dated swaps are better suited to non-cleared; more technical trades are better for clearing.”

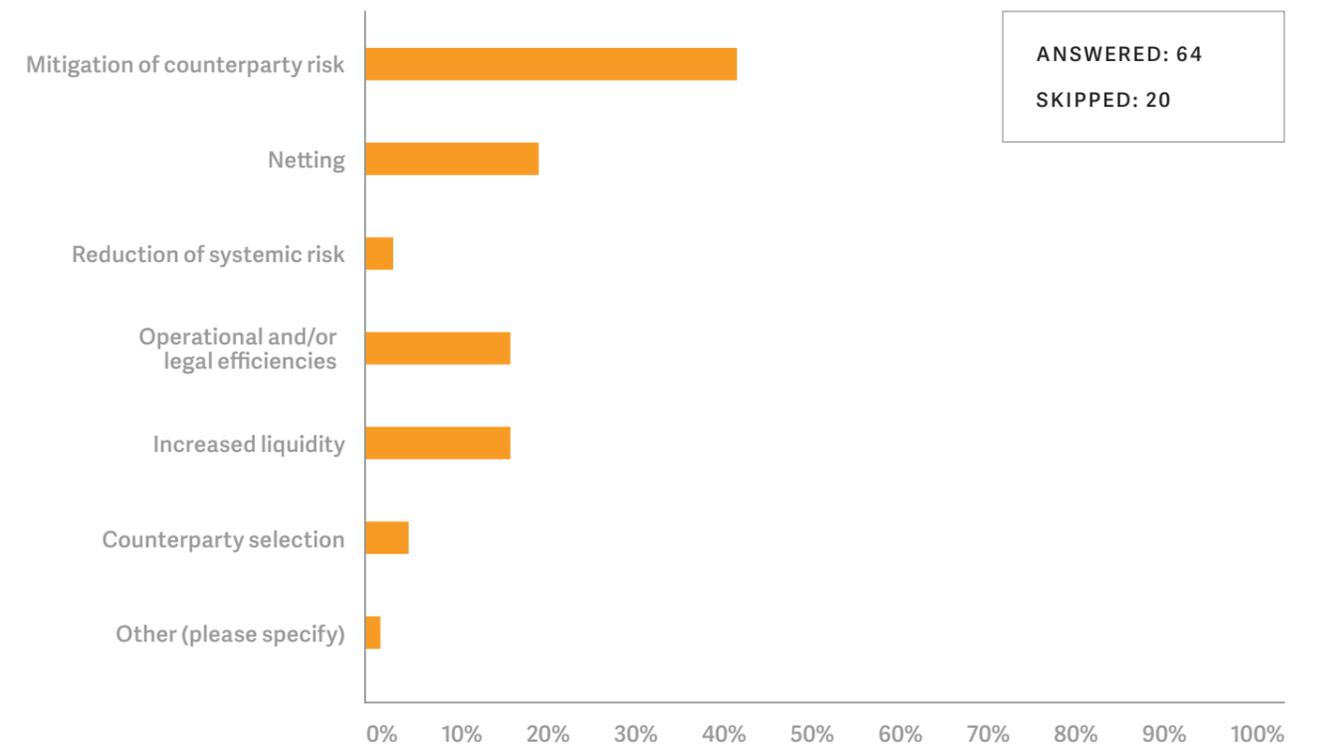
Max Verheijen
Director Financial Markets, Cardano

06. A Clear Choice

To clear or not to clear, that is the question. As one leading North American investor said, “If it’s worth it and clearable, and provides the netting efficiencies we are looking for, we’ll clear it. Currently the cheapest deal is OTC bilateral, but when UMR kicks in, and we’re more familiar with the numbers that ISDA SIMM generates, we’ll be able to reassess.”

Figure 8: Survey question

What is the single greatest benefit of clearing derivatives for your firm?



Mitigation of counterparty risk is the most important benefit of clearing for 41% (26/64) of survey participants, followed by netting at 19% (12/64).

