



# Clearing for equity swaps: the time is right

In partnership with

**PANORAMIX**  
PARTNERS



**LSEG**

---

## Foreword by Balbir Bakhshi, Group Chief Risk Officer, LSEG

When I started my career in finance in the mid-1990s when the focus was on financial innovation, there was great demand from the banks to de-risk the counterparty risk of the growing derivatives market whilst continuing to grow their book size. I saw this first-hand as a graduate starting at the London Clearing House and then shortly after that at Credit Suisse Financial Products. There followed a long period where the move to clearing followed the natural evolution and maturity of over-the-counter (OTC) markets – but a further impetus came from the response to the 2007-08 financial crisis when the 2009 Pittsburgh G20 summit agreed that all standardised derivative contracts should be exchange-traded and centrally cleared. At the same time there was a material push by lawmakers to bring more transparency to the OTC markets via trade reporting.

Shortly after I joined LSEG last year, we were discussing **Turquoise NYLON™** and its goal of providing a platform for cleared equity total return swaps. Turquoise is an LSEG business. It was around this time that there was active discussion around the then-recent collapse of Archegos Capital Management and what actions could have been taken to avoid this. It made sense to look at the **Turquoise NYLON™** initiative through the risk lens and in light of the lessons learned from the Archegos collapse; namely, credit concentrations, margining and transparency.

The equity swaps market is one major area that has yet to embrace clearing and the **Turquoise NYLON™** initiative seeks to combine the flexibility of OTC equity swap trading with the benefits of central clearing. The clearing house performs the

role of a centralised risk manager with all the usual benefits of clearing – including enhanced netting and risk management opportunities, lower capital requirements and margin efficiency. In addition, the initiative also creates new reporting capabilities that could alert supervisors to changes in large holdings from derivatives across a broad range of underlying equity markets (UK, Europe, US). Supervisors could use this information to evaluate potential threats to market stability and notify stakeholders accordingly.

With LCH Ltd, an LSEG business, a world leader of OTC swap clearing, **Turquoise NYLON™** underlines the group's commitment to making markets safer and to implementing some of the lessons learned from recent events.

## Summary

The Global Financial Crisis (GFC) of 2008 exposed significant weaknesses in the OTC derivatives market, including the build-up of large counterparty exposures between participants; limited transparency into levels of activity in the market and the overall size of counterparty credit exposures; and operational weaknesses that demonstrated the need for further standardisation and automation.

Prompted by legislative action and regulatory changes in response to these issues, central clearing for OTC derivatives markets has made great strides in the past decade. However, equity swaps markets constitute one major area that has yet to embrace clearing.

This paper examines the difficulties to date in providing cleared solutions in that market, outlines reasons why clearing is now a very compelling response to rising pressures for participants and reviews a new product offering in this space.

## The success of clearing since the Global Financial Crisis

The decade since the GFC has seen many market changes, but none more impactful than the rapid roll-out of central clearing arrangements for numerous OTC derivative products.

*The SwapClear service launched by LCH was an early facility providing clearing of OTC products among dealers. In 2008, the service successfully unwound almost US\$9 trillion-worth of interest rate swap (IRS) trades related to Lehman Brothers.*

Prior to the GFC, the advantages of clearing arrangements – mutualisation of risk, standardisation of products, operational efficiencies – were widely understood, leading to their adoption in many securities markets around the globe ranging from equities to bonds to exchange-traded options and futures. Typically, market participants established common clearing arrangements for exchange-traded products among themselves before extending them to their clients. There were examples of bilateral trading markets that formed clearing facilities to streamline processes, reduce risk and allow for market growth, such as the 1979 launch of the Mortgage-Backed Securities Clearing Corporation for the MBS marketplace which provided many of the services we see in central counterparties (CCPs) today.

However, clearing was not commonplace for OTC derivatives contracts. These markets had grown rapidly since the deregulation of the 1990s, to have notional outstanding of US\$598 trillion at the end of 2021, versus US\$80 trillion at the end of 1998, (per data from the Bank for International Settlements, BIS<sup>1</sup>).

An early facility to provide clearing of OTC products among dealers was the SwapClear service launched by LCH in partnership with a group of banks in 1999<sup>2</sup>, to clear some standardised interest rate swaps (IRS), executed under typical International Swaps and Derivatives Association (ISDA) contracts and then novated into clearing. In 2008, the SwapClear service successfully unwound almost US\$9 trillion of IRS related to Lehman Brothers<sup>3</sup>, a tremendous achievement that largely went unnoticed. Even so, only about 20% of the IRS market was being cleared at the time<sup>4</sup>. Prior to the run of defaults observed in this period, the view that the largest OTC dealers were almost riskless – as evidenced by collateral arrangements between them – also undercut the perceived need for market-wide clearing.

That view prevailed until the onset of the GFC, when the significant bilateral counterparty risks and outsized concentrations in various derivatives markets, such as the credit default swap (CDS) exposures that led to the bailout of AIG, took regulators by surprise. Regulators were swift to determine that clearing was a more transparent and better organised approach to managing counterparty risks in OTC derivatives markets. In early 2009, the initial regulatory pathways were set by combining the drive towards central clearing with the parallel goal of enhanced transparency by requiring trading on centralised exchanges and electronic trading facilities.

