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The Case for CCP Supervisory Cooperation

Significant progress has been made in moving standardized derivatives trades to central counterparties (CCPs), in line with commitments made by the Group of 20 (G-20). Approximately 77% of interest rate derivatives notional outstanding is now cleared, according to the Bank for International Settlements.

The increased importance of CCPs has focused attention on the resiliency and oversight of these entities. In the European Union (EU), this has resulted in a series of measures, including a proposed overhaul of how CCPs are supervised. As part of the proposed changes, known as EMIR 2.2, those third-country CCPs deemed to be of significant systemic importance could be required to relocate to the EU as a last resort.

ISDA believes a location policy presents serious risks, and could have implications for effective coordination and cooperation between global regulators. A better outcome would be to develop a model of supervisory cooperation that enables EU supervisors to exercise appropriate and proportionate oversight of CCPs that provide clearing services in the EU.

This paper explores how enhanced supervisory cooperation might work in practice.

It also examines the risks involved in migrating third-country CCP portfolios to the EU. ISDA's analysis finds all of the suggested methods for migration have significant weaknesses, and could lead to higher costs and operational disruption for market participants.

INTRODUCTION

ISDA has highlighted the serious risks posed by a CCP location policy

The starting point for an EU review into the supervision of CCPs is one industry participants agree with: that EU supervisors should have access as necessary to CCPs that provide clearing services in the EU.

However, the detail of the European Commission's (EC) proposals on June 13, 2017 (EMIR 2.2)[1] has prompted industry concerns about the potential implications. The EC sets out a two-tier approach for classifying third-country CCPs. Under the first tier, non-systemically important CCPs will mostly continue to be able to operate under the existing equivalence framework. Those third-country CCPs considered to be systemically important would fall under the second tier, and will be subject to stricter requirements. These include compliance with the relevant EU prudential and central bank requirements, and agreement to provide the European Securities and Markets Authority (ESMA) with all applicable information and to enable onsite inspections.

However, ESMA and the relevant EU central bank would also be able to recommend to the EC that any third-country CCP considered to pose substantial systemic importance to the EU financial system should be established in the EU as a last resort.

In a response to the proposals on October 10, 2017[2], ISDA highlighted a number of risks presented by a location policy. These include geographical fragmentation of markets, distortions in competition, increased systemic risk, higher costs, and reduced market liquidity and efficiency. A location policy could also have a significant impact on the structure and functioning of capital markets in the EU and, therefore, on the financing of the EU economy and EU end users. It could also have a negative impact for global regulatory coordination because of its extraterritorial implications.

Instead, ISDA's preferred approach for CCP oversight in Europe is supervisory cooperation. This paper further develops this recommendation and fleshes out how it might work.

The paper also considers the risks associated with the migration of cleared portfolios from an offshore CCP to a clearing house within the EU.

[1] http://europa.eu/rapid/press-release_IP-17-1568_en.htm

[2] https://www.isda.org/2017/10/10/isda-publishes-letter-on-ecs-ccp-oversight-proposals/

SUPERVISORY COOPERATION

Direct supervision of third-country CCPs and supervisory cooperation with local authorities should be proportionate and efficient

ISDA's preferred approach to enhancing EU oversight of third-country CCPs that fall under the second tier is to implement strong and effective supervisory cooperation between the relevant authorities[3].

In the response to the EC's proposals, ISDA made the following recommendations:

- Direct supervision of third-country CCPs and supervisory cooperation with local authorities should be proportionate and efficient. This means focusing on the supervision of services of particular relevance for the local jurisdiction.
- The interests of supervisors should be aligned through rules agreed ex-ante and based on global standards.
- The direct supervision of LCH SwapClear by several supervisors, including the US Commodity Futures Trading Commission (CFTC) in cooperation with the primary regulator, the Bank of England (BoE), provides an effective and proportionate precedent in the supervisory cooperation of a global derivatives clearing service. Cooperation between the EU and UK could be based on this example.
- Supervisors have a role to play in ensuring CCP margin and haircut models are robust, but should not change model outcomes on an ad hoc basis.

Given that the EC proposal has a particular relevance in the context of the UK's pending withdrawal from the EU, the recommendations presented in this paper primarily consider supervisory cooperation between EU 27 and UK authorities. Most of these proposals will also be applicable for other relationships, but need to be viewed through the lens of systemic importance and existing cooperation agreements.

Business-as-Usual

Proportionate and efficient direct supervision must be developed through business-as-usual cooperation, based on agreements made in advance between the relevant authorities.

Supervisory cooperation and trust established in good times will lay the foundation for robust cooperation in a crisis situation. This is in line with the Principles for Financial Market Infrastructures (PFMIs), published in April 2012 by the Committee on Payments and Market Infrastructures and International Organization of Securities Commissions (CPMI-IOSCO)[4]:

"Central banks, market regulators, and other relevant authorities should cooperate with each other, both domestically and internationally, as appropriate, in promoting the safety and efficiency of FMIs."