Source: LCH Survey Data (2020)

Transaction costs and the level of available liquidity are key considerations in this clearing debate. As FX liquidity continues to improve, the difference in transaction costs between cleared and uncleared trades grows smaller. For one European bank, resource allocation has been a primary reason why it has not yet moved to a cleared model, although it has been looking at how best to address the “space between cleared and uncleared”. For another European investor, “clearing offers standardisation, operational simplicity and efficiency” but it has been holding off because of the cost difference between the cleared and uncleared markets.

UMR is closing this gap, making the decision to clear more compelling for many of the firms spoken to, as a result of the more level playing field between the cleared and uncleared models.

For clearing brokers, there is an incentive to look at portfolio risk across counterparties to minimise total margin requirements, ultimately making the financial system safer. However, UMR has posed an enormous challenge, especially in the last two phases with the addition of hundreds of new counterparties, many of which have not previously had to put up margin.

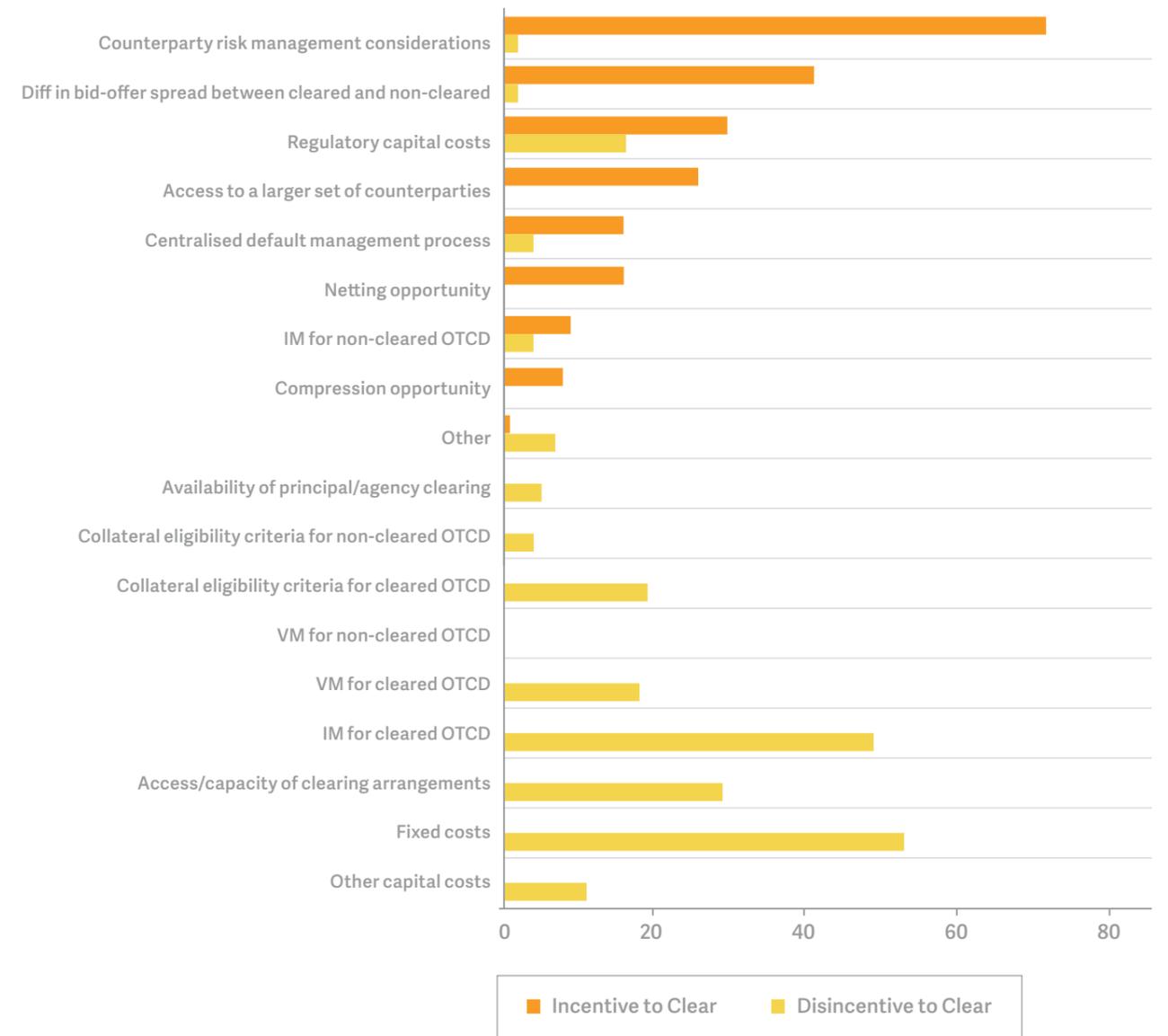
For smaller buy-side institutions that may be less operationally experienced, there is a greater benefit to outsourcing. There is likely a similar push from the sell-side to operate differently. Compression enables firms to reduce their notional, but even if they are unable to remain beneath the AANA threshold, by managing margin they can stay below the \$50 million IM hurdle.