Following the Global Financial Crisis, in September 2009 G-20 leaders meeting in Pittsburgh agreed and communicated that:

“All standardised OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties... OTC derivative contracts should be reported to trade repositories. Non-centrally cleared contracts should be subject to higher capital requirements ... ”

**FSB, 25 October 2010**

[https://www.fsb.org/wp-content/uploads/r\\_101025.pdf](https://www.fsb.org/wp-content/uploads/r_101025.pdf)

1 BIS website: [BIS Statistics Explorer: Table D5.1](#) (2021) and [BIS Statistics Explorer: Table D5.1](#) (1998)

2 LCH website: [Our History | LCH Group](#)

3 Reuters: <https://www.reuters.com/article/lehman-interestrateswaps-idUSN08132520081008>

4 BIS website: [https://www.bis.org/publ/qtrpdf/r\\_qt1612r.htm](https://www.bis.org/publ/qtrpdf/r_qt1612r.htm)

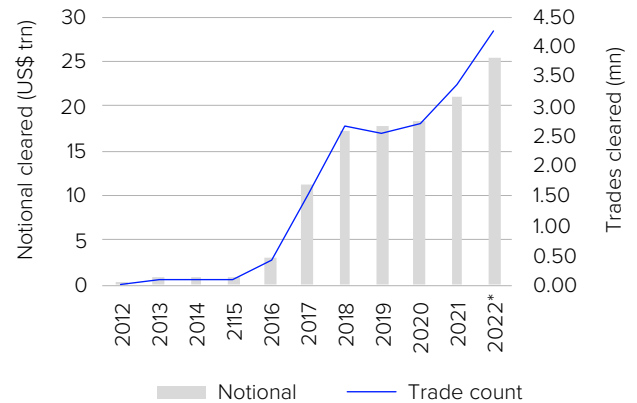


Many types of IRS and CDS received regulatory clearing mandates – forcing most participants to clear. Even though the regulators’ primary concern was the opaque CDS market, clearing took off more quickly for IRS since that market already had some clearing and much greater liquidity and depth. In addition to the requirements of regulatory mandates, the operational efficiencies and initial capital advantages of clearing products made market participants more willing to join. Certain market actors also saw clearing as a way to enter markets in which they previously had been less dominant. Even so, the roll-outs of these products took over five years<sup>5</sup>.

Additionally, over time, these benefits have resulted in a number of non-mandated clearing initiatives taking hold, such as in foreign exchange (FX) derivatives markets. LCH ForexClear launched in 2012 as a service for the clearing of non-deliverable forwards (NDFs) and has seen strong growth in volumes since launch – particularly once the first phase of the global Uncleared Margin Rules (UMR) was launched in September 2016.

Similarly, inflation swaps are another non-mandated class that has seen dramatic increases in clearing rates driven by economic incentives such as the favourable capital and margin. As in FX, UMR seems to have been a catalyst for an uptick in clearing, with data from ClarusFT’s SDRView showing that clearing rates (which stood at 0% until mid-2015) increased from 11% in the 12 months prior to September 2016 to 80% in the 12 months that followed.

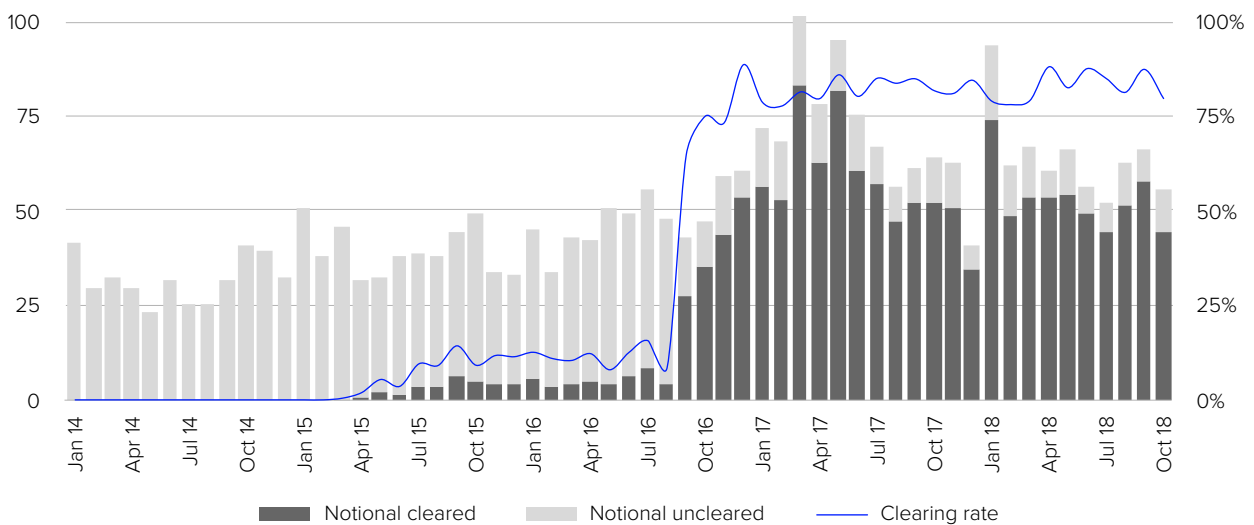
LCH ForexClear NDF volumes



Data: LCH data (\*2022 estimated based on annualised Q1 2022 volumes)

*There has been a complete overhaul of the margining standards for counterparty risk across cleared products.*

Clearing of Inflation Swaps



Data: ClarusFT SDRView

<sup>5</sup> BIS note, using their statistics and LCH data, that it took from 2008 to 2016 for clearing rates for OTC interest rate derivatives to double, see [https://www.bis.org/publ/qtrpdf/r\\_qt1612r.htm](https://www.bis.org/publ/qtrpdf/r_qt1612r.htm)

The creation of expanded clearing regimes also necessitated a deep review of how CCPs manage risk and the resources these clearing houses have available to do so. For example, there have been a number of improvements in the calculation of default fund sizing and contributions, the mechanics of porting contracts in event of member default and the robustness of margining approaches. These reviews were prompted by the creation of the new clearing facilities for OTC derivatives but were also extended to cover the more established cleared exchange-traded derivatives and cash products. As a result, there has been a complete overhaul of the margining standards for counterparty risk across cleared products. Margining policies are now more rigorously based on historical data and stress analyses and more responsive to periods of volatility and disruption<sup>6</sup>. At the same time, many CCP margin models also contain design features to control and mitigate the risk arising from pro-cyclicality<sup>7</sup>.