[3] In previous papers, ISDA has proposed that supervisory cooperation be accomplished through a combination of ex ante deference and information sharing between regulators (https://www.isda.org/2017/10/19/isda-response-to-cftc-project-kiss/, cross border principles: https://www.isda.org/2017/09/18/isda-proposes-risk-based-framework-for-substituted-compliance-via-cross-border-principles/). This would be an ideal solution, but ISDA understands it is not envisaged by policy-makers at this time. Comments are therefore offered on the joint supervision model. Some CCPs do not support joint supervision, but instead prefer supervisory cooperation via ex ante deference and information sharing between regulators

[4] https://www.bis.org/cpmi/publ/d101a.pdf

Topics to be agreed upon include:

- Provision of mutual support (eg, central bank access for deposits, and how this mutual support applies in a crisis);
- Areas where supervisors defer to each other;
- When host supervisors will rely on home-country supervision, including inspections by the home-country supervisor, and what inspections or other supervisory actions the host-country supervisor wishes to perform;
- Procedures for efficient review of the risk management framework;
- Procedures, decision-making processes and governance if a large clearing member is in resolution or otherwise defaults; and
- A procedure and governance structure for crisis situations (a European Parliament draft report has added crisis agreements to the scope of agreements between regulators, which is welcome[5]).

While there is an implicit assumption that UK and US CCPs will be affected, there is a possibility that some EU 27 CCPs might fall under a tier-two-type framework should one be implemented in the UK.

Assuming the UK incorporates the parts of the European Market Infrastructure Regulation (EMIR) that are operative into UK domestic law (those elements that are in force and apply when the UK leaves the EU), this is a possible outcome and in line with Section 3 of the European Union (Withdrawal) Bill. These provisions might cover Eurex and CDSClear services should they be deemed systemically important to the UK. Accordingly, a framework for supervisory cooperation should be designed in such a way that it could easily be implemented in both directions between the EU 27 and the UK.

Cooperation

Supervisors should defer to each other's rules and supervisory activities as far as it is appropriate and proportionate to do so, with a view to avoid conflicting or duplicative requirements. This principle is reflected in the PFMIs:

"Authorities are encouraged to cooperate with each other to reduce the probability of gaps in regulation, supervision, and oversight that could arise if they did not coordinate and to minimise the potential duplication of effort and the burden on the FMIs or the cooperating authorities."[6]

For efficiency, the host country should focus its direct supervision on segments of the CCP that are systemically important for the host country, rather than the whole CCP. This would be in line with the practice of other regulators around the globe (for instance, Canada, Australia and the US). Aligning EU supervisory practices with other jurisdictions would make them more acceptable to those that have raised concerns about the reach of the EC proposals[7].

[5] http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-%2f%2fEP%2f%2fNONSGML%2bCOMPARL%2bPE-616.847%2b01%2bDOC%2bPDF%2bV0%2f%2fEN

[6] The Key Considerations and the Explanatory Note of the PFMIs provide further guidance and details on this principle

[7] It would also be in line with PFMI Responsibility E, Explanatory Note 4.5.5: "The appropriate degree of formalisation and the intensity of the cooperation in relation to any given FMI will depend on the relevant authorities' statutory responsibilities and may also depend on the FMI's systemic importance to their respective jurisdictions. The degree of formalisation may vary depending on each set of circumstances.[…]"

There is no reason why a CCP should not seek both home and host(s) regulator approval of risk management or rule book changes that impact services in both jurisdictions, provided a streamlined and efficient procedure is in place to ensure CCPs can implement changes in a reasonable time frame – for example, as proposed by Article 49 of EMIR and amended by the EC proposals. If there are differences of opinion between supervisors, then there is enough time in a typical business-as-usual situation to discuss differences and agree on compromises consistent with global guidelines. A CCP subject to the risk management rules of several jurisdictions would likely apply the most conservative approach to all of its activities, ensuring strong risk management.

In addition to direct supervisory powers, supervisors should build information sharing into their agreements[8]. The home supervisor should share with host supervisors the outcomes of supervisory actions, such as inspections, stress tests and other significant interactions with the CCP[9]. Should the host supervisor (an EU 27 supervisor in the scenario currently envisioned, but it could be the other way round) perform its own inspection, results should be shared with the home supervisor.

Coordination

To avoid duplication and improve collaboration, home- and host-country supervisors should inform each other of their planned supervisory activities and work together to carry out those activities where appropriate. Supervisors of global CCPs should aim to coordinate their requirements in relation to inspections and supervisory activities and give due respect to existing practices of international comity.

Widespread information sharing is already practiced between supervisors. For instance, the CFTC has made public information-sharing agreements on its website. The European Central Bank (ECB) and the BoE have also agreed enhanced arrangements for information exchange and cooperation regarding UK CCPs with significant euro-denominated business[10].