For some firms the decision is easy. “We start clearing when the clearing broker and CCP are able to clear a product for us as a client. We’ve taken a top-down decision to clear all eligible products, which is in contrast to many other asset managers, where it’s often up to the portfolio managers to decide. At [our business], all portfolio management decisions are made centrally,” said a senior manager at a major European buy-side firm.

Efficiency is an important driver for many participants. With the introduction of its SwapAgent service, LCH extended the operational benefits of clearing to non-cleared OTC derivatives, providing the bilateral market with significantly cleaner, more efficient booking, valuation, reconciliation and settlement processes. It assists with risk rebalancing across different counterparties and helps optimise portfolios across cleared and uncleared trades.

More sophisticated risk management is also becoming a necessity for the buy-side. As a result, we are seeing a growing cottage industry of technology service providers focused on collateral optimisation.

Figure 9: Weighted rank of the top factors incentivising/disincentivising clients to centrally clear non-mandated products



Client survey question 53b (39 responses). Numbers not shown are equal to zero. Respondents selected an option from a pre-defined list so no manual categorisation was required. The ranking was based on the weighted methodology, so the x axis does not represent number of respondents.

Source: [DAT Qualitative Survey](#)

07. What's Next?

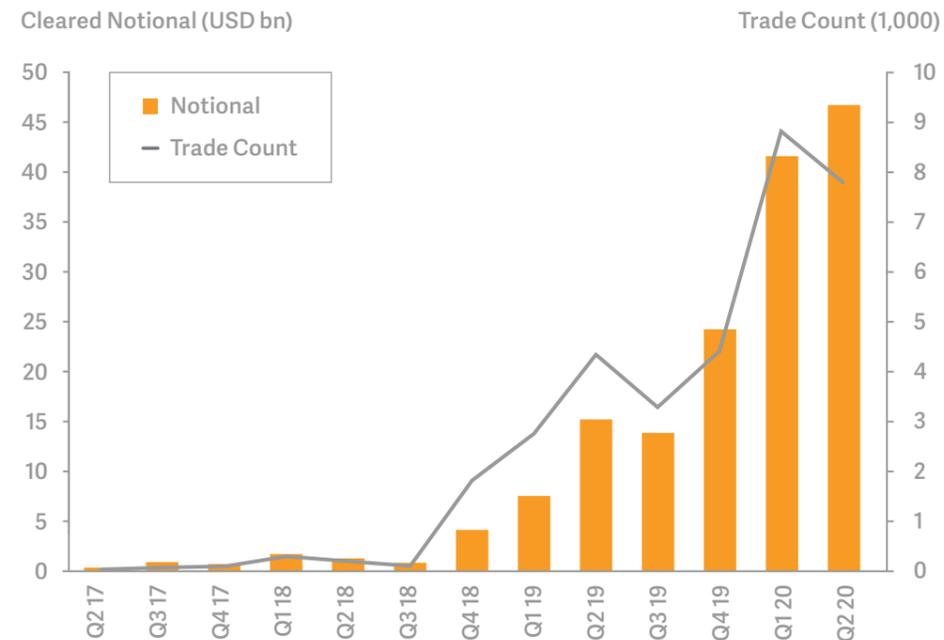
THE IMPACT OF UMR ON THE TRADING LANDSCAPE

LCH has experienced increased clearing volumes in inflation swaps, emerging market NDFs, G10 NDFs and FX options, while cleared credit index options have also seen large increases in activity in 2020. UMR Phase 5 may act as an incentive for continued adoption of clearing for these products.

