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Legal Perspectives on Client Clearing

Jo Braithwaite^{*}

Abstract: The post-crisis global regulatory regime for the over-the-counter ('OTC') derivatives markets mandates the use of central counterparties ('CCPs'). CCPs serve markets by becoming buyer to every seller and seller to every buyer. Two techniques, selective membership and collecting margin, are central to CCPs working safely. The objective of this article is to use a legal perspective to consider how G20-led reforms to the OTC markets interact with, and complicate, these two techniques. The article starts by establishing that arrangements allowing CCP members to access clearing service for their clients ('client clearing') will become increasingly important as a result of regulatory reform, because parties unwilling or unable to become members will now require access. The article then demonstrates how client clearing complicates the legal underpinnings of CCPs, in particular as they relate to the provision of margin. The problematic interaction between the new clearing regime and the UK rules on client assets is considered as an example. The article concludes that these legal complexities need to be addressed at EU level in order to safeguard the functions that attracted regulators to clearing in the first place.

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INTRODUCTION

Central counterparties (‘CCPs’) are post-trade, pre-settlement market infrastructure. They clear contracts of many kinds by becoming buyer to every seller and seller to every buyer. A combination of legal techniques including novation, netting and asset-backing enables CCPs to assume market participants’ counterparty credit risk, and act as a ‘shock absorber’ by mutualising losses in times of market failure. For this reason, CCPs can be thought of as ‘legal devices’, where underlying legal techniques both explain and constrain how clearing services work.¹

This legal perspective helps to evaluate the robustness of market infrastructure like CCPs. It reveals inherent challenges of a legal nature and informs how they should be met. For example, reliance on members’ margin (i.e., the assets they transfer to their CCP) means that CCPs, as well as their supervisors, must address fundamental questions directly arising from the law of property. These include questions about how assets should be transferred, and how assets should be protected on behalf of different members. The same legal perspective can also be used to assess more complex and dynamic issues. For instance, it offers a way of exploring the interaction between different legal techniques, and how those techniques may be complicated by exogenous factors like public sector regulation.

Building on this insight, this article offers a legal analysis of the interaction between two of a CCP’s key risk management tools, being selective membership and collecting margin, taking account of the new regulatory regime for over-the-counter (‘OTC’) derivatives.² The analysis is developed over three parts. Part 1 discusses the regulatory context and explains the newly enhanced role for CCPs in the ‘perimeter changing measures’³ implemented worldwide since the financial crisis. In particular, this part focuses on the impact of new rules imposing a ‘clearing obligation’, which will affect a broad range of actors, including corporate and other non-financial end-users of OTC derivatives.

Part 2 turns to the legal analysis of CCP clearing. It starts by cautioning that CCPs can only function in carefully controlled conditions. One such condition is selective membership, which allows CCPs to limit the number of shocks they have to manage, and withstand shocks better when they happen. The introduction of *compulsory* clearing, however, potentially conflicts with this aspect of CCPs’ autonomy because such a rule is premised on all non-exempt market participants

¹ J. Braithwaite, ‘The inherent limits of ‘legal devices’’ (2011) 12 *European Business Organisation Law Review* 87.

² Derivatives are bilateral contracts under which the rights and obligations derive from an underlying asset, index or benchmark, e.g. interest rate swaps. See the definition of derivatives and accompanying discussion in J. Benjamin, *Financial Law* (Oxford: OUP, 2007), 65. For a discussion of ‘OTC’ derivatives, see n 19 below.

³ N. Moloney, *EU Securities and Financial Markets Regulation* (Oxford: OUP, 3rd ed, 2014), 34.

being able to gain access to clearing services. As the article demonstrates, this conflict is mitigated, but not solved, by the possibility of ‘client clearing’ and ‘indirect clearing’, which provide alternative routes to clearing services, through a member. As the article explains, this means that one of the effects of the new regulatory regime for OTC derivatives will be to heighten the systemic importance of the legal structures behind client clearing arrangements.

With this in mind, part 3 of the article explores how client clearing interacts with the legal underpinnings of CCPs themselves. Focusing on the provision of margin, the article explains how the legal techniques that are fundamental for CCPs are significantly complicated by arrangements affording clients access to clearing. In particular, the rules on client money, recently overhauled as a direct result of the financial crisis, are imported into the clearing context when client clearing is used. Part 3 of the article demonstrates how CCP members acting in this capacity are subject to a patchwork of rules, as the clearing and client assets regimes sit awkwardly together. The article concludes that these legal complexities need to be addressed at EU level in order to safeguard the functions that attracted regulators to clearing in the first place.

1. THE REGULATORY CONTEXT

In the immediate aftermath of the global financial crisis, the G20 quickly turned its attention to reforming the OTC derivatives markets. This ambitious use of political capital reflected the fact that various types of these privately-traded derivatives, especially credit default swaps (‘CDS’), were implicated in disasters like the near-collapse of AIG.⁴ Accordingly, the statement issued after the G20’s September 2009 Pittsburgh meeting included the declaration that all ‘standardized OTC derivatives contracts’ should be ‘traded on exchanges or electronic trading platforms, where appropriate’ and cleared through CCPs by ‘end-2012’.⁵ These measures have subsequently become ‘one of the defining features of the G20’s reform programme’⁶ seeking to increase financial stability by addressing the concentration of risk, increasing market resilience, and improving the transparency of these opaque markets.⁷

⁴ National Commission on the Causes of the Financial and Economic Crisis in the United States, *The Financial Crisis Inquiry Report* (New York: Public Affairs, 2011), Chapter 19.

⁵ Leaders’ Statement, ‘The Pittsburgh Summit 25-29 September 2009’, 9. Available at https://g20.org/wp-content/uploads/2014/12/Pittsburgh_Declaration_0.pdf (all websites last accessed 14 June 2015).

⁶ Moloney, n 3 above, 573.

⁷ Reflected in the Recitals of EMIR, e.g. Recital 4 which states that the Regulation seeks to mitigate risks relating to interdependence in the OTC derivatives markets and improve the transparency of derivative contracts. Regulation (EU) No 648/2012 of 4 July 2012 on OTC derivatives, central counterparties and trade repositories. This Regulation is known as the European Market Infrastructure Regulation, hereafter ‘EMIR’.

The G20's agenda has triggered complex legislative activity worldwide, but, despite the stated deadline of 'end-2012', it has not been fully implemented in any jurisdiction yet. This piecemeal progress is helpfully charted by the Financial Stability Board in its regular Implementation Reports.⁸ To date, the US and EU have both implemented framework legislation on OTC derivatives markets reform, the details of which are still being fleshed out by delegated legislation. The US is further along this process than the EU, with reforms having been set out in Title VII of the Dodd-Frank Act 2010.⁹ In the EU, they are principally to be found in the European Market Infrastructure Regulation ('EMIR')¹⁰ and within the 2014 MiFID II/ MiFIR regime.¹¹ Overall, the combined effects of these new rules for the hitherto private and largely self-regulated OTC derivatives markets is dramatic; they have been described as representing 'a paradigm shift in the intensity with which OTC derivatives markets are regulated.'¹²

One of the central planks of the G20 reform agenda is that standardised OTC derivatives must be cleared through a CCP, rather than remaining as private, bilateral contracts between counterparties, where each assumed the credit risk of the other's default. Why would the G20 seek to impose this particular reform? One reason identified in the literature is that CCPs performed effectively during the crisis, even being described as the 'unlikely heroes' of the collapse of the Lehman Brothers group.¹³ LCH.Clearnet Group, for example, dealt with open Lehman Brothers positions with a notional value of \$10 trillion.¹⁴ It did so by moving Lehman Brothers' clients' accounts to other members of its CCPs, and, as regards Lehman Brothers' proprietary positions, it used assets deposited by these entities to hedge their exposures.¹⁵ This high-profile demonstration of the benefits of CCPs in contributing to market resilience seems to have helped influence the G20's decision to make the clearing of eligible contracts mandatory.¹⁶

⁸ Financial Stability Board, OTC Derivatives Markets Reform: Eighth Progress Report on Implementation (7 November 2014), Appendices A-E inclusive.

⁹ Dodd-Frank Wall Street Reform and Consumer Protection Act 2010, H.R. 4173.

¹⁰ EMIR, n 7 above.

¹¹ Markets in Financial Instruments Directive 2014/65/EU ('MiFID II') and Markets in Financial Instruments Regulation (EU) No 600/2014 ('MiFIR'), collectively the 'MiFID II/ MiFIR regime'.

¹² Moloney, n 3 above, 576.

¹³ P. Norman, *The Risk Controllers* (Chichester: Wiley, 2011) 3 and chapter 3.

¹⁴ *ibid.*, 26 (offering an account based on interviews with LCH.Clearnet executives).