Such arrangements – deference to each other's rules and supervision where appropriate, cooperative arrangements, information sharing, agreement of risk management or rule book changes by both supervisors and informing one another about plans and outcomes of supervisory activities like inspections – would reduce the potential for duplication and disruption arising from multiple and potentially conflicting supervisory regimes[11].

[8] See PFMI Responsibility E, Explanatory Note 4.5.5: "[…]For example, using an ad hoc arrangement to address promptly an emerging supervisory issue may be preferable to establishing a more-formal arrangement. Similarly, the intensity of cooperation may vary among arrangements, ranging from information sharing to more-extensive consultation and cooperation arrangements.[…]"

[9] See also PFMI Responsibility E, Explanatory Note 4.5.5: "[…] Information sharing may include the exchange of supervisory and oversight information (both public and non-public); the exchange of perspectives on risk-management controls, safety, and soundness; or plans for the potential recovery, wind-down, or resolution of the FMI.[…]"

[10] http://www.cftc.gov/International/MemorandaofUnderstanding/index.htm https://www.ecb.europa.eu/press/pr/date/2015/html/pr150329.en.html

[11] See also PFMI Responsibility E, Explanatory Note 4.5.8: "[…] Authorities should consult with each other, where practicable, and share assessments to support authorities with primary responsibility for the FMI's supervision or oversight and for which the FMI is systemically important. Information sharing and open discussion with respect to the principles should help authorities avoid sending the FMI conflicting messages or imposing unnecessarily burdensome requirements on the FMI. Assessments and the related consultation and information sharing should be conducted without prejudice to the relevant authorities' statutory powers or legal frameworks"

The G-20 leaders' St Petersburg declaration of September 2013 (paragraph 71) states:

"We agree that jurisdictions and regulators should be able to defer to each other when it is justified by the quality of their respective regulatory and enforcement regimes, based on similar outcomes, in a non-discriminatory way, paying due respect to home country regulatory regimes.… in order to avoid regulatory gaps, duplication, conflicts and inconsistencies which can lead to regulatory arbitrage and market fragmentation."

This approach to deference has been confirmed by the US Treasury in its October 2017 capital markets report, which recommends "clarity around the cross-border scope of CFTC and SEC regulations and [rules that are] compatible with non-US jurisdictions where possible to avoid market fragmentation", and "that effective cross-border cooperation include meaningful substituted compliance programs to minimize redundancies and conflicts"[12].

Access to Liquidity

CCP access to central bank money in the currencies in which they do business makes clearing more efficient and reduces risk to end users and the broader financial system. Access should include the ability to use central bank money for payments, central bank accounts for safe-keeping of participants' cash, and access to central bank liquidity, at least in emergency situations. Access to emergency liquidity can also be implemented via swap lines between involved central banks.

Access to the Security Settlement System in cooperating jurisdictions would bring benefits in terms of reducing settlement risk and increasing efficiency. It would also ensure that local authorities have full visibility on all flows denominated in local currency. If the central banks of cooperating jurisdictions would provide these services to each other's CCPs, potentially via the home central bank[13], then these CCPs would become safer, which is a major benefit in its own right.

These advantages have been highlighted in analysis on the interactions between payment systems and monetary policy published by the European Parliament internal research service[14]. The paper states that providing these services would require "particularly tight agreements between the issuing central bank (specifically the ECB) and the institution responsible for financial stability and monetary policy in the jurisdiction in which a CCP is located".

Close business-as-usual cooperation and support encourage practical day-to-day cooperation and reliance on each other. This will build trust and create strong incentives to include the other jurisdiction in crisis planning and crisis management should a stress event occur.

[12] https://www.treasury.gov/press-center/press-releases/Documents/A-Financial-System-Capital-Markets-FINAL-FINAL.pdf

[13] The existing swap line between BoE and ECB could be a good starting point for such an agreement

[14] http://www.europarl.europa.eu/cmsdata/138400/MD%20BRUEGEL%20final.pdf

COOPERATION IN A CRISIS

A global approach to supervision brings significant benefits, especially in a crisis

Default Management

For global markets to operate reliably and without undue systemic risk, supervisors should liaise regularly on a wide range of topics and agree mutually acceptable solutions to problems and challenges as they arise. A global economy and a global approach to markets brings significant benefits to society. Realization of these benefits requires cooperation among home and host supervisors that seek to exercise authority over regulated entities.

Crisis management is best addressed by rules agreed ex-ante. To illustrate the value of this approach to supervisory cooperation[15], consider the example of a distressed large EU 27 clearing member at a UK CCP. The European resolution authority (expected to be the Single Resolution Board) would likely place the clearing member into resolution. This resolution process would require access to the global derivatives market to facilitate the management and possible restructuring of the clearing member's exposures. Resolution would be more difficult if not impossible if the CCP commenced its default management process (DMP) at the same time.