Clearing may be introduced for additional instruments, but the ability to default manage new products will remain a key consideration for CCPs as they assess clearing viability.

Sponsored repo clearing at LCH is an example of a clearing innovation that was an indirect result of UMR, but it is not just product development that is driving growing interest in clearing. Hedge funds and asset managers are the two main areas of opportunity, in addition to banks that do not have access as direct clearing members (e.g. smaller regional banks). In fact, APAC more generally is seeing more firms coming to clearing because of UMR and the March 2020 market volatility triggered by the global spread of COVID-19.

Figure 10: Client FX Volume



Source: [LCH](#)

“We can also expect firms trading OTC equity derivatives products — which historically have not been cleared — to look for strategic choices that deliver the benefits of central clearing, but retain the flexibility of the OTC market, such as through the product partnership between Turquoise NYLON™ and LCH EquityClear.”¹⁰

Bruce Kellaway
Global Head of Rates,
Securities and Collateral, LCH

“Uptake of clearing for equity swaps has been limited by lack of availability at clearing houses — this looks set to change.”

Indrajit Bardhan
Industry Consultant

Among the other areas to watch in the wake of Phases 5 and 6:

- 01. Pension funds** are currently exempt from mandatory clearing under EMIR until sometime between 2021 and 2023, but UMR is an important driver of pension scheme arrangements (PSAs) into clearing, many of which have described UMR as a move that “undermines the clearing exemption.”
- 02. Non-deliverable forwards (NDFs)** are a major focus, with several end-clients interviewed looking to “crunch the numbers” to see if it’s worth clearing or keeping them under the UMR umbrella. There might be an incentive on margin, but funding costs from clearers must be considered. Even so, cleared NDFs have the potential to significantly grow in popularity among the buy-side.
- 03. Execution-only mandates**, in which the client does the margin calculations, will likely increase, as clients rarely outsource this function.
- 04. Equity swaps** are a covered contract under UMR but, historically, have not been cleared; if above the threshold, IM needs to be calculated and exchanged with counterparties. Some banks are considering an alternative to equity swaps; LCH EquityClear and Turquoise NYLON™ are aiming to combine the best of listed contracts and OTC.
- 05. Divergence in EU/US UMR frameworks**, with the US calculation period differing from the Basel Committee on Banking Supervision (BCBS) and EU frameworks.¹¹

¹⁰ [Risk.net](#)

¹¹ [Federal Register / Vol. 85, No. 127 / Wednesday, July 1, 2020 / Rules and Regulations](#)

08. Conclusion

UMR is the final component of the framework that regulators put in place following the 2009 Pittsburgh G20 agreement, and has resulted in key benefits to the industry.

01. **Collateralisation of all derivatives contracts.** The introduction of IM for uncleared derivatives has reduced systemic risk by mirroring the approach taken in central clearing.
02. **More efficient risk optimisation.** A growing number of tools are available for all participants to better manage risk across the derivatives spectrum.
03. **Creation of a level playing field.** By introducing IM for uncleared derivatives, it is easier for participants to evaluate and compare the costs of the cleared and uncleared markets, and create a more efficient operational workflow.

However, as participants start to evaluate the process, it is less clear whether the huge operational lift of the final two phases of UMR will produce a proportionate gain for the industry. For many, the first two phases of UMR were sufficient to achieve the strategic goals of regulators. But regardless of your viewpoint, there is broad consensus that the decade-long programme has positioned central clearing as a preferred option for most participants in derivatives markets. It has therefore ushered in a new era of opportunity for the derivatives market, as it seeks to deliver even more capital and operationally efficient solutions to drive the industry forward.