One could argue that the resilience of CCPs under the recent stresses of Covid-19 and the Ukraine crisis are a testament to the improved and responsive approach of the CCPs. The changes have not merely been more conservative; there has been an increased awareness of the need for practical and capital-efficient offerings, especially considering the comparisons with the industry standard of the Standard Initial Margin Model

(SIMM)<sup>8</sup>. A recent innovation in cleared OTC derivative markets is the ability for users to characterise cleared contracts as “settled-to-market” rather than “collateralised-to-market”: this means that daily variation margin is treated as settling changes in the mark-to-market value, rather than collateralising those changes, resulting in further efficiencies for risk-based and leverage ratio capital.

Since the initial regulatory mandates spurred by the GFC, there are now well-defined clearing providers covering a broad range of OTC derivative products and a range of underlying asset classes. However, some significant areas of the market are still waiting for cleared solutions.

“Clearing has become an essential part of the OTC derivatives landscape and should be among the tools available to users of derivatives, whatever the underlying risk.”

**Robert Pickel**, Former CEO, ISDA

<sup>6</sup> See <https://www.risk.net/risk-quantum/7885416/initial-margin-at-lch-ltd-rose-in-q2>

<sup>7</sup> Pro-cyclicality refers to a sudden, significant increase in margin requirements at times of market stress, which in turn exacerbates and intensifies that stress.

<sup>8</sup> SIMM is the industry-wide margining standard policy used for regulatory margins on uncleared bilateral exposures under UMR. It was developed by ISDA and is updated annually.

## Why OTC products in equity financing markets have lagged in clearing

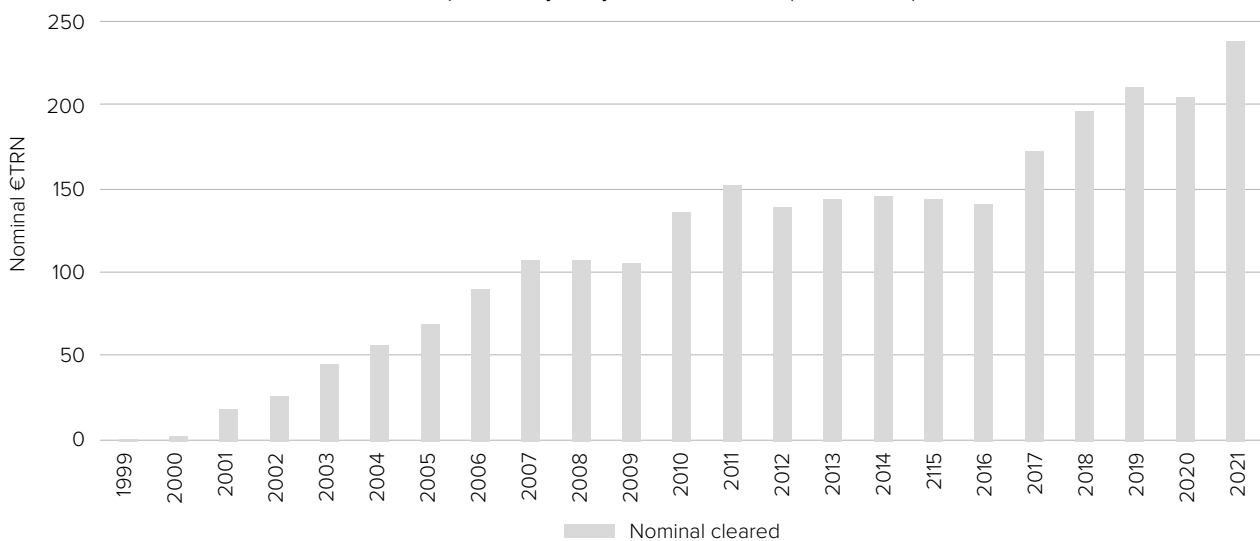
The major OTC markets that have been more challenging for the adoption of clearing have been the financing products of repo, stock loan and more noticeably the equity swaps markets. These markets, which have always been core to the secured funding capabilities for brokers and banks, have evolved to be highly customisable and flexible, allowing various nuances in pricing, collateralisation and determination of credit capacity.

The daily trading flows and processes for these products are very comparable and almost standardised by market convention. However, bespoke documentation, margin arrangements, collateral schedules and unwind criteria are all critical to ensure optimal capital and liquidity treatment. One would have expected the normalisation of regulatory standards under the various Basel Accords to bring commonality to these points. Instead, the regulatory roll-out has been fragmented by region and regulator – and regulatory treatment has not been harmonised across products, leaving a greater dependence on flexibility of arrangements.

Given these hurdles, the attempt to bring a standardised on-exchange approach to trading these products was a non-starter. The focus instead has shifted to partial clearing solutions.

The repo markets have had some success, with examples including the roll-out of the Fixed Income Clearing Corporation (FICC) repo clearing facility in the US and the RepoClear service from LCH in the UK and Europe (operated via LCH’s UK and European CCPs, LCH Ltd and LCH SA). On average, FICC provides matching, netting and settlement for more than US\$3 trillion per day<sup>9</sup>, whilst RepoClear sees average daily volumes of €1.1 trillion<sup>10</sup>. Historically, RepoClear served the interdealer market only, but since 2017 buy-side firms have been able to directly participate through Sponsored Clearing, which is expected to drive further growth by increasing netting opportunities for participants. Despite these volumes, clearing rates for repo remain far below those observed for OTC derivatives such as interest rate swaps, with market survey data suggesting around 30% of outstanding European repo by value is cleared<sup>11</sup>.