An orderly resolution process, and the potential avoidance of a default by the clearing member, significantly benefits the CCP, its members and their end-user clients. The DMP at a CCP is both onerous and risky, and there is absolutely no incentive on the part of a CCP or its members to engage in default management unless absolutely necessary. It is clear, therefore, that the interests of the CCP, its supervisor and the resolution authority are well aligned, and the process will work best if the relevant authorities and interested parties (in this case, the CCP) communicate, cooperate and support each other.

Such cooperation can be based on the Financial Stability Board (FSB) paper *Guidance on Continuity of Access to Financial Market Infrastructures (FMIs) for a Firm in Resolution* as a reference guide[16], and will need to be grounded on detailed ex-ante clarifications of roles and responsibilities to ensure:

- The supervisor and resolution authority for the distressed clearing member have comfort that the third-country CCP will not commence the DMP (either on its own or as directed by its home supervisor) as long as the resolved bank satisfies requirements of the rule book; and

- The CCP's home supervisor can rely on the bank in resolution meeting margin calls and other rule book requirements.

Availability of liquidity arrangements supported by central bank access in all relevant currencies, including that of the host jurisdiction, would facilitate this and would likely be critical in tackling the market stress that could be expected in such an event.

The procedures for crisis management should be practiced on a regular basis to make all participants comfortable that the agreement will protect their interests.

[15] See also PFMI Responsibility E, Explanatory Note 4.5.5, footnote 182: "These arrangements may define the roles and responsibilities of the relevant authorities in specific (for example, crisis) scenarios"

[16] http://www.fsb.org/2017/07/guidance-on-continuity-of-access-to-financial-market-infrastructures-fmis-for-a-firm-in-resolution-2/

Recovery and Resolution

An overwhelming majority of defaults at a CCP are expected to be dealt with in line with the CCP's DMP, using pre-funded resources at the CCP, and can be seen as business-as-usual.

Recovery and resolution of a CCP is an extreme stress event. Decisions by the local supervisor can have an impact on other jurisdictions – for instance, by employing recovery tools like variation margin (VM) gains haircutting that could affect all clearing participants independent of location. As with other aspects of supervisory cooperation, the approach to these situations needs to be agreed ex-ante, as time can be of the essence – long discussion with a wide range of stakeholders may not be possible.

In the planning stage, recovery and resolution plans can be reviewed by a wide range of stakeholders, including the host supervisor(s)[17]. This role will be even more important if that jurisdiction provides tools for the smooth operation of the CCP (eg, central bank settlement, accounts, liquidity). In such situations, authorities in the host jurisdiction will be important stakeholders in the preparation and execution of the plans.

This cooperation can be arranged in line with the FSB's *Guidance on Central Counterparty Resolution and Resolution Planning*[18], which includes requirements to establish crisis management groups for CCPs that are systemically important in multiple jurisdictions.

Depending on the level of cooperation and reliance on authorities in different jurisdictions, the resolution plans should map out what decisions require agreement, and which role each authority plays.

Host authorities should also know exactly what the range of possible actions in recovery and resolution would be so they can plan accordingly.

It is worth noting that all of the above points are not only considerations between cooperating supervisors in the EU 27 and third counties, but also in situations where all parties are established within the EU.

Aligned Interests

The home supervisor acts in the name of the jurisdiction that bears the ultimate financial risk, and therefore needs to have the lead and the last word in a crisis. This, however, does not mean that the home supervisor should consider its own markets exclusively when dealing with a CCP crisis. With markets being tightly integrated, it will be very difficult to solve a local crisis without cooperation with other jurisdictions.

Recovery and resolution tools apply to all creditors alike. International guidance and European regulation already stipulate that creditors cannot be treated differently because of their country of incorporation. We therefore do not believe that recovery and resolution tools could or would be applied to the detriment of a certain jurisdiction.

[17] See also PFMI Responsibility E, Explanatory Note 4.5.5, footnote 182: "In the resolution context, relevant authorities also may exchange information regarding the resolvability of a particular FMI"

[18] http://www.fsb.org/2017/07/guidance-on-central-counterparty-resolution-and-resolution-planning-2/

With close cooperation and provision of services (such as the ability to use central bank money for payments, central bank accounts for safe-keeping of participants' cash and access to central bank liquidity, at least in emergency situations), authorities in host jurisdictions should support the home supervisor or resolution authority. This will provide incentives for that authority to solve the crisis in a way that will not negatively affect the host jurisdictions. This is particularly valid if a large part of the collateral is kept in the host jurisdiction's central bank accounts.

Eurozone Crisis

There is a belief that during the eurozone crisis, increased haircuts exacerbated market stress and raised the credit risk of European sovereigns.