Appendix: Weighing the Impact of UMR

		Clearing Brokers	Execution Brokers	Clients
Bilateral	PROS	<ul style="list-style-type: none"> Benefit from increases in IM from client bilateral trades but bilateral IM cannot be recognised for Leverage Ratio General increase in bilateral IM improves clearing volumes for its clearing service 	<ul style="list-style-type: none"> Broader FX product range No costs involved in passing trades through clearing Benefit from increases in IM from client bilateral trades but bilateral IM cannot be recognised for Leverage Ratio Increase in bilateral IM improves netting opportunities and counterparty risk through a move to clearing 	<ul style="list-style-type: none"> Broader FX product range No need to switch operations Able to post non-cash VM Services such as those offered by SwapAgent allow optimisation through standardised CSAs
	CONS	Higher funding and capital costs for IM and balance sheet where bank now has to post bilateral IM	<ul style="list-style-type: none"> Highest IM funding costs where bank has to now post bilateral IM High capital cost of balance sheet Incremental balance sheet requirement to support their open bilateral transactions Risk exposure to multiple counterparties and gross IM to each 	<ul style="list-style-type: none"> Risk exposure to multiple counterparties and gross IM to each Increased funding cost, when trading bilaterally, and inefficient distribution of collateral due to the lack of netting offset Performance drag as operational burdens increase exponentially
FXPB	PROS	Lower IM on EB trades	<ul style="list-style-type: none"> Net risk exposure to one counterparty and single IM Improved netting opportunities Simplifies operations and increases efficiencies Support tighter spreads for clients 	<ul style="list-style-type: none"> Simplifies operations Full netting benefits Reduced counterparty risk and operational complexity Ability to achieve best price regardless of counterparty concentration
	CONS	Highest funding costs	<ul style="list-style-type: none"> Absorbs funding costs for IM but lower than bilateral Must maintain balance sheet to support the interdealer EB-PB leg PB must have assets to support both EB-PB and PB-client legs 	<ul style="list-style-type: none"> Limited FX product offering Limited liquidity for cleared products Additional transaction costs
Clearing	PROS	<ul style="list-style-type: none"> Improved netting opportunities as clients push more volume through clearing, leading to lower capital, and NSFR and LCR funding costs Lower Leverage Ratio capital costs because client-cleared IM can be recognised in Leverage Ratio 	<ul style="list-style-type: none"> Reduced margin and balance sheet obligations by offsetting or uncorrelated positions Net risk exposure to one counterparty and single IM Full netting benefits Economic efficiencies as the EB's costs remain zero Support tighter spreads for clients 	<ul style="list-style-type: none"> Increased capital efficiencies Consolidation of margin calls and reduction of collateral movements Reduced counterparty risk and operational complexity Ability to achieve best price regardless of counterparty concentration Improved leverage ratios Full netting benefits Lower IM Automatic compression
	CONS	Must still maintain capital against open trades	<ul style="list-style-type: none"> The cost of splitting CCPs through PB Must still maintain capital against open trades 	<ul style="list-style-type: none"> Limited FX product offerings Liquidity for cleared products

Source: LCH



There is broad consensus that the decade-long UMR programme has positioned central clearing as a preferred option for most participants in derivatives markets.

DISCLAIMER

This document has been provided to you for informational purposes only. This document does not, and does not purport to, contain a detailed description of any services provided by LCH Limited or any of its group undertakings (each, an "LCH Group Company"), or any other topics discussed in this document, and it has not been prepared for any specific person. This document does not, and does not seek to, constitute advice of any nature. You may not rely upon the contents of this document under any circumstance and should seek your own independent legal, investment, tax and other advice. The information and any opinion contained in this document does not constitute a recommendation or offer with respect to any derivative contract, financial instrument, security or service. No LCH Group Company makes any representation, warranty, condition or guarantee (whether express or implied) that the contents of this document are accurate, complete or up-to-date, and makes no commitment to offer any particular product or service. No LCH Group Company shall have any liability for any losses, claims, demands, actions, proceedings, damages, costs or expenses arising out of, or in any way connected with, the information contained in this document, except that each LCH Group Company accepts liability that cannot be excluded by applicable law.

Copyright © LCH Limited 2022. All rights reserved. SwapClear, ForexClear and SwapAgent are registered trademarks of LCH.