¹⁵ *ibid.*, 28-35. In a 2013 article, Mark Carney, then the Chair of the Financial Stability Board, contrasted the uncertainty and 'stress' in the CDS market after the collapse of Lehman, with '[o]ther derivatives markets that were backed by strong financial infrastructure such as central counterparties (CCPs) or exchanges'. He concluded that '[t]his experience provides important lessons for the reform agenda.' M. Carney, 'Completing the G20 reform agenda for strengthening over-the-counter derivatives markets' (April 2013), 17 *Financial Stability Review (Banque de France)* 11, 12.

¹⁶ See, e.g., T. Lane, J. Dion and J. Slive 'Access to central counterparties: why it matters and how it is changing' (April 2013) *Financial Stability Review (Banque de France)* 169, 170: 'This [G20] commitment arose directly from the experience of the global crisis: markets for OTC derivatives that were settled bilaterally lacked transparency with respect to exposures and concerns about counterparty default intensified during the crisis, transmitting stress throughout the global financial system'. See also Norman: 'The success of the LCH.Clearnet Group and other clearing houses in the aftermath of the Lehman bankruptcy made

In the new EU regime, the ‘clearing obligation’ is found in Article 4 of EMIR, which is fleshed out in Commission Delegated Regulation 149/2013.¹⁷ The obligation applies to ‘OTC derivatives contracts’, where the definition of derivative is that used in MiFID I,¹⁸ and ‘OTC’ is defined as contracts which have not been executed on a ‘regulated market’.¹⁹

Under Article 4, OTC derivatives contracts will be subject to mandatory clearing if two conditions are met. First, it must be a type of derivative to have been declared subject to the clearing obligation and entered in a public register maintained by the European Securities and Markets Authority (‘ESMA’).²⁰ EMIR provides that classes of contracts may become subject to the clearing obligation either by a ‘top down’ approach initiated by ESMA acting ‘on its own initiative’, or by a ‘bottom up’ approach, based on classes of contracts already cleared by CCPs.²¹ In the EU, at the time of writing, no classes of contracts have yet been declared subject to the clearing obligation, though the ‘bottom up’ approach outlined in Article 5(2) of EMIR has been triggered by the first authorisations of CCPs by competent authorities. Accordingly, at the time of writing, ESMA has submitted to the Commission draft regulatory technical standards in relation to certain interest rate products, and standards are also reportedly in progress in relation to certain standardised credit derivatives.²²

The second condition for the clearing obligation to apply is that the contracts involved must be between certain types of parties, as listed in Article 4 of EMIR. The starting point is that the obligation will apply to contracts concluded ‘between two financial counterparties’ (‘FCs’).²³ FCs are defined in Article 2(8) of EMIR. The definition is broad, and includes investment firms, credit institutions, UCITS, insurance and reinsurance undertakings and alternative investment funds. Under Article 4, the clearing obligation will also apply to a contract where one or both parties is a ‘non-financial counterparty’ (‘NFC’), as long as the NFC exceeds the clearing threshold.²⁴ NFCs are defined as undertakings established in the European Union, other than CCPs and FCs.²⁵ As demonstrated later in this article,

clearing OTC trades a high priority for policy makers in their efforts to learn from the financial crisis.’ Norman, n 13 above, 47.

¹⁷ Commission Delegated Regulation (EU) No 149/2013 of 19 December 2012. This is one of the Commission Delegated Regulations which expand upon the EMIR framework by providing regulatory technical standards, six of which were adopted in December 2012. For discussion of the role of the European Securities and Markets Authority (ESMA), which publishes, consults and proposes these regulatory technical standards to the Commission, see Moloney, n 3 above, 577 (in the context of EMIR) and 920-938 (ESMA’s role more generally).

¹⁸ Markets in Financial Instruments Directive 2004/39/EC (‘MiFID I’). The definition is as set out in points (4) to (10) of Section C of Annex 1 and cross-referenced in Article 2(5) of EMIR.

¹⁹ Article 2(7) of EMIR, cross-referencing the definition in Article 4(1)(14) of MiFID I.

²⁰ Article 6(1) of EMIR.

²¹ Articles 5(3) and 5(2) of EMIR, respectively.

²² ESMA’s website on EMIR sets out updates on the clearing obligation at <http://www.esma.europa.eu/page/OTC-derivatives-and-clearing-obligation>

²³ Article 4(1) of EMIR.

²⁴ Article 4(1)(a) of EMIR.

²⁵ Article 2(9) of EMIR.

this definition of FC and NFC catches a far greater range of parties than are currently members of UK CCPs.

Contracts involving NFCs will not have to be cleared unless the NFCs involved exceed the ‘clearing threshold’.²⁶ These thresholds have been set by Commission Delegated Regulation, with the figures provided for each of five asset classes, including €1 billion gross notional value for credit derivatives and €3 billion gross notional value for interest rate derivatives.²⁷ Critically, the only contracts which have to be counted for this purpose are those ‘which are not objectively measurable as reducing risks directly relating to the commercial activity or treasury financing activity of the non-financial counterparty or of that group’.²⁸ In effect, this provides an exemption for contracts used for hedging business risk, for example, an airline hedging oil prices. Conversely, a NFC over the individual threshold in any category (called a NFC+)²⁹ would have to clear all classes of derivatives (whether entered into for hedging or speculating) for as long as it was over any of the thresholds.

EMIR does not cover derivatives traded on a ‘regulated market’,³⁰ though MiFIR includes a separate obligation that these products must be cleared.³¹ The MiFID II/ MiFIR regime also implements the G20’s reform agenda for the OTC markets, and it ‘is designed to be closely aligned with EMIR’.³² Its other main contribution in this respect is the provision that certain OTC derivatives (which are deemed to be standardised and sufficiently liquid) will be subject to a ‘trading obligation’, meaning that they may only be traded on regulated markets, multilateral trading facilities (MTFs) or organised trading facilities (OTFs). These trading venues will afford greater transparency, better regulatory monitoring and operational efficiencies.³³ The objectives of this measure clearly echo those underlying the clearing obligation in EMIR. While the MiFID II/ MiFIR regime raises important issues for CCPs, including as a consequence of the requirement that clearable derivatives agreed on trading venues are cleared promptly, and about how trading venues access CCPs, this article focuses on the clearing obligation under EMIR and membership of CCPs themselves.

²⁶ Article 10(1)(b) of EMIR.

²⁷ Article 11, Commission Delegated Regulation (EU) No 149/2013, setting out the clearing threshold values for the purpose of the clearing obligation. See also the accompanying information for UK NFCs provided by the UK Financial Conduct Authority (‘FCA’), ‘Obligations for non-financial counterparties under EMIR: The hedging definition and the clearing threshold, available at €1 billion gross notional value’ available at <http://www.fca.org.uk/firms/markets/international-markets/emir/obligations-non-financial-counterparties>

²⁸ Article 10(3) of EMIR and Commission Delegated Regulation (EU) No 149/2013.

²⁹ The FCA calls such entities ‘NFC+’. See guidance on the obligations of NFC+ entities at FCA, n 27 above.

³⁰ Article 2(7) of EMIR, and see n 19 above.

³¹ Article 29(1) of MiFIR.

³² Moloney, n 3 above, 623.

³³ *ibid.*

While the EMIR clearing obligation broadly tracks that found in Title VII of the Dodd-Frank Act, there are significant differences between the two regimes. This is not only a source of ongoing political controversy,³⁴ but also of friction for entities having to comply with both sets of rules.³⁵ These differences may be found, for example, in terms of the detail of how a contract becomes subject to mandatory clearing, which parties may be exempt, and, more fundamentally, arising from the fact that within the US itself, regulation of the OTC markets is fragmented due to the jurisdictional split between the SEC (responsible for ‘security-based swaps’) and the CFTC (responsible for ‘swaps’). Furthermore, as already noted, the US is implementing obligations under Dodd-Frank Act ahead of other jurisdictions. The mandatory clearing of standardised interest rate swaps and credit derivatives has been phased in since 2013, with the timing depending on the type of party involved in the trade.

Looking at the worldwide OTC markets, though the clearing obligation has not yet come into force in many jurisdictions, there is already significant, and growing, use of clearing. The Bank of England reports that 50% of the global OTC interest rate derivatives market was centrally cleared in January 2015, compared to 31% in April 2012.³⁶ Notwithstanding the delayed and piecemeal implementation of the G20’s agenda, therefore, CCP clearing has already become a vitally important part of the global financial market infrastructure.

2. ACCESS TO CLEARING

THE ‘MEMBERSHIP DILEMMA’

One reason that the clearing obligation in EMIR has caused concern is that it sweeps up a broad range of market participants, including, as shown, not only FCs but NFC+s. This is of real relevance in practice, as OTC derivatives famously have a very broad range of uses and users.³⁷ For instance, a recent Research Study published by ISDA,³⁸ demonstrates how trades involving diverse participants have

³⁴ For a recent e.g. see J. Rennison, ‘US Superior to Europe on futures margin’, *Financial Times* (14 May 2015), discussing disagreement between EU and US regulators on levels of margin to be posted to CCPs in relation to futures trades and describing a ‘two -year spat over recognition of each other’s rules’.