A number of changes have been made since then, which should limit the potential of a repeat. These changes include:

- Introduction of the single supervisory mechanism;
- Revised PFMIs that introduce limits on pro-cyclicality;
- Improvements to CCP risk management and supervisory cooperation, following a review of changes to risk models and parameters by ESMA and the supervisory college (which includes central banks of issue);
- The swap line between the ECB and the BoE, and the enhanced arrangements for information exchange and cooperation in relation to UK CCPs with significant euro-denominated business[19]; and
- Changes to CCP haircut models based on lessons from the crisis, with the result that they are now less pro-cyclical.

ISDA believes the relevant supervisors should agree ex-ante on the models CCPs deploy to help protect against systemic risk in the jurisdictions of concern. It is expected that these models would address pro-cyclicality and possible changes in the market and wider economy.

Since coming into force in 2013, EMIR has significantly enhanced communication and cooperation between regulators, addressing the primary concern from 2011. While ISDA and its members agree that disruptive measures should be avoided, there is significant concern about subjective, reactive and unpredictable approaches that might limit the capacity of a CCP to act, therefore preventing prudent risk management.

[19] https://www.ecb.europa.eu/press/pr/date/2015/html/pr150329.en.html

Impact on Monetary Policy

Derivatives do not involve the settlement of notional amounts, but solely the exchange of mark-to-market movements every day. During the financial crisis, over-the-counter (OTC) derivatives were found to transmit and amplify stresses across the market, but they are not directly linked to monetary policy operations. CCPs act as a backstop against transmission of these risks. Risks to the system are reduced when instruments are cleared, provided adequate oversight is exercised by the relevant authorities.

Central banks should be part of CCP supervisory cooperation arrangements based on ex-ante agreements in areas that are relevant to safeguarding their role. These include:

- Margin requirements;
- Collateral eligibility;
- Collateral haircut models (see above);
- Liquidity management, especially if the CCPs have access to central bank accounts (see above); and
- Stress testing (both in terms of liquidity stress scenarios and involvement in system-wide stress tests).

CONCLUSION

No economy can entirely ring-fence its market infrastructures from outside risks

In integrated global financial markets, no economy can entirely ring-fence its market infrastructures from outside risks. Supervisors have to work together to deliver robust international markets.
By accepting the interdependencies in CCP supervision and deferring to one another where appropriate, relevant jurisdictions can build a cooperative supervision framework. If these jurisdictions also provide central bank payment facilities, accounts or liquidity to each other's CCPs, these clearing houses will become safer and there will be a foundation for robust cooperation in times of crisis.

MIGRATION APPROACHES

Migration of positions to a new CCP involves unprecedented operational and systemic risk

ISDA has highlighted the unprecedented operational risk and execution costs posed by a migration of positions to an EU 27 CCP. The EC's proposals are silent on how such a migration would be managed following the invocation of a location policy.

This section of the paper analyzes three potential migration strategies that have been proposed by supporters of a location policy:

- Grandfathering of existing transactions;
- Full migration of all transactions in scope; and
- De-recognition only after the risk of euro transactions cleared at third-country CCPs exceeds a threshold.

According to ISDA analysis, none of these strategies would produce a satisfactory outcome and mitigate the risk, cost and disruption of a location policy. In fact, these strategies would increase operational risk, execution cost and systemic risk. Given the negative outcomes, ISDA believes supervisory cooperation, as outlined in the first section of the paper, should be the preferred solution rather than a location policy.

For ease of identification, existing CCPs affected by a location policy are referred to as 'legacy CCPs'. EU 27 CCPs that would be recipients of migrated business are referred to as 'target CCPs'.

Challenge 1: Complexity of OTC Derivatives Migration

Migrating OTC derivatives from one CCP to another is complex. The approach to migration will therefore likely differ significantly from the approach taken for other products, such as cash instruments (equities, repos) or even futures.

There are two main issues specifically relevant to migrating OTC derivatives.

- Non-standard products: OTC contracts are not fungible instruments and differ from each other – for example, by maturity date, strike price, coupon and/or other contract specifications. OTC derivatives therefore have to be migrated on a transaction-by-transaction basis. Unlike some other products (such as cash equities or futures), there is no concept of an amalgamated 'position' in a given contract that can be migrated as a single lot.
- Maturity: Cleared interest rate swaps can have maturities on each and every day of up to 51 years, which means it is not possible to align the timing of any migration with the maturity roll-off of a swaps portfolio. Other asset classes typically have much shorter dated maturities (eg, cash equities, repo), which may lead to different migration strategies being suitable.

The practical result of this is that major dealers each have many tens of thousands of open OTC derivatives contracts facing the legacy CCP, each of which may have to be addressed individually.

Challenge 2: Access to the Target CCP

An activity common to all of the scenarios is that clearing participants will have to establish access to the target CCP. While large clearing members may have a pre-existing clearing relationship with the target CCP, smaller clearing members and clients will have to establish new relationships. This alone can be a multi-million euro project, especially if client clearing capability also has to be established.