**Total yearly nominal in €trn**  
LCH RepoClear yearly nominal value (1999-2021)



<sup>9</sup> See [https://www.assetserVICINGtimes.com/assetservicesnews/dataservicesarticle.php?article\\_id=12734&navigationaction=dataservicesnews&newssection=Data+Services](https://www.assetserVICINGtimes.com/assetservicesnews/dataservicesarticle.php?article_id=12734&navigationaction=dataservicesnews&newssection=Data+Services)

<sup>10</sup> LSEG data for YTD volumes across GBP and EUR debt (as at April 2022)

<sup>11</sup> ICMA, Frequently Asked Questions, “What does a repo CCP do?”, [LCMA website](#)

Attempts to bring centralised clearing into the equity financing markets have, however, been slow. Reasons include (amongst others) the number of issuers and the existence of multiple pricing conventions in equity markets. The core concept of CCPs combined with trading venues has proved difficult to deliver in the highly diverse and customised equity financing markets. There have been some attempts to offer clearing within stock loan: the Options Clearing Corporation (OCC) offers a clearing facility that offsets against derivatives exposures and the Depository Trust & Clearing Corporation (DTCC) has just announced plans to roll out its clearing platform for securities lending; but on the other hand, one European exchange group launched and has recently retired a cleared securities lending product.

---

*Attempts to bring centralised clearing into the equity financing markets have, however, been slow. Reasons include (amongst others) the number of issuers and the existence of multiple pricing conventions in equity markets.*

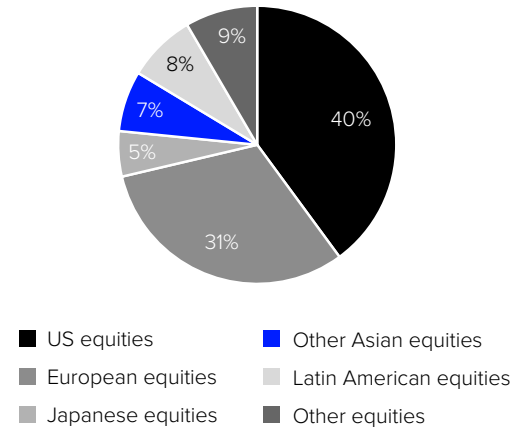
---

Equity derivatives themselves are not new to clearing, especially when one considers the significant number of listed options and futures markets. The complexity of options offerings is quite remarkable, with different strikes, maturities, flex options, etc. There are even single stock futures in many exchanges in countries not traditionally considered financial centres. However, even within this diversity of offerings, a common feature has been product standardisation and the expectation that products are listed on exchanges.

Outside observers are often puzzled as to why the success of OTC clearing in the IRS and CDS markets – and even the FX NDF market – has not provided a ready path for OTC equity swaps. In reality, the OTC equity swap market is completely unlike its CDS and IRS counterparts, as the derivative is used as a financing wrapper as opposed to a pure trading product. In this sense, it is also unlike the index and single-stock futures markets which can be used for both outright exposures and financing trades.

The OTC equity swap market is about US\$3-4 trillion<sup>12</sup>. This market is dominated largely by the main prime brokers, given the synergies with that business as outlined below. The business, however is significant in its own right, with the revenues of these business lines now constituting over half of overall prime revenues<sup>13</sup>. The flexibility of the offering has allowed for more regions to be included in equity financing – such as Asian markets – and for a diverse set of dealers to offer capacity.

**Global equity-linked forwards and swaps by region (H2 2021)**



<https://stats.bis.org/statx/srs/table/d8>

<sup>12</sup> See BIS OTC derivatives data for equity-linked “forwards and swaps” at <https://stats.bis.org/statx/srs/table/d8>

<sup>13</sup> “Whats better for hedge funds, synthetics or cash prime brokerage?”, Finadium, Dec 2021, <https://finadium.com/whats-better-for-hedge-funds-synthetic-or-cash-prime-brokerage/>



The swaps trades are used in three main buckets: client synthetic positions, stock loan equivalents and structured trades.

---

*The highly evolved synthetic prime brokerage model has created a very efficient offering that mimics physical prime brokerage in almost every way.*

---

The client synthetic business is where clients use OTC derivatives to get leveraged exposure to underlying equities. They choose to maintain this exposure through derivatives because of economic advantages over physical holdings, such as relative cost, operational ease or the inability to gain physical access to certain markets. The dealers who facilitate this business effectively run financing books since they are broadly hedged with the underlying physical equities' exposure. Over time the highly evolved synthetic prime brokerage model has created a very efficient offering that mimics physical prime brokerage in almost every way, including the way clients gain equity exposure through trading desks, the way financing is done and reported and the operational support model provided. Many dealers have found it easier to carve out a synthetic offering as an extension of their derivatives business, in advance of the harder commitment of building out a full-fledged prime brokerage platform. Some dealers even prefer to limit their offering to synthetic products. A hallmark of this business is a highly customised product offering that considers diverse client needs across trading financing, tax reporting, corporate actions, etc. No standardisation could find a foothold in this market since its essence is its flexibility.