³⁵ Many financial services firms now offer comparative guides to Dodd-Frank and EMIR which illustrate the task for clients having to comply with both. See for e.g. PWC, ‘The bottom line: Enter EMIR, You’re going to need a bigger boat’ *Financial Services Regulatory Briefing* (March 2013), which explains ‘The bottom line- Get ready for an expensive undertaking as you conform to at least two sets of global derivatives rules’, 1. Available at http://www.pwc.com/en_US/us/financial-services/regulatory-services/publications/assets/pwc-fs-reg-brief-derivatives-emir.pdf

³⁶ The Bank of England, *The Bank of England's supervision of financial market infrastructures—Annual Report* (March 2015), [1.1], citing data from DTCC trade information warehouse reports and Bank calculations.

³⁷ Benjamin, n 2 above, 86-91.

³⁸ The International Swaps and Derivatives Association, which is the trade association for participants in

become a more significant portion of market turnover in the last decade. Based on data published by the Bank for International Settlements ('BIS'),³⁹ ISDA reports that in 2013, 65% of the OTC derivatives markets by turnover were trades between reporting dealers (i.e. major banks and securities houses)⁴⁰ on the one hand, and 'other financial institutions' such as pension funds, or non-financial counterparties such as manufacturers, on the other. Accordingly, only 35% of the market by turnover were trades where both parties were reporting dealers (and, as ISDA points out, some of this is necessary to support client trading).⁴¹ Moreover, inter-dealer activity has sharply declined as a percentage of market turnover since 2001, when such trades were 66% of market turnover.

As a result, we need to consider the types of entities which may need (or wish) to access clearing services for OTC derivatives under the new global regulatory regime, alongside the types of entities that are able or willing to become members of CCPs, and thereby able to access clearing direct. This part of the article considers the implications of a potential mis-match, and explains how it is mitigated, though not solved, by structures allowing alternative ways of accessing clearing.

ACCESSING CLEARING

Accessing clearing services was relatively straightforward when early CCPs⁴² served clubs trading tulip bulbs,⁴³ the London Stock Exchange's brokers,⁴⁴ Liverpool cotton traders,⁴⁵ or other 'club markets', with pre-selected, close-knit participants dealing in contracts with relatively short maturities.⁴⁶ By contrast, the question of access to modern services clearing OTC derivatives raises issues which are legally complex, technically challenging and more politicised. In order to explore why this is the case, the three ways of accessing clearing are considered below.

the OTC derivatives markets, with other 800 members in 67 countries. See

<http://www2.isda.org/about-isda/>

³⁹ ISDA, 'Dispelling Myths: End user activity in OTC derivatives' (August 2014) ISDA Research Study. Available at <http://www2.isda.org/functional-areas/research/studies/>

⁴⁰ '[A]pproximately 400 large commercial and investment banks and securities houses in 47 countries, including their branches and subsidiaries worldwide' that take part in BIS's derivatives survey. *Ibid*, 17.

⁴¹ *Ibid*, 6.

⁴² The historical development of central clearing is discussed in the context of a detailed account of OTC derivatives CCPs in D. Murphy, *OTC derivatives: Bilateral Trading and Central Clearing* (Basingstoke: Palgrave Macmillan, 2013) chapter 6.

⁴³ Norman, n 13 above, 52-53 on the Dutch Golden Age.

⁴⁴ Norman describes how the London Stock Exchange set up a clearing house for its brokers in 1874. *Ibid*, 55.

⁴⁵ *Ibid*, 59-61.

⁴⁶ H. Collins, *Regulating Contracts* (Oxford: OUP, 1999) 212-218.

Membership

Article 2(14) of EMIR defines a ‘clearing member’ as ‘an undertaking which participates in a CCP and which is responsible for discharging the financial obligations arising from that participation.’ This definition neatly captures the linked rights and responsibilities involved in CCP membership. Members may access clearing services and enjoy the security of facing a CCP rather than facing a market counterparty, whose counterparty risk they may have had to manage with collateral or guarantees or other third party promises. In return, members must post margin to their CCP and contribute to a shared, pre-funded default fund. They also assume operational and administrative obligations towards running the CCP, as set out in a detailed membership agreement. For example, upon a fellow member’s default, non-defaulting members may be expected to participate in an auction of the defaulter’s positions.⁴⁷ Should the defaulter’s margin prove insufficient to cover any losses, non-defaulting members’ margin and default fund contributions and other resources will be used to meet losses. These assets will be deployed in the order according to a ‘default waterfall’, the structure of which is designed by each CCP, based on Article 45 of EMIR. Thus, members depend on a CCP to clear their positions, while CCPs depend on members to be able to operate in a robust and resilient way. This symbiosis helps to explain why a CCP must be so careful about selecting and monitoring its members.

The membership criteria for clearing services for OTC derivatives are onerous, even by the standards of other clearing services. This is because a CCP faces more risk clearing OTC derivatives, which have very high values and long maturities compared to other cleared contracts (e.g., for commodities), while the operational complexities involved in clearing OTC derivatives are also far greater.⁴⁸ LCH.Clearnet, for example, ordinarily requires that parties applying to be a type of member called futures commission merchant (‘FCM’) Clearing Member maintain adjusted net capital of a minimum of \$7.5m. However, if the applicant intends to clear interest rate derivatives on its SwapClear service (for interest rate swaps), the minimum becomes \$50m.⁴⁹ There is also variation between membership criteria depending on the type of OTC derivatives to be cleared. For example, CME Group requires members to maintain minimum net capital of £10m to clear OTC commodity derivatives, but for OTC interest rate swaps this figure is the higher of USD50m, 20% of the aggregate collateral requirement for

⁴⁷ Article 37(6) of EMIR allows CCPs to ‘impose specific additional obligations on clearing members, such as the participation in auctions of a defaulting clearing member’s position.’

⁴⁸ EMIR recognises that such concerns underpin membership criteria, stating that they should ‘ensure that clearing members have sufficient financial resources and operational capacity to meet the obligations arising from participation in a CCP.’ Article 37(1) of EMIR.

⁴⁹ LCH.Clearnet Limited, ‘FCM Regulations of the Clearing House’ (last updated 30/3/15), Regulation 4(c)(ii), available at <http://www.lchclearnet.com/documents/731485/762514/fcm-regulations-ot-26-05-15/4a475524-70da-46a4-974f-94e3f1096045>

See Lane, Dion and Slive suggesting that capital requirements have been reduced from previous highs, n 16 above, 172.

all its interest rate swap accounts, or such a figure as the CCP's Risk Committee recommends.⁵⁰

Article 37 of EMIR, which deals with a CCP's 'participation requirements' sets out, in very broad terms, the objectives which should guide CCPs when setting their membership criteria. CCPs 'shall ensure that clearing members have sufficient financial resources and operational capacity to meet the obligations arising from participation in a CCP.'⁵¹ Further, members must comply with entry criteria on an 'ongoing basis' for the duration of their membership.⁵² A CCP may also impose 'specific additional burdens'⁵³ on CCPs members. In practice, the resulting membership criteria are demanding financially and operationally, both at the time of applying and thereafter. Potential members must demonstrate high levels of technical capacity and satisfy numerous corporate governance requirements.⁵⁴ As discussed by Murphy, members of CCPs may be required to participate in 'fire drills' where the CCP runs through its procedures for an emergency.⁵⁵ Representatives of members must also take part in a CCP's risk committee.⁵⁶ This is not to forget that membership is also expensive, not only because of the requirements to post margin and a default fund contribution, and pay fees, but also, as Lane, Dion and Slive point out, because of indirect costs through capital requirements. Clearing members which are banks will face increased costs under new regulatory capital rules. Specifically, they will 'incur higher costs on their credit exposures to a CCP, on pre-funded default fund contributions and on exposures to clients who clear indirectly through them.'⁵⁷

While there is concern amongst international regulators that clearing services and other parts of the financial market infrastructure are accessible, it is notable that the new regulatory framework continues to reserve discretion over membership criteria to CCPs, as long as such measures may be related back to managing risk. Principle 18 of IOSCO's 2012 Principles for Financial Market Infrastructures⁵⁸ states that 'An FMI [sic] should have objective, risk-based and publicly disclosed criteria for participation, which permit fair and open access.' This is implemented in EMIR which requires membership criteria to be 'non-

⁵⁰ CME Group, 'Ensuring that members are able to meet their obligations' at <http://www.cmegroup.com/europe/clearing-europe/risk-management/membership-criteria-monitoring-and-stress-testing.html#membership-criteria>

⁵¹ Article 37(1) of EMIR.

⁵² Article 37(2) of EMIR.

⁵³ Article 37(6) of EMIR.

⁵⁴ See, e.g., ICE Clear Europe Membership, available at <https://www.theice.com/clear-europe/membership>

⁵⁵ Murphy, n 42 above, 147.

⁵⁶ Article 28(1) of EMIR.