When establishing a new relationship, both the target CCP and new member must complete a number of processes, including:

- Negotiating clearing fees and tariff structures;
- Negotiating documentation;
- Undertaking due diligence of the CCP by the member;
- Undertaking due diligence of the new member by the CCP;
- Establishing clearing accounts;
- Creating new data connections;
- Navigating the CCP's approval process;
- Onboarding the CCP in the firm's systems; and
- Funding additional default fund contributions. Default fund contributions will be required before migration to the target CCP is initiated, even where the clearing member is ceasing its membership of the legacy CCP and is expected to receive its contribution back. Therefore, there will be a 'doubling' up of these contributions for a period of time.

Clients will also have to find a clearing member that can provide access to the target CCP. This could either be through their existing broker or a new broker (if the existing broker will not or cannot clear at the target CCP). Finding a new broker could be difficult and depends on numerous factors, such as the size of the client, the client's approach to migration, the volume of new clients simultaneously seeking new relationships, and the conditions attached to clearing at the target CCP.

If a new broker is used, onboarding would include:

- Completing anti-money laundering and 'know your customer' checks;
- Undertaking due diligence on the client – for instance, according to Article 25 of the Markets in Financial Instruments Directive regulatory technical standard 6;
- Onboarding as a client of the broker;
- Establishing clearing accounts;
- Negotiating terms;

- Negotiating documentation;
- Implementing data links and other technology changes; and
- Potential changes in provided information and workflow for the client.

If the client can use the existing broker, then the overall impact would be mitigated to the extent that existing arrangements can be re-used. However, at a minimum, documentation and some processes would have to be amended to incorporate the rule book of the target CCP.

Finally, the client base of EU clearing members would necessarily be reduced, as non-EU clients would not be bound by denial of recognition and would likely still want access to the legacy CCP's liquidity. The EU clearing members may therefore lose non-EU customers, which could then threaten their business (by reducing their available clients). If this in turn causes EU clearing members to withdraw from client clearing, it would affect the pricing, availability and risks of clearing for EU clients.

Challenge 3: Migration of Transactions

A CCP has to have a matched book. For each contract to be migrated, a counterparty has to be found to take the other side of that transaction – one for the legacy CCP and one for the target CCP.

For each and every transaction at the legacy CCP, clients and clearing members will have to find a counterparty in the market willing to sell an exactly offsetting closing transaction. As these transactions can be older and off-market, counterparties could be difficult to find. As a result, the transactions would likely be more expensive and, being at an off-market rate, unavailable on a trading venue.

The participant would then have to find a counterparty to establish the same transaction at the target CCP, with the same issues associated with non-standard transactions.

Counterparties for both closing and re-opening transactions will know there is regulatory pressure for affected participants, and will price the transactions accordingly. This would likely create an unnecessary expense for participants affected by the migration.

During the migration, it will be extremely difficult to ensure portfolios at the legacy and target CCPs are always balanced. Establishing this balance will likely result in increased risk and margin at both CCPs. This will lead to higher risk in the overall financial system and the requirement for market participants to fund margin and default funds at both CCPs during the migration.

The migration process would have to be repeated for all transactions, and firms seeking to migrate whole portfolios would probably do so at a high price. Indeed, affected participants would likely have to cross the bid-offer spread for each transaction migrated.

Affected firms could choose to establish their positions at the target CCP by opening fewer transactions that collectively recreate the required risk profile, instead of re-establishing all transactions at the target CCP one-by-one. However, this would require a high level of coordination to ensure the client is not exposed to additional risk if transactions are closed and re-opened on different days.

From a documentation perspective, termination provisions within existing clearing documentation may be triggered as a result of a compulsory migration, forcing a clearing broker to close out against its client in the event of it becoming illegal or impossible to continue maintaining cleared transactions at a particular CCP.

In addition, because the migrations cannot occur as novations but rather as a termination and re-establishment, the termination of trades at the legacy CCP and re-establishment at the target CCP will have potentially serious tax and accounting consequences for participants (eg, crystallization of profits and losses).

'Porting' of client positions from one clearing broker to another under client cleared derivatives agreements (such as the ISDA/FIA Client Cleared OTC Derivatives Addendum) is dependent on the availability of an alternative clearing broker connected to the target CCP, the client fulfilling certain conditions prior to porting, and the ability to clear through the target CCP pursuant to the relevant agreement[20]. This is necessary whether porting occurs in the event of a clearing broker default, an illegality event (as described above) or otherwise upon a client's request. Similar issues would have to be analyzed if clients of a clearing member are permitted to clear through the legacy CCP but the clearing member is not. The clients would need to port to clearing members permitted to clear through the legacy CCP.

Such conditions may vary from broker to broker. In the event these conditions are met, the replacement clearing broker typically retains some discretion over whether to accept the transactions for porting. Migrating positions within a short time frame would adversely impact clients due to a multitude of factors, including the likelihood of market stress, and the difficulty of finding a replacement broker and negotiating equivalent terms.