---

*The goal of the dealer market is mainly to facilitate the netting of dealer inventory positions arising from hedging activity in their financing and derivatives business.*

---

Equally significant, equity swap balances occur where dealers face each other using swaps to finance or lend baskets of stocks. In most instances, these swaps are flexibly defined to allow for

changes in dealers' portfolios. The goal of the market is mainly to facilitate the netting of dealer inventory positions arising from hedging activity in their financing and derivatives businesses. Dealers are able to replace physical inventory holdings, long stock positions or borrowed shorts with the equivalent economic exposure through swaps. This reduces balance sheet consumption from the notional of the physical position to a smaller exposure capitalising the swap. The additional counterparty risk causes increased risk-weighted capital (RWA) resulting in a trade-off for the firms involved.

These swap trades also allow non-prime dealers to offer their balance sheets and funding into the equity financing market. The swap contracts are written on baskets of stocks, often in multiple markets and currencies, enabling frequent rebalancing within the contract. This keeps the nature of the financing very similar to the analogues of repo and stock loan. Since the advent of stricter guidelines on liquidity, such as Liquidity Coverage Ratio (LCR) rules, there have been more explicit funding commitments introduced in the contracts to provide regulatory relief. Regulators too recognise the similarity of risks between the swap books and the physical stock loan books, reviewing their risks in conjunction with each other.

The efficiency of financing afforded by the swap market is only matched by the equity-for-equity financing product that is available to dealers in many, but not all, markets. Incoming regulatory changes under the "output floor" requirements introduced in Basel IV (which require firms to use standardised approaches as a "floor" to their internal models) may change the comparative benefits between these two products. However, it is hard to declare a clear winner between them.

The third structured component of the business is small and niche, but it is noteworthy because it will always represent the need for bilateral arrangements that are very specific to a situation or a counterparty. Examples of such trades would be accelerated swap buybacks, swaps with embedded options or collars, swaps on private company holdings or simply swaps with highly negotiated legal terms. Such trades may not easily fit the risk metrics clearing houses require to appropriately monitor and margin them.

## The unique pressure on equity finance markets right now

The OTC equity swaps markets continue to thrive as more players become involved. The differential capital impacts of swaps versus prime brokerage are being more heavily studied by dealers as they review and optimise the capital usage in their businesses. In many instances, swaps are more capital-efficient for the dealers, since they can net down their inventory with their firm trading books and across the market. This has led to the growth in the OTC swap business outstripping the overall growth of the prime business itself: in H1 2020, these revenues accounted for more than half of all prime services revenues<sup>14</sup>.

Significant changes, however, have happened or are due to happen that increase the cost and complexity of this business.

---

### *The first major change was the roll-out of the swap dealer registration requirements.*

---

The first major change was the roll-out of the swap dealer registration requirements. Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the “Dodd-Frank Act”) established a comprehensive regulatory framework for security-based swaps and swaps. Under this framework, the Securities and Exchange Commission (SEC) regulates security-based swaps (which includes single-name equity swaps and those over a “narrow” index), the Commodity Futures Trading Commission regulates swaps (which includes equity swaps over “broad” indices) and the two agencies jointly regulate mixed swaps. In order to comply, banks had to significantly overhaul their entity and governance structures around OTC swaps businesses and in many instances move client businesses across entities. Banks worked through multi-year changes to preserve what they continued to see as profitable client business.

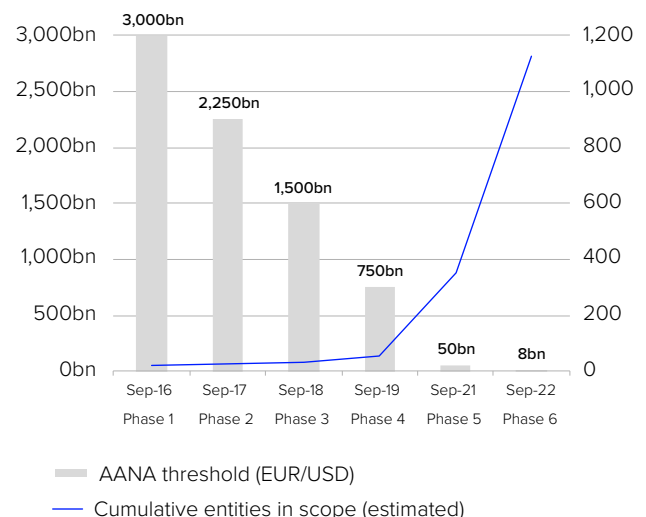
---

### *The final phase of the Uncleared Margin Rules (UMR), comprising mainly buy-side firms, came into effect in September 2022, bringing 1,000+ firms in scope.*

---

The UMR are slowly but surely coming to the forefront. These rules originated with global policymakers after the GFC, were drafted by the BIS and then put into effect by national and supranational regulators. They are designed to make the financial system safer by requiring the daily exchange of variation margin and, once fully phased in, the two-way posting of gross, segregated initial margin by users of uncleared OTC derivatives. While collection of initial margin is common for banks and broker-dealers, the posting of such, particularly to their buy-side clients, is novel and poses challenges. These rules began with the 20 largest banks in 2016 and have gradually captured more and more firms each year, with two notable delays due to market readiness and COVID-19<sup>15</sup>. The final phase, and the sixth wave, comprising mainly buy-side firms came into effect in September 2022 bringing 1,000+ firms within scope<sup>16</sup>. Added complexity comes with differing implementations of UMR in different jurisdictions, particularly by the SEC for security-based swaps in the US – and studies of the initial phases indicate that OTC equity derivatives are particularly costly in terms of initial margin<sup>17</sup>.