⁵⁷ Lane, Dion and Slive, n 16 above, 173. The final standard for capital requirements for bank exposures to CCPs was published by the Basel Committee on Banking Supervision in April 2014, to take effect from 1 January 2017. See BCBS, 'Capital requirements for bank exposures to central counterparties' (April 2014) available at <http://www.bis.org/publ/bcbs282.htm>

⁵⁸ Committee on Payment and Settlement Systems and International Organization of Securities Commissions, Principles for Financial Market Infrastructures (April 2012).

discriminatory’ and ‘ensure fair and open access’.⁵⁹ However, EMIR is also clear in several places that this duty is subject to a CCP’s right to control its own risks by selecting members according to its own choice of criteria. For example, Article 37(1) of EMIR states that ‘[c]riteria that restrict access’ are only allowed ‘to the extent that their objective is to control risk for the CCP.’⁶⁰ Ultimately, both the PFMI and EMIR reflect the fact that while openness is important, the safety of the CCP remains the paramount concern.

This all helps to explain the actual number and nature of clearing service members. The Bank of England, which supervises the four UK CCPs, is in the second year of publishing annual reports on financial markets infrastructures.⁶¹ The latest shows that the four UK CCPs have memberships of 18 (CME Clearing Europe), 43 (LME Clear), 81 (ICE Clear Europe) and 98 (LCH.Clearnet’s SwapClear service).⁶² On the one hand, each of these UK CCPs has a good proportion of the major players in the OTC markets as members. Cross-referencing the membership lists of each CCP (which are published by the CCPs on their websites)⁶³ with what ISDA has called the ‘G-18’, which it defines as the major banks active in the OTC derivatives markets,⁶⁴ shows that CME Clearing Europe has 12 of ISDA’s G-18 (or subsidiaries in the relevant group) as members, LME Clear 12, ICE Clear Europe 14 and LCH.Clearnet’s SwapClear 16.⁶⁵

On the other hand, it is notable that the total membership numbers for each of these UK CCPs is relatively small, even compared to the total number of dealers in the OTC markets. By way of comparison, the Bank for International Settlements data on the OTC markets, cited earlier in this article, is based on reports from a core group of 400 ‘reporting dealers’, defined as large commercial

⁵⁹ Article 37(1) of EMIR.

⁶⁰ E.g., see also 37(6) of EMIR, and the requirement that the CCP’s Risk Committee advises the Board about the impact of membership criteria on ‘the risk management of the CCP’ (Article 28(3)).

⁶¹ Bank of England, n 36 above, and FSB, n 8 above, Appendix G which lists central counterparties clearing OTC derivatives worldwide.

⁶² Bank of England, n 36 above, Annex, 22. Membership numbers are provided here for each UK CCP, apart from for LCH.Clearnet, where data is provided for each of its clearing services. SwapClear has the largest membership of the clearing services listed in this Annex. The second largest is RepoClear at 78 and the smallest is Listed Interest Rate at 10.

⁶³ Membership lists are published by each clearing house on their websites. See ICE Clear Europe <https://www.theice.com/clear-europe/membership> CME Clearing Europe <http://www.cmegroup.com/europe/clearing-europe/clearing/cme-clearing-europe-members.html> LCH.Clearnet (SwapClear): <http://www.lchclearnet.com/members-clients/members/current-membership> LME Clear <https://www.lme.com/lme-clear/membership/clearing-membership/>

⁶⁴ E.g., see ISDA’s press release (11 October 2014) announcing that the ‘G-18’ had signed up to its Resolution Stay Protocol. <http://www2.isda.org/news/major-banks-agree-to-sign-isda-resolution-stay-protocol> The 18 are defined by ISDA as: Bank of America Merrill Lynch, Bank of Tokyo-Mitsubishi UFJ, Barclays, BNP Paribas, Citigroup, Crédit Agricole, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, JP Morgan Chase, Mizuho Financial Group, Morgan Stanley, Nomura, Royal Bank of Scotland, Société Générale, Sumitomo Mitsui Financial Group and UBS.

⁶⁵ For the purposes of checking against CCP membership, members which are subsidiaries of these groups were counted, but only once where more than one subsidiary of the same group was a member, e.g., BNP Paribas Commodity Futures Limited and BNP Paribas SA are both members of CME Clearing Europe. This is counted once, as ‘BNP’. Lists of members were checked on 12 June 2015.

and investment banks and securities houses in 47 countries.⁶⁶ Moreover, there are almost no members of CCPs which are not banks and other types of financial services companies. A review conducted by the author of the membership lists published on each UK CCP's website found that the only exceptions were in the membership of ICE Clear Europe's ICE Futures clearing service, where Mars Chocolate UK Limited, Shell International Trading and Shipping Company Ltd and Glencore Commodities Ltd were members.⁶⁷ Overall, therefore, the membership of UK CCPs remains narrow, in the sense that it is dominated by 'dealers' or specialist financial institutions. This is what we might expect given the onerous membership criteria, but it stands in sharp contrast with the numerous and diverse participants in the OTC derivatives markets as a whole.

This type of membership may make for robust CCPs, but it clearly poses a challenge in a world of mandatory clearing. In other words to the extent that: (1) membership of CCPs is small and still primarily made up of banks and specialist financial services companies; (2) the definition of FC in EMIR catches a broader range of market participants, such as insurers and asset managers; and (3) NFCs, such as manufacturers or energy companies fall outside the clearing exemption and are therefore also obliged to clear, it must follow that EMIR will impose the obligation to clear on entities that are not currently members of CCPs. Thanks to the mutual rights and responsibilities flagged up at the start of this part of the article, addressing this mis-match is not as simple as throwing open membership to any entity required to clear. In fact, mandatory clearing creates a 'membership dilemma', where, on the one hand, regulators require all non-exempt parties to be able to gain access to clearing, while on the other, CCPs must continue to be selective about their members in order to function safely, and in the way that made them so attractive for regulators in the first place. This tension between CCP autonomy and inclusiveness is the direct result of regulators having framed compulsory legislation around a private sector legal device designed to mutualise losses for selected participants. As discussed next, this membership dilemma is mitigated, though not solved, by the availability of two further options for accessing clearing.

Client Clearing

For entities unable or unwilling to meet the burdens of CCP membership, there are other routes by which they can access clearing. The most important of these is client clearing. EMIR defines a client as 'an undertaking with a contractual relationship with a clearing member of a CCP which enables that undertaking to

⁶⁶ ISDA, n 39 above, 17.

⁶⁷ Membership lists of UK CCPs are available on each CCP's website, n 63 above, checked on 12 June 2015.

clear its transactions with that CCP'.⁶⁸ 'Client clearing' therefore involves a client accessing clearing by contracting with an eligible member of a CCP.

In Europe, members of CCPs are either 'individual members', which may clear solely on their own behalf, or 'general clearing members', which may also clear for their clients. In the US, members are either clearing members, which may clear proprietary trades and trades on behalf of non-US domiciled clients, or Futures Commission Merchants (FCMs). FCMs are required to be registered with the Commodity Futures Trade Commission and, in addition to the activities open to clearing members, they may also clear on behalf of US-domiciled clients.⁶⁹ In this article, as the focus is the EU clearing regime, the term 'members', unless otherwise defined, refers to general clearing members, and the term 'clients' refers to entities as defined as such in EMIR.

EMIR provides that clearing members may only clear for clients if they have 'the necessary additional financial resources and operational capacity to perform this activity'.⁷⁰ In practice, client clearing is often one of a bundle of services provided by a prime broker to its client, along with secured lending, and custody arrangements. As regards clearing, the prime broker/clearing member may offer related services such as collateral transformation, whereby lower quality assets are swapped at a discount or 'haircut' for higher quality ones, which are accepted by a CCP as margin. In return for these services, the member will charge fees which may be calculated in a variety of ways,⁷¹ and may also benefit from a right of use over excess margin posted by the client but not due to the CCP, for instance because of the effects of position netting.

In legal terms, there are two main ways that a client may structure relations with its clearing member,⁷² which have important implications for the rights and obligations of all three parties concerned. In Europe, the 'principal to principal' model is the norm. In this case, the client is principal in its dealings with the member and the member principal in its dealings with the CCP. The client and CCP have no contractual relationship, and there are separate, bilateral contracts between the member and client, and the member and CCP. The principal to principal model is reflected, for example, in the CCP's fee arrangements – SwapClear's published information for members makes it clear that all fees for clearing services will be charged to members not clients, and then it is up to members to make individual pricing arrangements with their clients.⁷³

⁶⁸ Article 2(14) of EMIR.

⁶⁹ SwapClear, *Becoming a Member* guide, available at <http://www.swapclear.com/service/becoming-a-member.html>

⁷⁰ Article 37(3) of EMIR.

⁷¹ J. Gregory, *Central Counterparties: Mandatory Clearing and Bilateral Margin Requirements for OTC Derivatives* (Chichester: Wiley, 2014), 213 explains that fees may be charged on a fixed fee and/or per transaction basis.

⁷² See diagrams in *ibid*, 208-9.

