Celebrating SwapClear's 25 years of clearing the global IRS market

Interest rate swaps (IRS or swaps) markets are constantly evolving. In partnership with our members and clients, we have been able to support these markets through their evolution, while helping to reduce systemic risk and strengthen stability more broadly across financial markets.



On our trip down memory lane, we would like to revisit some of the key milestones that have led to the tremendous success SwapClear has seen over the years.

As we mark LCH SwapClear's 25th anniversary, we wanted to reflect on our journey. It began in 1999 when the service first launched and has seen us grow into one of the largest derivatives clearing services in the world. On this journey, we have overcome monumental market challenges by collaborating with our members and clients to innovate and create new capital and operational efficiencies for all market participants.

On our trip down memory lane, we would like to revisit some of the key milestones that have led to the tremendous success <u>SwapClear</u> has seen over the years. Each of these moments have been pivotal in helping us clear the way for rates derivatives markets, not merely by adapting to the changes, but enabling them to thrive in response.

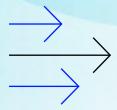
SwapClear's default management process in action

It's important that we start with how the IRS market has reached its current point. The introduction of the US Commodity Futures Modernization Act (CFMA) in 2000 formally exempted over-the-counter (OTC) derivatives from dedicated regulation — although they were still subject to broader risk and capital regulation such as Basel I—and contributed to rapid growth.

The subsequent 2004 Basel II Accord improved risk management practices in financial institutions. It heralded more specific requirements on counterparty credit risk arising from the burgeoning use of OTC swaps. As a result, SwapClear saw significant growth in volumes, clearing over US\$60 trillion in notional value for the first time in 2007. However, the swaps markets remained largely bilateral (non-cleared) during this period.

The big turning point came with the Global Financial Crisis of 2007-08, which highlighted a number of vulnerabilities in the financial system, including the systemic risks posed by the lack of clearing in OTC derivatives markets. The clearest example of this was the bankruptcy of Lehman Brothers in 2008.





The quick resolution of SwapClear's cleared swaps was in marked contrast to efforts to resolve Lehman's non-cleared OTC derivatives exposures.

Like many of its large global banking peers, Lehman was a member and a user of SwapClear but managed the bulk of its OTC derivatives activity outside clearing. When the firm's bankruptcy was declared on 15 September 2008, LCH SwapClear's default management process kicked in to successfully liquidate Lehman's US\$9 trillion cleared IRS portfolio over a period of three weeks. In doing so, no loss was mutualised to non-defaulting clearing members.

The quick resolution of SwapClear's cleared swaps was in marked contrast to efforts to resolve Lehman's non-cleared OTC derivatives exposures. This fact did not go unnoticed by regulators, and thrust SwapClear and other CCPs into the spotlight as critical agents for systemic risk mitigation and management. In short order, at the G20 Pittsburgh Summit in 2009, world leaders agreed on comprehensive measures to strengthen the oversight and regulation of financial markets, including mandatory central clearing of standardised OTC derivatives.

Expansion of clearing services to meet mandatory clearing requirements

Wave after wave of regulatory reform ensued, including the implementation of Dodd-Frank Wall Street Reform and Consumer Protection Act ('Dodd-Frank') in the US, the European Market Infrastructure Regulation (EMIR) in the EU, and the Basel III Accord, all of which imposed more rigorous trading, clearing, reporting, and risk management requirements.

Many of the current mandates to trade, to clear, and to report activity in several classes of OTC derivatives came into effect in the years that followed. These regulations transformed markets.

The majority of end-users of OTC derivatives (the buy-side) were wholly new to clearing, and the intermediaries who could connect them to CCPs did not offer these services for OTC derivatives. Our first and most critical job at SwapClear was therefore to deliver a workable client clearing model for them.

This was achieved by working in close partnership with SwapClear's member firms as both dealers and intermediaries, and led to the launch in 2012 of a US futures commission merchant (FCM) model for US clients and an EMIR model for EU clients. They remain the backbone of SwapClear's current client clearing capability, which has grown strongly to account for a third of all notional cleared in 2024.

The original member-only model for OTC clearing also needed to be re-engineered to deal with greater levels of direct connectivity to trading venues, faster submission to clearing, higher volumes of registrations and resultant cleared stock, and expedited onward reporting. SwapClear delivered a wide range of innovative solutions to help address these challenges, including:

- Real-time trade registration (RTTR) workflows, which needed to be designed and built, to get new trades straight into clearing.
- Enhanced compression capabilities to deal with spiralling growth in outstanding stock and associated default processing risks.
- Expansion of SwapClear's product scope to provide more comprehensive coverage of customer portfolios, including the clearing of inflation swaps in 2014.
- Extension of currency eligibility with a total offering of 27 currencies, over tenors from one month to 51 years, and referencing dozens of different benchmark rates.

- Enhanced customer protection solutions such as CustodialSeg, providing functionality beyond the demands of EMIR's individual segregation.
- Improved collateral efficiency and velocity to support the new margin dynamics.

Additionally, the latter part of the 2010s saw the tightening of regulation governing bilateral OTC derivatives business, such as the Uncleared Margin Rules (UMR). These rules, introduced over several phases in different jurisdictions, brought better alignment of incentives between cleared and uncleared swaps business in cases where clearing was voluntary. This further increased the clearing volumes seen across the industry.

SwapClear has played a crucial role in these reforms, supporting participants in rates derivatives markets globally with critical building blocks along the road to full transition.

Facilitating the LIBOR transition

Exposed in 2012, the London interbank offered rate (LIBOR) scandal brought to light the widespread manipulation of this important benchmark. As a result, regulators decided to phase out legacy benchmarks based on expert judgement in thinly traded markets and to replace them with alternative <u>risk-free reference rates (RFRs)</u>. This kicked off one of the most complicated changes to market structure ever attempted.