UMR thresholds vs entities



<sup>14</sup> “Whats better for hedge funds, synthetics or cash prime brokerage?”, Finadium, Dec 2021, <https://finadium.com/whats-better-for-hedge-funds-synthetic-or-cash-prime-brokerage/>

<sup>15</sup> “The Future Impact of UMR”, LCH, September 2020, <https://www.lch.com/content-hub/future-impact-umr>

<sup>16</sup> Bloomberg: <https://www.bloomberg.com/professional/blog/uncleared-margin-rules-what-you-need-to-know/>

<sup>17</sup> “The Future Impact of UMR”, LCH, September 2020, <https://www.lch.com/content-hub/future-impact-umr>

Many dealers have already handled UMR for their interdealer exposures, acknowledging the additional costs which arguably have been internalised. The first phase of client roll-outs has also been broadly addressed, through some third-party offerings as well as dealers working with their biggest clients. However, the operational hassle of numerous smaller clients remains an issue.

The third arrival on the regulatory front is the introduction of a new standard model for credit risk capital, the “standardised approach to counterparty credit risk” (SA-CCR), which came into force in June 2021 in Europe, and January 2022 in the UK. The US date for adoption was also January 2022, though regulators allowed and at least one firm chose to opt in earlier based on the perceived benefits<sup>18</sup>. This new model, which replaces the prior standard models, the “current exposure method” (CEM) and the “standard model”, has been designed to be:

*“... a risk sensitive methodology that appropriately differentiates between margined and unmargined trades, and provides more meaningful recognition of netting benefits than either of the existing non-modelled approaches ...”<sup>19</sup>*

SA-CCR applies to OTC derivatives, exchange-traded derivatives (ETDs) and long settlement transactions for all banks subject to the leverage ratio and all banks without permission to use an internal model, for risk-based capital. However, as mentioned previously, with the implementation of Basel IV, even those internal model method (or “advanced approaches”) banks must start to calculate SA-CCR exposures and use these as a floor for internal models.

---

*While often leading to higher capital requirements than the prior models – at least anecdotally – in certain circumstances SA-CCR can reduce capital costs for banks by introducing netting benefits.*

---

While often leading to higher capital requirements than the prior models – at least anecdotally – in certain circumstances SA-CCR can reduce capital costs for banks by introducing netting benefits via offsets of long and short exposures with the same

counterparty. Thus, clearing with a CCP, which can naturally consolidate multiple bilateral exposures into a netted single exposure, offers potentially significant capital efficiencies.

Even with these coming changes, the OTC equity swap business may have just absorbed the costs and moved on, as it has often in the past. Past cost increases have been effectively defrayed between continued volume growth, greater focus on efficiencies and some repricing. Clients have felt some pressure, with smaller clients facing more pricing constraints or even accessibility issues and bigger clients becoming concerned about overall available capacity. On the other hand enough new players are entering the market to compete, which should offset some of these issues.

“The equity swap market is an important component of hedge fund financing activity. We believe clients would welcome increases in capacity from cleared solutions, especially considering potential constraints on growth in dealer capital and balance sheet.”

**Matthew Thomas**, Managing Director, Head of Financing and Balance Sheet Management, BlackRock

However, two large items have loomed over the last year that will change the calculus markedly. The first was the very visible failure of the Archegos default, which echoed all the original issues of the CDS market from the GFC even though the issue was not in any way systemic. The second is the regulatory demand for more transparency, now being pushed out in various equity financing markets, from the recent stock loan reporting in the US to the swaps reporting advances and the short reporting requirements of the Financial Industry Regulatory Authority (FINRA). This also follows increases in transparency after the GFC, i.e., MiFID II/MiFIR transparency (to the public) and transaction reporting (to regulators), EMIR reporting and SFTR reporting<sup>20</sup>.

---

*The very visible failure of the Archegos default echoed all the original issues of the CDS market from the GFC even though the issue was not in any way systemic.*

---

<sup>18</sup> “SA-CCR: Impact and Implementation”, Acuiti, July 2021, [SA-CCR-Impact-and-Implementation.pdf \(acuiti.io\)](#)

<sup>19</sup> BIS website: <https://www.bis.org/publ/bcbs279.htm>

<sup>20</sup> These being the revised Markets in Financial Instruments Directive; the Markets in Financial Instruments Regulation; the European Market Infrastructure Regulation and the Securities Financing Transactions Regulation

The Archegos default that happened in March 2021 caused banks to lose over US\$10 billion<sup>21</sup> collectively in their lending exposures through OTC swaps relating to a very concentrated portfolio of technology and media stocks. The exposures had built up over the period of a year and a lot of the excess leverage was a result of prior profits being re-pledged to gain further leverage. Looking back, there were many points of failure for the banks: their view of the risks, their failure to act in timely fashion and possibly even how the unwinds were handled post-default – a number of inquiries both internal and external are reviewing the failures and potential remediations.

Regulators on both sides of the Atlantic have moved quickly in response to the incident. In particular, the Fed and UK's Prudential Regulation Authority (PRA) have required banks under their supervision to do a thorough review of their risk practices around their equity financing businesses, across first and second lines of defense and across portfolio risks and client review. The Dear CEO letter published by the PRA in Jan 2022<sup>22</sup> explicitly states:

*“The default of Archegos Capital Management last year also brought to light deficiencies in banks’ risk management governance and frameworks, many of which were symptoms of a broader root cause and manifestations of an inappropriate internal risk culture where lessons from the global financial crisis had not been sufficiently learnt. This event further reinforced the need for firms to consider concentrated and leveraged exposures and to improve counterparty risk management.”*

All major banks, regardless of their involvement in the Archegos incident, are overhauling their approach to contingent market risks and their stress-testing capabilities.

One big issue that was quite evident was the lack of transparency in the overall build-up of concentrated exposure across the market. Although each bank was aware of its own bilateral risks and the existence of additional exposures, the overall sizing was not known until the event of default. More stringent requirements around client-level transparency, as well as regulatory review of bank exposures, can help mitigate such issues. Additionally, if done correctly a cleared model allows for a market-driven solution to increase visibility. For example, options exchanges report exposures currently at an aggregate level, which preserves client confidentiality but alerts to the build-up of significant underlying exposures.