⁷³ SwapClear, *Client clearing: Fees*, available at <http://www.lchclearnet.com/asset-classes/otc-interest-rate-derivatives/fees>

The drafting of the documentation between client and member will be complex. It must attempt to replicate the relevant membership obligations of the CCP, and, in particular, provide for the provision of margin up this intermediated chain to the CCP. The clearing member will be concerned to match up their two sets of rights and obligations, to ensure that the client is bound by the relevant membership rules of the CCP. Thus, the CCP's requirements for clearing will have an indirect effect on the client, despite the fact that there is no privity of contract between them. To the extent that any of these obligations are not successfully matched up, the member assumes 'asymmetry costs',⁷⁴ for example, if a CCP demands that the member posts margin more frequently than the client has to post it to the member. There is market standard client clearing documentation, however, this does not guarantee the contractual structure to be risk-free. The recent LBIE prime brokerage litigation demonstrated the difficulties of producing comprehensive documentation in this type of context, even when documentation was based on market-standard contracts.⁷⁵

The structure used for client clearing in the US is agency-based. This means that the member deals with the CCP as agent for the client, with the result that, unlike in Europe, the client and CCP have a contract with one another. The clients' obligations to the CCP are guaranteed by the clearing member. Given the focus in this article on the EU, this article will proceed on the basis that the principal to principal model is in place.

Indirect Clearing

A third way of accessing clearing involves a market participant becoming an 'indirect client', defined in the EU rules as 'the client of a client of a clearing member'.⁷⁶ Compared to client clearing, an indirect client is therefore one step further removed from the CCP. For the sake of clarity, this article focuses mainly on client clearing. It follows, though, that the arguments developed about client clearing also apply to the longer contractual chain involved in indirect clearing, and many of the legal concerns will be the same in both contexts.

Indirect clearing is largely overlooked in EMIR itself, but, having been 'introduced [into ESMA's brief] at the last minute'⁷⁷ it has since been addressed in Commission Delegated Legislation.⁷⁸ The Consultation Paper circulated by ESMA prior to the publication of the Commission Delegated Regulation noted respondents' views that indirect clearing is 'a relatively new concept and that

⁷⁴ Discussed at Gregory, n 71 above, 213.

⁷⁵ Such as the standardised prime brokerage documentation that proved silent on the salient points in *Re Lehman Brothers International (Europe)* [2009] EWHC 2545 (Ch).

⁷⁶ Article 1(a), Commission Delegated Regulation (EU) No 149/2013.

⁷⁷ ESMA, Consultation Paper: Draft Regulatory Technical Standards for the Regulation on OTC derivatives, CCPs and trade repositories, (25 June 2012), ESMA/2012/379, [16], 8.

⁷⁸ Articles 1-5 inclusive, Commission Delegated Regulation (EU) No 149/2013 of 19 December 2012.

market practices continue to evolve.⁷⁹ This Commission Delegated Regulation, now in force, seeks to ensure that ‘any type of indirect clearing arrangements comply with minimum conditions for ensuring their safety’⁸⁰ and that indirect clients have ‘equivalent protection ... as granted to clients under Regulation (EU) No 648/2012’⁸¹ including ‘in a default scenario’.⁸² For example, the Delegated Regulation extends the protections afforded by EMIR to clients, such as porting, to indirect clients.⁸³ It is also notable for setting out standards for each of the parties in the indirect clearing chain (apart from the end-user itself), being the CCP (Article 3), the clearing member (Article 4) and the clients (Article 5). As regards members, they are required to facilitate indirect clearing by their clients on ‘reasonable commercial terms’.⁸⁴ At the same time, the rules recognise the possibility of the membership-like burdens being imposed by members in such circumstances. Thus, the Delegated Regulation provides that terms which members impose on any clients offering indirect clearing services ‘may include minimum operational requirements’.⁸⁵

In practice, this approach has not been uncontroversial. Financial press commentary suggests that some of these requirements have proved unpopular with clearing members, in particular the requirement that indirect clients are offered segregated accounts,⁸⁶ which impose costs and operational burdens on members.⁸⁷ A further suggestion is that regulators and clearing members are, at the time of writing, at a ‘standoff’ about offering indirect clearing at all, because the latter see it as ‘commercially unviable’.⁸⁸ It may be, therefore, that comprehensive new rules have had a chilling effect on this nascent business.

Finally, as Gregory explains, indirect clearing may also be necessary where a European bank has clients who wish to clear in the US. Under US rules, CCP members must be registered Futures Commission Merchants (FCMs), so the European bank would have to become a client of a FCM for its own clients to access clearing.⁸⁹

LIMITATIONS OF ACCESS ARRANGEMENTS

Though membership of CCPs clearing OTC derivatives remains onerous, there are, therefore, other routes whereby non-members may gain access. Given the

⁷⁹ ESMA, n 77 above, [18].

⁸⁰ Recital (4), Commission Delegated Regulation (EU) No 149/2013.

⁸¹ *Ibid.*, Recital (5).

⁸² *Ibid.*, Recital (6).

⁸³ *Ibid.*, Article 4(4).

⁸⁴ *Ibid.*, Article 4(1).

⁸⁵ *Ibid.*

⁸⁶ *Ibid.*, Article 4(2), 5(1) and 5(2).

⁸⁷ P. Stafford, ‘Newedge debuts ‘indirect clearing’ service’ *Financial Times* (10 February 2014).

⁸⁸ C. Sourbes, ‘Banks shun Emir’s indirect clearing service’ *Risk Magazine* (12 August 2014).

<http://www.risk.net/risk-magazine/news/2359798/banks-unwilling-to-offer-emirs-indirect-clearing-service>

⁸⁹ Gregory, n 71 above, 128.

sweeping effects of the EMIR clearing obligation, these routes are of increasing importance. There remain, however, at least three significant concerns about how these means of accessing clearing will work in practice.

First, client and indirect access arrangements exacerbate the type of market interconnectedness that regulators intended to reduce by introducing compulsory CCP clearing. As we have seen, client and indirect clearing are based upon networks of contracts which converge on a relatively small number of financial institutions, in their capacity as CCP members. Further, the complexities, risks and regulatory obligations involved in offering client clearing mean that it is unlikely to prove to be a market with many new entrants. The concern, as has been highlighted in recent work produced by central bankers and economists, is that the markets once again become dominated by a few major players, this time acting as clearing members, and that risk is concentrated as a result.⁹⁰ While it remains perfectly correct, therefore, to say that mandatory clearing tackles one type of interconnectedness, by novating (or, in other words, cancelling and replacing) bilateral contracts between market participants and interposing a CCP in the middle of each trade, client clearing arrangements push some of the same problems lower down the clearing chain. Here, they will be complex for regulators to monitor.

It will certainly be challenging for regulators to track how risk is concentrated by client clearing. EMIR provides that CCP members may be required to report to CCPs ‘relevant basic information to identify, monitor and manage relevant concentrations of risk relating to the provision of services to clients.’⁹¹ However, it is telling that elsewhere EMIR anticipates that CCPs may not know for which clients its members are clearing.⁹² Regulators may be able to establish patterns of interconnectedness from reports to trade repositories.⁹³ However, there are concerns about how cleared contracts are being reported generally,⁹⁴ and under the principal to principal model, it follows that the client-member and member-CCP trades would be distinct. Consequently, this data may be less than ideal as a means of monitoring interconnectedness at CCP member-level.

The second drawback of client and indirect clearing arrangements is that they mitigate rather than solve the membership dilemma. In other words, it remains possible that a non-exempt market participant wishing to trade a product subject to the clearing obligation may not be able to secure access to a CCP. Even though

⁹⁰ Lane, Dion and Slive, n 16 above, 171-2.

⁹¹ Article 37(3) of EMIR.

⁹² E.g., Article 48(7) of EMIR states that where a CCP is holding collateral distinguished as belonging to clients, any excess left over after managing the member’s default ‘shall be readily returned to those clients when they are known to the CCP or, if they are not, to the clearing member for the account of its clients.’

⁹³ See Commission Delegated Regulation (EU) No 148/2013, the Annex of which sets out and explains the fields of information that have to be reported. Once cleared, this has to be reported again, as a modification. Article 2, Commission Delegated Regulation (EU) No 148/2013

⁹⁴ For e.g., ISDA, n 39, 7 above expresses concern about the double-counting of cleared transactions in BIS data.

EMIR acknowledges the importance of openness, CCPs (rightly) cannot be required to take an entity on as a member.⁹⁵ Nor are members obliged to clear for any given client. Indeed, there may be good reason to refuse to clear for a particular entity. Thus, de facto exclusion from clearing is possible, though the EU regime is silent on this scenario. In order to monitor this state of affairs, it is suggested that if an entity were unable to access clearing and therefore denied access to a particular cleared product, it should report this to the national competent authority for that CCP (e.g., the Bank of England for UK CCPs), whereupon these authorities could collect data in order to monitor if lack of access becomes a significant problem in practice.