Where the prevailing commercial terms were established at historically advantageous rates for clients, renegotiation under constrained conditions may end up disadvantaging them. This potentially creates a scenario where the client is required to accept materially worse commercial terms as a consequence of migrating positions to a replacement broker.

Overall, this process would lead to huge operational risks and costs for affected clients and clearing members, which will predominantly be from the EU 27. Large-scale migration would also increase risk in the overall financial system because of temporarily unbalanced portfolios during the transition.

Challenge 4: Clearing Issues Related to Grandfathering

Grandfathering would allow legacy CCPs to clear existing transactions, up to a certain cut-off date. All new transactions from the cut-off date would have to be cleared at target CCPs.

While superficially attractive on first inspection, deeper analysis of grandfathering suggests a host of difficulties. For example:

- With grandfathering in place, EU 27 participants will not be able to manage portfolios at the legacy CCP. This could result in increased margin requirements and liquidity strain between the legacy CCP where the legacy portfolio is held and the target CCP where new hedges would have to be booked.

[20] This is a very important consideration as work on porting of client positions has historically contemplated porting from one clearing member to another clearing member at the same CCP

- The legacy CCP would need clarity over whether it has access to a sufficient breadth of liquidity providers in a given product if certain participants maintain their positions there but are not able to participate in the DMP.
- If EU 27 participants are allowed to add risk-reducing transactions to run down their portfolios at the legacy CCP, their risk management costs would increase. The participants would be unable to make markets and would have to 'cross the spread' each time they add a risk-reducing transaction.
- The legacy CCP could be forced to terminate clearing members and their clients that are not allowed to risk manage their portfolios and cannot participate in the DMP. Should the denial of recognition make an exception and allow participation in the DMP, these clearing members would have no incentive to bid as they cannot risk manage the won portfolio at the legacy CCP. The integrity of the legacy CCP would be called into question should some clearing members not be suitably incentivized to bid aggressively in the DMP, because of the difficulty in trading out of the positions.

Challenge 5: Interdependency of Cleared and Non-cleared Transactions

A clearing member's CCP risk position is not only determined by today's and tomorrow's positions with the CCP, but also by some of its non-cleared transactions.

By way of example, in the interest rate space, swaptions are not cleared. However, they often exercise into a swap that will be cleared at a specified CCP (eg, the legacy CCP). This swaption might be hedging callable bonds, mortgages with prepayment options or corporate loans with prepayment features, all of which exist outside the world of CCPs.

A large number of swaptions currently exist that, upon exercise, will result in cleared swaps at the legacy CCP. Some of those swaptions will exercise in 20 years' time. Pricing and risk management of these transactions assumes exercise at the legacy CCP. As a consequence, issues caused by the prevention of access to the legacy CCP could reverberate for a very long time, as and when these swaptions are exercised. There are two scenarios:

- These swaption contracts are grandfathered (as they were in Dodd-Frank clearing obligations: physical non-cleared exercises do not have to clear if the option was executed before mandatory clearing began). In that case, the swaption would exercise into the legacy CCP as planned. For such trades resulting from the exercise, the same issues of managing the position at the legacy CCP apply.
- The exercise of these swaptions is not grandfathered, which means they will be exercised into the target CCP. In this case, it creates an unexpected exposure, both at the legacy CCP (exercise was expected but did not occur) and the target CCP (exercise wasn't expected to occur but now does).

If clearing cannot occur according to the original terms (which would have been exercised at the legacy CCP), then cash settlement could occur instead as a contractual fallback. Invoking cash settlement would not mitigate the issue: a physical exercise that was expected did not occur, and the physical delta hedge has to be executed at extra cost separately as a new trade, which would then be cleared at an EU 27 CCP, where no exercise was expected.

This issue is mainly relevant for EU 27 firms, but will also affect entities outside the EU 27 if their swaption counterparty is an EU 27 firm.

Summary of Migration Strategies

The following tables summarize three migration strategies – grandfathering, full migration and de-recognition subject to a threshold – with respect to their impact on clients, clearing members, CCPs and systemic risk. The issues described above are not repeated in the tables.

Grandfathering of Existing Transactions	
Description	Existing transactions up to a certain date can be cleared by a legacy CCP. All new transactions from this point will have to be cleared at the target CCP. A variation of this approach allows clearing risk-reducing transactions at the legacy CCP, even after the cut-off date.
Impact on Clients	• By not being allowed to add transactions to their portfolio at the legacy CCP, clearing participants (clients and clearing members) might also lose access to trading venues that are only cleared by the legacy CCP. • No forced migration and no market disruption once the location policy is invoked.
Impact on Clearing Members	• Same as for clients. • Increased directionality at CCPs implies higher default fund contributions per clearing member.
Impact on CCPs	• Both the legacy CCP and target CCP will have more directional portfolios, as the hedges in the legacy portfolio have to be booked in the target CCP. This could make the DMP more costly and risky, as both CCPs will ask the market to absorb more risk.
Systemic Risk	• Increased directionality in both legacy and target CCP. • Liquidity strain on clients and clearing members due to increased initial margin and VM payments for hedges that are not cleared where the legacy portfolio is. • Smaller operational risk than no full migration.