---

## *There has been a move to get more transparency into the equity financing markets.*

---

Even outside of the Archegos issue, there has been a move to get more transparency into the equity financing markets. Most recently, the SEC has issued proposed trade reporting rules for securities lending transactions, with two levels of reporting (for the public and the regulators). Similarly, on 4 June 2021 FINRA invited comment on proposals that would, among other things, increase the frequency of short interest reporting from twice per month to weekly or even daily and add synthetic short exposure via derivatives to disclosures<sup>23</sup>. On the swaps reporting side, the SEC proposed a series of potentially far-reaching changes to the regulation of the security-based swap (SBS) markets. Among other changes, the proposed rules would impose, for the first time, public reporting requirements for large positions of SBS. This rule, according to SEC Chairman Gary Gensler, “would improve the transparency and integrity of the security-based swaps market.”<sup>24</sup> Similarly, the proposed securities lending trade reporting rules address concerns about fees, position transparency and timing of reporting. The roots of these proposed requirements for SBS and securities lending derive from various sources, ranging from the original push from Dodd-Frank to an enduring distrust and worry among the SBS and securities lending markets in general. The Archegos failures are also adding to regulators’ concerns about the potential build-up of leveraged risks in unregulated “shadow” banking worlds. All these factors make the case for cleared solutions in the equity financing markets that much stronger.

### **US regulators are considering numerous proposals which may dramatically increase transparency requirements in US securities finance markets, including:**

- SEC Exchange Act Rule 10c-1 for securities lending reporting
- FINRA Regulatory Notice 21-19 for short-sale reporting
- SEC Exchange Act Rule 10b-1 for security-based swap position disclosure
- Changes to form 13F via the House Short Sale Transparency and Market Fairness Act
- SEC changes to form N-PX for corporate voting and securities lending disclosure

21 Financial Times: <https://www.ft.com/content/c480d5c0-ccf7-41de-8f56-03686a4556b6>

22 Bank of England website: <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/letter/2022/january/uk-deposit-takers-2022-priorities.pdf>

23 FINRA website: <https://www.finra.org/rules-guidance/notices/21-19>

24 U.S. Securities and Exchange Commission, “Statement on Exchange Act 10B and Rule 9j-1” (Dec. 15, 2021).

## How clearing can help

The issues raised in the previous section can be well addressed through clearing and trading on a venue. While reporting standards can vary across CCPs and products, there are good examples of reliable and useful position and trade reporting available for public dissemination, e.g., the listed options markets. This visibility can highlight both areas of concentrated build-up and significant changes over short periods. The visibility would be helpful to risk officers of lending institutions in assessing the liquidation risk in their client portfolios. Reporting standards must be careful to take into account data privacy needs of specific client and dealer positioning and pricing, but visibility to overall market totals and averages should be acceptable to all participants. In fact, none of the participants in the equity financing markets benefits from an inordinate build-up of concentrations, since disorderly defaults are a problem to borrowers, lenders and other participants. CCPs provide just the right amount of transparency to help with such risks.

---

### *Trading on-venue and via a CCP also offers very tangible operational efficiencies*

---

Trading on-venue and via a CCP also offers very tangible operational efficiencies – including simplified counterparty management, netting of payments and cash flows and straight-through-processing of business with consistent, centralised reporting. Similarly, trading in this manner offers significant contractual efficiencies, easing the on-boarding of new counterparties and clients by replacing often complex and highly negotiated bilateral ISDA documentation with the rule book of the trading venue and CCP. Effectively, the one-to-all counterparty model of a CCP streamlines the set-up and daily operating flows for dealers and their clients.

There are several benefits to having the additional risk management capabilities of a CCP inserted into the process. The CCPs in essence provide an independent third-party and well-regulated risk manager into what was previously a bilateral risk arrangement. This adds another robust approach to tail and concentration risks, along with the dealer risk management done currently. Other advantages include the independent valuation of contracts and reductions in the number of margin disputes.

When properly constructed, cleared products can offer capital and funding advantages vs trading uncleared and subject to UMR. The cleared product's multilateral netting of margins compares favourably with the gross margin approach under UMR. Other considerations include the robustness and competitiveness of CCP margining regimes as well as capital treatment of margin holdings. In particular, reduction of margin and capital usage helps with market capacity in addition to reducing costs. Some institutions are taking the view that using cleared products wherever available allows their remaining uncleared exposures to stay below the UMR margin and notional thresholds, thereby avoiding UMR altogether.

---

### *LSEG is launching a cleared solution for the US, UK and European equity swap market, combining the contractual flexibility of an OTC swap with the benefits of central clearing.*

---

In one of the first offerings to hit the market in a meaningful way, LSEG is launching a cleared solution for the US, UK and European equity swap market, combining the contractual flexibility of an OTC swap with the benefits of central clearing. The product is the result of a partnership between two LSEG businesses: **Turquoise NYLON™**, the derivatives business of trading venue Turquoise, and LCH Ltd's EquityClear clearing service, which provides the clearing and risk management.



Key to the LSEG product is the **Turquoise NYLON Venue Rights™** functionality at the trading venue that allows firms to use the venue rules and trading platform to create legally binding agreements which mirror the per-counterparty and per-contract flexibility that would otherwise be found in their bilateral swap documentation. These agreements are maintained between the trading counterparties and trading venue and are not passed to LCH. This means that the contract that is cleared remains sufficiently standardised for the CCP to risk and default manage, while counterparties retain the flexibility they need to transact in this market.