The final, and perhaps most significant, drawback of client clearing arises from its impact on the legal arrangements that underpin central counterparty clearing, and in particular, the ‘asset-backing’ of cleared contracts. Client clearing requires assets such as securities and cash to move up and down a contractual chain, along which the assets commingle, pass through different accounts, and are likely to be rehypothecated (or lent out again) to third parties. Each step potentially creates risk for the client. This particular type of risk should be of acute concern for clients given, first, that many clients will be non-dealers new to clearing, with conservative risk profiles, and secondly, because recent events in the financial markets have demonstrated how even carefully segregated client assets may be vulnerable in times of market stress.

Client assets did not have a good crisis. Client asset rules and market standard contracts were both found to be wanting in the event of brokers' insolvencies, so that client assets were not returned promptly, or even subjected to an unexpected shortfall. The collapse of Lehman Brothers International (Europe) Ltd (‘LBIE’), the London-based broker and derivatives dealer, triggered long-running and controversial litigation about paying out client money, including that which was meant to be held on a statutory trust. This culminated with the Supreme Court’s controversial decision interpreting the FSA’s client money rules (the CASS sourcebook, or ‘CASS’).⁹⁶ In sum, the court held that the pool of segregated client money was to be shared, even by clients whose assets had not been segregated by LBIE. Understandably, this outcome was met with great concern by the markets. The collapse of LBIE also demonstrated the shortcomings of private arrangements for holding client assets. In a LBIE case considering a standard form prime brokerage agreement, Briggs J (as he then was) considered the parties’ terms in detail, found them silent on the matters in hand, and had to rescue the clients’ proprietary rights over cash generated by its securities by taking the unusual step of implying a contractual term in the relevant agreement.⁹⁷ The October 2011

⁹⁵ EMIR preserves a CCP’s right to refuse membership to entities meeting its membership criteria, so long as this refusal is based on a ‘comprehensive risk analysis’. Article 37(5), EMIR.

⁹⁶ *Re Lehman Brothers International (Europe)* [2012] UKSC 6, on appeal from [2010] EWCA Civ 917 and [2009] EWHC 3228 (Ch).

⁹⁷ *Re Lehman Brothers International (Europe)* [2009] EWHC 2545 (Ch).

collapse of the broker-dealer MF Global UK Ltd triggered further litigation about client assets, which again demonstrated the uncertainties of the UK legal regime.⁹⁸ For regulators, these events helped to spark a wholesale review of CASS, which started with a consultation paper in September 2012. For market participants, this spike of litigation continues to serve as a stark warning about the potential vulnerability of client assets.

In conclusion, this part of the article has shown how the clearing obligation in EMIR (along with similar rules in other jurisdictions) has stoked tension between CCP autonomy and inclusiveness. A CCP's autonomy to choose its members remains central to its risk management, while, at the same time, inclusiveness is assumed by regulatory reforms. This is one of the implications of embedding privately-owned entities into mandatory public sector reforms. There are, of course, links here with debates about fair access to other financial market infrastructures, such as payment and securities settlement systems, but what this part of the article has shown is that the case of CCPs is uniquely pressing, because regulators have chosen to make clearing compulsory, and because CCPs mutualise losses between their members. In this sense, the response to one lesson of the crisis (namely, the risks associated with OTC derivatives) may well be underestimating another (the risks associated with client assets). On this note, the interaction between client clearing and client assets is explored in the final part of the article below, in the context of a CCP's reliance on margin.

3. MARGIN AND CLIENT CLEARING

Margin is fundamental to clearing, as is reflected in EMIR's definition of clearing as:

[...] the process of establishing positions, including the calculation of net obligations, and *ensuring that financial instruments, cash or both, are available to secure the exposures arising from those positions.*⁹⁹ [this author's emphasis]

Margin provides the means by which a CCP is able assume the risk of standing in the middle of each trade that it clears, acting as a 'shock absorber' for the market should a participant fail. In other words, it underpins the effects that have proved so valuable for markets and so attractive for regulators. This part of the article begins by outlining how margin fits into the clearing process. The discussion then

⁹⁸ See *Re MF Global UK Ltd (in special administration) (No 2)* [2013] EWHC 92 (Ch), [59]-[68].

⁹⁹ Article 2(3) of EMIR

considers the legal complexities that arise when client and indirect clearing are used.

MARGIN

A clearing member is required to post two types of margin to the CCP: initial margin and variation margin. A member must also contribute to the CCP's default or 'guaranty' fund. Just as membership requirements are more onerous for OTC clearing services, as discussed above, the levels of margin will also be higher when clearing OTC contracts. These types of margin are explained below:

Initial margin (IM): IM is collected on the basis of a CCP's estimation of the losses it might face due to the event of a default of a member, during the period from when the last variation margin has been received (see below) and the time when the contract can liquidated.¹⁰⁰ This period is called the Margin Period of Risk (MPR). Usually IM can be posted either as cash or as eligible, high quality securities.¹⁰¹ CCPs profit from holding IM, because of the difference between earned interest and interest paid out to members.¹⁰² Calculating IM will be complex and subjective, and each CCP will have a proprietary model for doing so,¹⁰³ subject to highly detailed regulators' requirements¹⁰⁴ and the model's validation by their competent authority.¹⁰⁵ Models use historical data to make sure that a CCP clearing OTC derivatives calls for sufficient IM to deal with losses over a defined time horizon¹⁰⁶ and are also revised in accordance with market conditions, taking in account procyclicality,¹⁰⁷ which refers to a 'tendency of margin requirements to rise in periods of market stress'.¹⁰⁸ IM calculations require a balance to be struck between providing adequate protection for the CCP, and ensuring demands of members is not so excessive as to restrict access. Added to this, there is

¹⁰⁰ See definition at Article 1(5), Commission Delegated Regulation (EU) No 153/2013, and at Murphy, n 42 above, 148.

¹⁰¹ CME Europe accepts cash (in ten currencies), selected sovereign debt and gold as margin and default fund contributions.

<http://www.cmegroup.com/europe/clearing-europe/risk-management/collateral.html>

¹⁰² Norman, n 13 above, 14

¹⁰³ See three interest rate swap clearing services' IM methodology compared at Gregory, n 71 above, 167.

¹⁰⁴ In the EU, these detailed requirements have been set out in Commission Delegated Regulation (EU) No 153/2013, as discussed in Gregory, n 71 above, 175.

¹⁰⁵ Article 41(2) of EMIR requires a CCP's 'models and parameters' for setting margin requirements to be validated by the competent authority, which in the UK is the Bank of England.

¹⁰⁶ Article 41(1) of EMIR calls for at least 99% but this is set at 99.5% in Article 24, Commission Delegated Regulation (EU) No 153/2013. The technical standards adopted in the EU provide detailed requirements for these models, including that historical data should include an episode of financial stress, see Article 25(1) Commission Delegated Regulation (EU) No 153/2013.

¹⁰⁷ Article 41(1) of EMIR requires a CCP to take procyclical effects into account when reviewing margin levels, elaborated on by Article 28, Commission Delegated Regulation (EU) No 153/2013.

¹⁰⁸ D. Murphy, M. Vasios and N. Vause, 'An investigation into the procyclicality of risk-based initial margin models' (May 2014) *Bank of England Financial Stability Paper* No. 29, 4.

some concern amongst commentators that if CCPs compete too aggressively on IM, this will be at the expense of their robustness to withstand default.¹⁰⁹

Variation margin (VM): This is margin collected or paid out to reflect on changes to the mark-to-market value of a contract.¹¹⁰ VM is calculated by the CCP on a regular basis which, in the case of OTC derivatives, might be daily or even intra-day. The challenge for OTC products is that a CCP needs to decide how it will price the contracts, but having done so, calculating VM for cleared contracts is ‘relatively straightforward’ compared to IM.¹¹¹ CCPs usually only accept cash as VM. VM is posted by, and paid to, the member during the life of the contract, leaving the CCP neutral. To give a simplified example, if A and B have equal and opposite contracts with the CCP, and if A is out of the money and is due to pay VM, B will be due to receive it. The CCP will facilitate the calculation, calculating and receiving VM from A and paying it to B.¹¹² For this reason, Gregory describes CCPs, with respect to VM, as ‘calculation agents’.¹¹³ In practice, the CCP’s rules may provide for a time lag between margin calls and paying out VM. This potentially creates a cost for members, which would be exacerbated if the member were also clearing for clients. This is because members would usually fund VM calls made with respect to client positions, and then call for these sums from clients.¹¹⁴

Default fund: The role of the CCP’s ‘pre-funded default fund’¹¹⁵ is to mutualise losses not covered by a defaulting member’s margin. As such, the default fund underpins one of the most important systemic functions of a CCP, and it helps to explain the appeal of clearing for regulators in the wake of the crisis. EMIR requires a default fund to be able to withstand scenarios based on ‘extreme but plausible market conditions’.¹¹⁶ Members are required to pay into the default fund. As set out in A42(2) of EMIR, ‘The contributions shall be proportional to the exposures of each member’. A CCP has to make a judgment about the relative importance of IM and default fund contributions when designing its buffer against members’ defaults. Assuming this buffer is

¹⁰⁹ Gregory, n 71 above, 167-8.