Full Migration of All Transactions in Scope	
Description	All transaction in scope have to be migrated within a given migration period.
Impact on Clients	• Huge cost for affected clients and clearing members.
Impact on Clearing Members	• Same as for clients.
Impact on CCPs	• Both the legacy and target CCPs will have more directional portfolios during the transition. • Increased transaction volume at both CCPs, coupled with more operational risk for non-standard migrations. • During the migration period, both CCPs would be less stable due to more directional and concentrated portfolios and the operational challenges of the mass migration.
Systemic Risk	• Such an exercise would create incredible operational challenges and legal complexities. No regulator in any jurisdiction has to date attempted to implement a location policy that involves moving such a vast amount of derivatives-related risk from one CCP to another, let alone from a CCP in one jurisdiction to another. (About €150 trillion notional volume of euro-denominated swaps has been cleared at LCH SwapClear in the year to August 2017, a quarter of which is for EU counterparties).

De-recognition Only After Risk of Euro Transactions Cleared at Third-country CCPs Exceeds a Threshold	
Description	The EC would declare a threshold of the risk allowed to be cleared at a third-country CCP. This might be calculated as: $\frac{\text{(Average IM for EUR transactions)}}{\text{(Average total IM)}}$ This percentage would be reduced every year. Should the threshold be exceeded, the CCP would be de-recognized.
Impact on Clients	• As long as the threshold is not exceeded, all participants can migrate transactions in a way that avoids portfolio imbalances. • Once the threshold is exceeded, the same issues described above under 'Access to the Target CCP' and 'Migration of Transactions' apply, unless the majority of transactions have been moved before.
Impact on Clearing Members	• Overall as for clients above. • Non-European clearing members not affected by a threshold breach would not be incentivized to migrate their transactions, which in turn makes it more likely that the threshold is exceeded. Three quarters of all volume does not have an EU nexus. The threshold either has to be very high, or will easily be exceeded.
Impact on CCPs	• While the threshold has not been exceeded, the impact on both the target and the legacy CCP is minimized. After it has been exceeded, the impact is the same as for a full migration, unless many transactions have been moved voluntarily before.
Systemic Risk	• While the threshold has not been exceeded, the systemic risk impact is minimized. • After the threshold is exceeded, and unless many transactions have been moved voluntarily before, the impact is the same as for a full migration, including the systemic risk of a full migration.

CONCLUSION

No regulator in any jurisdiction has to date attempted to implement a location policy involving a wholesale migration of transactions

The introduction of a CCP location policy for euro-denominated trades means that all affected clearing participants will have to establish a connection to the target CCP at considerable cost.

A full migration will create significant operational challenges and legal complexities. No regulator in any jurisdiction has to date attempted to implement a location policy (or any other type of policy) involving the movement of such a vast amount of derivatives-related risk from one CCP to another, let alone from a CCP in one jurisdiction to another. This would likely result in significant disruptions and increased systemic risk. All previous migrations of risk between CCPs have been much smaller in scale and have involved the entire membership, client base and CCP portfolio being novated to a new CCP in a single move.

Should a significant loss event (either from a clearing member default or otherwise) impact the legacy or target CCPs during a migration period, the risks to financial stability would be vastly increased for market participants. There would be significant complexity in allocating responsibilities for supervising and managing the loss event. A longer grandfathering period, while beneficial in allowing time for participants to migrate positions in an orderly and efficient manner, would also serve to extend the period during which participants are exposed across two CCPs, with the potential for loss events.

Mitigants proposed, such as offering grandfathering, could reduce the burden of a full migration, but would introduce other risks and costs. This includes participants not being able to risk manage their legacy portfolios and CCPs being left with clearing members that cannot fully participate in the DMP. It is not obvious that this would be acceptable to the CCP or its supervisors, which could result in a full exit for those firms, leading to a full migration.

A migration solution where the amount of risk cleared at third-country CCPs reduces every year is ultimately the same as a migration with a longer time period. This is unlikely to work, as a considerable amount of risk is cleared between firms without an EU 27 nexus, which would not be affected by a location policy.

ISDA believes no migration strategy is able to mitigate the issues associated with such an enormous undertaking. The risks and costs of such a migration would add, unpredictably, to the risks and costs of fragmented markets that are caused by a location policy. Before invoking a location policy, authorities should very carefully analyze the risks, costs and disruption on CCP participants, the majority of which will be EU 27 firms.