In order to access and benefit from the Turquoise Rules – and the **Turquoise NYLON Venue Rights™** which form part of those rules – all participants in the LSEG platform will be members of Turquoise, including all sell-side and buy-side trading counterparties and all sell-side clearing members.

On the clearing side, the product will be risk and default managed by LCH as part of their EquityClear service, the same service operated by LCH for the clearing of cash equities, giving the potential for cross-margins across synthetics and cash products in the future. Additionally, LCH have incorporated other product features that have proven successful in their other OTC clearing services, such as allowing contracts arising through this service to be characterised as “settled-to-market” – giving further capital benefits as noted previously.

As part of a regulated trading venue, a multilateral trading facility (MTF), Turquoise will provide post-trade transparency on business executed on the platform on a real-time basis. This (anonymised) data provides a facility for market participants to track and manage concentration risk and strikes the right balance between public and private transparency, a balance that is also enhanced by aspects of the contract design, meaning that the price reported is a reference price for the underlying security rather than the (often sensitive) financing spread (as would

have been the case for a traditional OTC bilateral equity swap). Additionally, Turquoise (and LCH) provide reporting to regulators as required under MiFID II/MiFIR and EMIR, respectively, and maintain detailed records of all activity.

“LSEG’s cleared equity swap product promotes capital efficiency. It allows the flexibility of a bilateral trade with the capital relief of a cleared product. In addition, for the buy-side, it mitigates counterparty risk and potentially the need for onerous tri-party accounts for initial margin or mandated adherence to the Uncleared Margin Rules. As some prime brokers have recently exited the business, the market needs to continue to adapt. Those that remain need to be more efficient in order to grow with their client base.”

**Ian Brock**, Former Treasurer, Viking Global Investors

The main advantage of the LSEG product over prior attempts is the way it will preserve the flexibility of the OTC market while offering the advantages of clearing. This is one of the benefits of the product having been designed by practitioners with a deep understanding of the equity finance and OTC derivative markets.

## Conclusion

Recent market developments and regulatory changes have made the case for cleared equity swaps very compelling. LSEG's product aims to strike the right balance between preserving flexibility and introducing the benefits of clearing; and between public and private transparency. LSEG's commitment and willingness to partner with market participants mean that this product can form the basis for a brave new world of cleared equity finance.

## Further reading

- “Central clearing predominates in OTC interest rate derivatives markets”, BIS Quarterly Review, BIS, December 2016, [https://www.bis.org/publ/qtrpdf/r\\_qt1612r.htm](https://www.bis.org/publ/qtrpdf/r_qt1612r.htm)
- “Implementing OTC Derivatives Market Reforms”, FSB, 25 October 2010, [https://www.fsb.org/wp-content/uploads/r\\_101025.pdf](https://www.fsb.org/wp-content/uploads/r_101025.pdf)
- “Frequently Asked Questions on Repo”, ICMA, updated January 2019, <https://www.icmagroup.org/market-practice-and-regulatory-policy/repo-and-collateral-markets/icma-ercc-publications/frequently-asked-questions-on-repo/>
- “The Future Impact of UMR”, LCH, 1 September 2020, <https://www.lch.com/content-hub/future-impact-umr>
- “The standardised approach for measuring counterparty credit risk exposures”, BIS Basel Framework, 31 March 2014, <https://www.bis.org/publ/bcbs279.htm>
- “Margin requirements for non-centrally cleared derivatives”, BIS Basel Framework, 3 April 2020, <https://www.bis.org/bcbs/publ/d499.htm>
- “Dear Chief Executive Officer, UK Deposit Takers Supervision: 2022 priorities”, Prudential Regulation Authority, 12 January 2022, <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/letter/2022/january/uk-deposit-takers-2022-priorities.pdf>
- “Turquoise NYLON™ Equity TRS trade matching & central clearing initiative”, LSEG Group Risk, November 2021

## About LSEG

LSEG (London Stock Exchange Group) is more than a diversified global financial markets infrastructure and data business. We are dedicated, open-access partners with a commitment to excellence in delivering the services our customers expect from us. With extensive experience, deep knowledge and worldwide presence across financial markets, we enable businesses and economies around the world to fund innovation, manage risk and create jobs. It's how we've contributed to supporting the financial stability and growth of communities and economies globally for more than 300 years.

Discover more at [lseg.com](https://lseg.com)

## About Panoramix Partners

Panoramix Partners advises leadership of financial services firms on risk-management, governance and operational excellence. Our team of experts includes practitioners who have overseen risk, trading and financing businesses, and academic advisors doing original research. Our risk practice ranges from broad enterprise-wide risk management to specific topics in quantitative and tail risk modelling. We have deep expertise in secured financing, across prime brokerage, synthetics, repo and clearing.

Learn more at [panoramixpartners.com](https://panoramixpartners.com)

This whitepaper contains text, data, graphics, photographs, film clips, illustrations, artwork, names, logos, trade marks, service marks and information (“Information”) connected with London Stock Exchange plc, LCH Limited, Turquoise Global Holdings Limited and other companies within the London Stock Exchange Group (collectively, LSEG). LSEG endeavours to ensure Information is accurate, however Information is provided “AS IS”. LSEG does not warrant the accuracy, timeliness, completeness, performance or fitness for a particular purpose of any of the Information. No responsibility is accepted by or on behalf of any members of LSEG for any errors, omissions, or inaccurate Information. No action should be taken or omitted to be taken in reliance upon this Information. LSEG accepts no liability for the results of any action taken on the basis of the Information. The Information does not constitute professional, legal, regulatory, financial or investment advice. Advice from a suitably qualified professional should always be sought in relation to any particular matter.

© September 2022 London Stock Exchange Group plc