¹¹⁰ See definition at Article 1(6), Commission Delegated Regulation (EU) No 153/2013.

¹¹¹ Gregory, n 71 above 149.

¹¹² Though note the technical details of VM complicate this in reality, as discussed in Murphy, n 42 above, fn 315 and 316.

¹¹³ Gregory, n 71 above, 149, and see the discussion of VM at *ibid*, 149-152.

¹¹⁴ *Ibid*, 152.

¹¹⁵ Article 42(1) of EMIR

¹¹⁶ Article 42(3) of EMIR. How a CCP is to identify and review its definition of ‘extreme but plausible market conditions’ is further prescribed by Articles 30 and 31, Commission Delegated Regulation (EU) No 153/2013. A CCP has to take into account ‘at least’ historic data, including periods of extreme market movements, from the last 30 years ‘or as long as reliable data have been available’ and ‘potential future scenarios’.

to have a fixed value, the balance could be struck in different ways, each with different implications for members. Heavy IM demands with low default fund contributions would be more expensive for members, but would mean defaulting clients would be more likely to be covered by their own margin. The reverse offers cheaper IM rates and greater mutualisation through the default fund, but also higher moral hazard.¹¹⁷ The default fund can be used to incentivise members' behaviours in other ways. For example, under SwapClear's Default Management Process, any losses to be met by the default fund are designed to incentivise participation in the portfolio auction for the defaulting member's positions, which precedes any recourse to the default fund. This is done by default fund losses being borne first by the non-bidding members' contributions to the default fund, then (if necessary) the non-winning auction bidders' contributions, then, finally, the auction winner's.¹¹⁸

In the case of a default, therefore, a member's VM and IM provide the first two lines of defence which a CCP will use in order to cover any losses. It is noteworthy that this has been sufficient of a buffer in many defaults in the past: Gregory reports that of the seven defaults experienced by LCH.Clearnet to date, all losses have been managed with recourse to the defaulter's margin alone.¹¹⁹ However, should further assets be needed, a CCP will work through what is referred to as the 'default waterfall'. This is partly prescribed by EMIR and usually represented as follows:

- Member's variation margin
- Member's initial margin
- Member's default fund contribution
- Fixed amount of CCP equity (a CCP's 'dedicated own resources'¹²⁰)
- Other members' default fund contributions
- Capital calls on other members
- Rest of CCP equity¹²¹

¹¹⁷ The table at Gregory, n 71 above, 176-7 compares the different scenarios in detail.

¹¹⁸ SwapClear, Default Management Process: Loss Attribution (2013), available at <http://www.swapclear.com/service/default-management.html>

¹¹⁹ Gregory, n 71 above, 177.

¹²⁰ Article 45(4) of EMIR.

¹²¹ Article 45 of EMIR dictates this order. It is presented in list form at Murphy, n 42 above, 149, on which the list in this article is based. Note that Article 45(4) of EMIR states that a CCP may not use margins posted by non-defaulting members to cover the losses from a defaulting member. The layer of the default waterfall made up by the CCP's own resources is further dealt with by Articles 35 and 36, Commission Delegated Regulation (EU) No 153/2013. See CME Group's version of the waterfall at CME Group, 'Financial Safeguards: Protecting Customers Against Default' at

<http://www.cmegroup.com/europe/clearing-europe/risk-management/financial-safeguards.html>

For the ongoing debate about what should happen if losses prove greater than assets available in the conventional default waterfall and questions of resolution arise, see D. Bailey, The Bank of England's

How does this collection and use of margin work in the context of client clearing? The basic principle of a party having to back up its cleared positions with assets remains the same. Accordingly, under the principal to principal model, the objective is that margin should be posted by the client to the member, and then by the member on to the CCP. If the client defaults, its margin should be available for the CCP to use to cover losses from positions cleared on its behalf by the member, as happens with members' own positions. If the member defaults, the aim under EMIR is that client's positions and assets should be 'ported', or transferred, to a new, solvent member to allow continuity for the client.

In practice, however, adding the 'client-member' tier (and a further 'indirect client-client' tier, if applicable) to clearing arrangements raises a large number of technical legal issues. This article does not attempt to work through all of these technical legal issues, but it focuses, first, on explaining the legal regime for client clearing, which is comprised of the EMIR regime, national rules on client assets and implementation by CCPs themselves, as manifested in increasingly elaborate account offerings. Secondly, it provides various examples of the shortcomings of the current framework for client clearing, in order to support the overall thesis that client clearing has significant, complicating effects on the legal fundamentals of CCPs, and therefore deserves far greater scrutiny from regulators.

THE LEGAL REGIME FOR CLIENT CLEARING

As a 2012 policy statement from the Financial Services Authority ('FSA') reminds readers, 'EMIR is a European regulation which is directly applicable to firms and its requirements cannot be waived'.¹²² The primary legal rules for client clearing are accordingly to be found in the Regulation itself. However, as discussed below, members offering client clearing in the UK will usually, but not always, also have to comply with the UK's client assets regime, which is set out in the recently revised Client Assets Sourcebook ('CASS') in the FCA's Handbook.

The EMIR Framework

Given the complexity of the issues presented by client clearing, there are surprisingly few details specifically about it in EMIR, and there is no directly related Commission Delegated Regulation. Articles 39 (Segregation and portability) and 48 (Default procedures) are the main source of relevant rules for client clearing in EMIR,¹²³ and, perhaps unsurprisingly given the preceding

perspective on CCP risk management, recovery and resolution arrangements (Speech, 24 November 2014) available at

<http://www.bankofengland.co.uk/publications/Documents/speeches/2014/speech781.pdf>

¹²² FSA, 'Client assets regime: changes following EMIR' (December 2012) PS12/23, 19. (Hereafter 'FSA PS12/23').

¹²³ Articles (2)-(5) inclusive, Commission Delegated Regulation (EU) No 149/2014 cover indirect

discussion, they are almost exclusively concerned with margin and the arrangements for holding it.¹²⁴

The central requirement of Article 39 is that CCPs make two types of accounts available to members clearing for clients, as a minimum. Under Article 39(5), a clearing member has to pass on the same choice to its clients. The first type of arrangement that CCPs are required to offer is described as ‘omnibus client segregation’ (Article 39(2)), and the second as ‘individual client segregation’ (Article 39(3)). EMIR prescribes the basic features of these accounts but gives little detail: for example, it does not specify whether the positions of clients participating in an omnibus client account should be margined on a net or gross basis.¹²⁵ As regards indirect clearing, it has already been noted that the same two types of arrangements feature in the Commission Delegated Legislation and are imposed not only on the CCP member, but also on the client enabling indirect clearing.

In the ‘omnibus client segregation’ arrangement, EMIR requires CCPs to keep separate records and accounts to enable each clearing member to ‘distinguish in accounts with the CCP the assets and positions of that clearing member from those held for the account of its clients’. In other words, the member’s house account will be kept separate to its single, ‘omnibus’ client account. Article 39(9) goes on to explain that to ‘distinguish in accounts’ means that assets and positions are recorded in separate accounts (i.e., here there a member will have a house account and a client account); that netting between different accounts is prevented; and that assets in one account may not be used to cover losses relating to positions recorded in another account.

This omnibus model has several operational advantages. First, the member may post net VM and IM on its net client portfolio (though as noted above, EMIR is silent on exactly how to work this out). Because some clients’ positions are likely to cancel each other out, the member is therefore likely to hold more client margin than it is required to post to the CCP. This is an advantageous arrangement for the member, which would be able to keep this excess margin, and, if applicable, exercise its right of use powers (i.e., it may use the excess margin as collateral for its own activities). In light of the pressures on collateral, access to this margin may be a very valuable benefit for clearing members. On the other hand, it is potentially problematic for clients, which would have an exposure to the clearing member for part of its margin in the event of its default.

clearing, including replicating the effects of Articles 39 and 48 of EMIR (for client clearing) in this context.

¹²⁴ The Financial Markets Law Committee (‘FMLC’) has criticised the ‘absence of any power for the Commission and ESMA to develop Level 2 regulatory technical standards on the operation of either Article 39 or Article 48 of EMIR’. It has suggested that the FCA seeks to address this issue at EU level. FMLC, Issue 147: Client monies, Response to the consultation of the Financial Conduct Authority entitled ‘Review of the client assets regime for investment business’, (January 2014), 17.

¹²⁵ Discussed in FSA, PS12/23, n 122 above, 10. The difference is explained by the FSA as between netting all clients’ positions and providing margin on that basis, or netting each client’s positions and providing margin on ‘gross per client’.

A further disadvantage for clients of this omnibus arrangement is that there are no assets at the clearing house level which are identifiable as the individual client's own. This means that the omnibus model represents the weaker position for the client to be in terms of first, portability and secondly, vulnerability to the default of other parties.