Non-USD LIBORs (CHF, GBP, and JPY) were discontinued in late 2021, while global authorities chose to extend the cessation of USD LIBOR to mid-2023 to give market participants more time to overcome the complexities involved in the transition.

SwapClear played a crucial role in these <u>reforms</u>, supporting participants in rates derivatives markets globally with critical building blocks along the road to full transition. These programmes, which involved intense multi-year collaboration between private and official sector institutions, amply demonstrated the enormous efficiencies that clearing has brought to OTC derivatives markets via greater standardisation and higher transparency. It is possible these transitions would have taken years longer, and may not even have been executable, without the unifying force of clearing.

At a practical level, the LIBOR transition necessitated intense innovation, such as enabling accelerated adoption of swaps linked to the new RFRs via early eligibility to clearing. This was exemplified when SwapClear cleared the first US dollar swap linked to the secured overnight financing rate (SOFR) in 2018.

Equally vital but less visible changes were also necessary, such as price alignment interest (PAI)/discounting switches. When the European Central Bank (ECB) introduced the euro short-term rate (€STR) to replace euro overnight index average (EONIA) in late 2019, SwapClear executed a PAI/discounting switch in Q3 2020 to facilitate the conversion of our entire stock of EONIA contracts to €STR equivalents in early Q4 2021. Hot on the heels of this success, we rounded out 2021 by converting contracts in all non-USD LIBORs, each to their recommended alternative RFR.

In Q2 2023, SwapClear converted the last remaining USD LIBOR swaps to SOFR equivalents alongside those linked to SGD SOR and THB THBFIX and did the same with SwapClear's CAD CDOR contracts, which were converted to Canadian overnight repo rate average (CORRA) in June 2024. MXN TIIE swaps were the latest to be handled, giving a running total of remediated contracts of more than US\$90 trillion in notional value across more than one million individual swap contracts.

Widening the accessibility and efficiencies of clearing

SwapClear constantly strives to support our customers wherever they are based and whatever they trade. As a typical example, our opening hours were extended in August 2023 to better support the APAC region. This has not only allowed market participants to benefit from continuous access to LCH's deep liquidity pools, but has also strengthened our already robust risk management practices.

In recent years, new currencies have been added on both the deliverable and non-deliverable fronts to bring superior portfolio netting opportunities, and more efficient onboarding. This includes adding ILS to our deliverable service, and expanding our non-deliverable IRS clearing to include LatAm and more APAC currencies (BRL, CLP, COP, THB and TWD) — in addition to the already existing CNY, INR, and KRW, taking the total to 27 eligible currencies including eight non-deliverable currencies.

As the market has evolved and clearing volumes have surged, demand for trade compression is strong. Market participants want to simplify the management of their positions, and compression helps to free up valuable capital that would otherwise be held unnecessarily against offsetting positions.

We continue to make significant enhancements to SwapClear's compression functionality, which drives smaller, cleaner, lighter, and less complex books. In terms of proprietary functionality, the extension of blended rate compression to include basis swaps and zero-coupon (ZC) inflation swaps in November 2019 is a great example. And on the multilateral side, SwapClear now conducts more frequent compressions and more currencies than ever before. This has resulted in US\$7 quadrillion of OTC IRS notional outstanding being compressed by the service, as of April 2024.

We must also mention our ambitions in US dollar listed derivatives. SwapClear recently launched a <u>Listed Rates clearing service</u> in partnership with the FMX Futures Exchange. Although it is still early days, this offers our members and clients the opportunity to generate margin and operational efficiencies between their OTC and USD listed rates derivatives positions, as well as ensuring more effective risk management.



By securing equivalence, SwapClear has enabled undisturbed access to our services, helping to minimise market fragmentation and its associated risks and costs.

Response to new challenges

Significant challenges have also arisen outside the financial world. EU regulatory proposals created uncertainty around the future alignment and operational framework for CCPs operating in both the EU and UK. This resulted in significant changes to clearing arrangements for UK-based CCPs operating in the EU and vice versa – including equivalence decisions and recognition processes.

To safeguard our EU and UK clients from potential issues, SwapClear worked in partnership with European Securities and Market Authority (ESMA), ECB, and the Bank of England to help ensure continuity and stability by maintaining EU firms' access to global infrastructures such as ourselves servicing interest rates markets. By securing equivalence, SwapClear has enabled undisturbed access to our services, helping to minimise market fragmentation and its associated risks and costs.

The COVID-19 pandemic caused unprecedented market volatility and operational disruptions, putting significant pressure on CCPs, testing their resilience and risk management frameworks. A major concern was that the crisis would lead to excessive procyclicality that would need to be controlled. In fact, we did not see sharp increases in initial margin (IM) during the March 2020 market turmoil, suggesting that anti-procyclicality (APC) tools were able to dampen or slow down the required IM increase over the period, in line with Financial Stability Board recommendations



We would like to thank you all for being a vital part of our journey.

SwapClear's risk models performed as designed, with no adjustments required to accommodate the volatility, no margin increases of more than 25% and no ad hoc increases. This brought much-needed stability to the market, and did not lead to runs on members' and clients' collateral.

As we look to the future, we are excited to continue to offer innovative products, services, and partnerships on a global scale, continuing to partner with market participants and regulators to shape the future of swaps and listed rates clearing.

These are only some of the milestones we have achieved over the years, but none of them would have been possible without your continued support. We would like to thank you all for being a vital part of our journey and we invite you to join us in celebrating SwapClear's 25th year in business!

We look forward to continuing this incredible partnership with you for the next 25 years and beyond.

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