Portability refers to the option of a client moving its portfolio from one member to another member, typically in the event of a default by the original member.¹²⁶ As noted at the start of the article, this was one of the techniques successfully deployed to minimise disruption in the wake of the collapse of LBIE in 2008. Article 48(5) of EMIR deals with porting under the omnibus segregation model. It provides that the CCP shall:

[a]t least, contractually commit itself to trigger the procedures for the transfer of the assets and positions held by the defaulting clearing member for the account of its clients to another clearing member designated by all of those clients, on their request and without the consent of the defaulting clearing member.

It is notable that under the omnibus model, all clients' assets and positions have to move as one to a new member. Moreover, as this Article is silent on the decision-making practicalities involved in 'all ... clients' designating a new member, or making a 'request' to port, this detail will be something for clients to check carefully for themselves. The second part of this Article 48(5) includes the important qualification that the new member is only obliged to accept these porting clients where it has previously made a contractual commitment to do so. This is unsurprising, as it would not want to accept this burden in the heat of the moment without proper due diligence.¹²⁷ In practice, porting may be impossible anyway, if the unsegregated margin has been used up because of the mutualisation of the losses of other defaulting parties. This may be the case, as Murphy shows, if the CCP closes out against the whole client portfolio, when it will have available the comingled client margin as a whole. In these circumstances, a non-defaulting client has a 'fellow client risk'.¹²⁸

The alternative model set out in Article 39(3) of EMIR is the individual client segregation model. In this case, CCPs must offer arrangements so that members can 'distinguish in accounts' each client's assets and positions from other clients'.

¹²⁶ However, as Murphy has noted, porting requires a client's margin to be able to move with its contracts and in practice, this would difficult to arrange in a crisis without having a pre-existing relationship with the "backup" clearing member'. He suggests that porting would in fact require a client to have relations with two members to begin with. Murphy, n 42 above, 159-160.

¹²⁷ The backstop position is set out at the end of A39(5)- if porting is not possible, the CCP may 'take all steps permitted by its rules' to manage the positions held by members for clients.

¹²⁸ See Murphy, n 42 above, 170 and also the diagrams on 169-172 detailing losses in a range of default scenarios.

In practice, under this model, each client's margin will be kept in a separate account by the CCP. This is the preferred EMIR model in terms of portability and client protection. Article 48(6) reflects this, stating that the client may, on its own, request porting, designate a new member and have its assets and positions moved. In the ordinary course of events, however, individual client segregation is less operationally convenient for the member, not least because it requires the member to post all of the margin it receives from the client. For these reasons, it will be more costly for the client. It can therefore be seen that while the cheaper omnibus model puts non-defaulting clients at greater risk on default of a member and a fellow client, the corollary is that the individual segregation model will be more expensive and operationally less convenient.

Finally, it should be remembered that the EMIR framework sets out the *minimum* choice that a CCP has to offer. In practice CCPs are marketing an array of offerings above and beyond this minimum. For example, in May 2014, CME Clearing Europe¹²⁹ stated that it received Bank of England protection for its 'new full segregation client protection model'. The clearing house announced that this 'unique form of Client account offers more collateral protection than any other account available'.¹³⁰ The central aim behind this option seems to be that the entity posting securities as initial margin may do so while keeping them at an account with a custodian in the clearing house's name, in other words, it avoids having to move them.¹³¹ Meanwhile, SwapClear offers four different 'customer protection options'.¹³² These options (Value Seg, Value Omni, Asset Seg, Asset Omni) distinguish segregation of client positions and segregation of client assets. Client asset protection has therefore become a point on which CCPs actively compete. Rather than a binary choice with stark trade-offs between price and protection, CCPs' offerings go beyond the minimum in EMIR, and allow for parties to pick from a menu of choices to suit their budget and appetite for risk.¹³³

¹²⁹ CME Group, Enhanced Client Protections.

<http://www.cmegroup.com/europe/clearing-europe/risk-management/customer-protection-and-segregation.html>

¹³⁰ *ibid.*

¹³¹ *ibid.*

¹³² SwapClear, Customer Protection: EMIR (added June 13 2014), 4.

http://www.swapclear.com/service/customer_protection_under_emir.html

¹³³ Legally separated, but operationally co-mingled ('LSOC') is another sort of interim position between full segregation and the omnibus model. In the LSOC model, margin with respect to clients' positions is held in a single account, but unlike the omnibus model, the CCP's records reflect the value of margin of each client X and Y. If X defaults, only X's margin can be used to cover its losses, and therefore Y's margin is more secure than it would be under the omnibus model. In the US, Regulators require CCPs to use this LSOC compromise. See SwapClear, Customer Protection: Dodd-Frank, available at

http://www.swapclear.com/service/customer_protection_dodd_frank.html

Interaction between EMIR and CASS

In the UK, one of the most significant regulatory implications of client (and indirect) clearing is that it imports a further set of legal rules into the clearing process. These are the recently reformed¹³⁴ CASS rules in the FCA's Handbook.

The FCA's CASS rules do not apply to CCPs,¹³⁵ but as the FSA explains in a December 2012 Policy Statement, they become relevant when client clearing is used because

[c]learing members of CCPs will often be 'firms' as defined in the FSA Handbook, who hold client money for the purposes of the CASS rules. Margin transferred by a firm to a client account at a CCP may be client money from the perspective of the clearing member.¹³⁶

As at 2013, the FCA's client assets regime covered 1,500 firms, £10 trillion of custody assets, £100 billion of client money.¹³⁷ The rules are designed to regulate a huge range of business activities¹³⁸ and they do not always sit easily with the technical and CCP-tailored EMIR regime. They therefore offer only patchy coverage in the clearing context, which at best creates complexity for regulators and regulated firms, and at worse, is inefficient and may exacerbate litigation risk.

Piecemeal Application to CCPs

The rules on client money, CASS 7 and CASS 7A, apply in a piecemeal way to the clearing sector. The fragmentary application of these rules is exacerbated by three factors.

First, as mentioned above, the CASS regime is relevant only when client or indirect clearing is used, because the rules apply to CCP members holding client assets rather than to the CCP, or the clearing process as a whole. Secondly, CASS is 'broadly speaking, only applicable to UK firms and their EEA branches'.¹³⁹ This means that some clearing members of a UK CCP will not be subject to CASS. For instance, as the FMLC observes in its recent report, CASS will not apply 'where a clearing member is an incoming EEA firm subject to Home State regulation of its operational arrangements under client money'.¹⁴⁰ CASS would also not apply to protect UK clients using members based outside the EU, e.g., to provide UK clients with access to a third country CCP.¹⁴¹

¹³⁴ Changes have been phased in, with the latest reforms taking effect on 1 June 2015.

¹³⁵ FSA, PS12/23, n 122 above, 20.

¹³⁶ *ibid* [1.8].

¹³⁷ FCA, 'Review of the client assets regime for investment business' (July 2013) CP 13/5, [1.8].

¹³⁸ CASS covers authorised persons undertaking all regulated activities (CASS 1.2) for example occupational pension schemes, stock lending and prime brokerage (CASS 1.4).

¹³⁹ FSA, PS12/23, n 122 above, 9.

¹⁴⁰ FMLC, n 124 above, 14.

¹⁴¹ FSA, PS12/23, n 122 above, 9

Thirdly, even if all members of a CCP were UK firms, CASS would still not apply to all of their transactions. This is because CASS only applies to transactions involving ‘client money’. So, for example, the FMLC points out that CASS would not apply to those members accepting deposits as a bank.¹⁴² Furthermore, it would not apply to any margin provided by clients to members by way of a title transfer collateral arrangement (‘TTCA’).

A TTCA is a popular type of financial collateral arrangement,¹⁴³ which a provider of collateral may choose to use as an alternative to a security financial collateral arrangement.¹⁴⁴ There are important legal differences between these two types of arrangements. When it provides security, the client retains a property interest in the assets, though the member may enjoy a contractual ‘right of use’ over the assets.¹⁴⁵ By contrast, under a TTCA, the client retains no property rights in the assets at all, and it only has a contractual right to the return of equivalent assets. This means that whenever a TTCA is used, ‘money cannot be said to be held on behalf of that client’.¹⁴⁶ Therefore the protections afforded to client money and client assets in CASS will not apply if a TTCA is used.¹⁴⁷ This is reflected in the fact that the amended CASS rules require TTCAs to be evidenced in writing.¹⁴⁸

CASS and EMIR

EMIR significantly complicated the reform of CASS, as rules had to be specially adapted to accommodate the particular legal arrangements used in client clearing. In some cases, special rules had to be written, evidenced by the fact that CASS now includes CCP-specific provisions. The most prominent example was added to allow for clearing practices that would otherwise clash with the over-arching principle in CASS 7 and 7A, namely that on the failure of a firm, client assets should form a ‘single notional pool of client money for the beneficiaries of the general pool’.¹⁴⁹ Instead, clearing members are specially permitted to create separate sub-pools of client money for clients clearing through a net margined

¹⁴² *Ibid*, 14.

¹⁴³ FSA, PS12/23, n 122 above, 11, noting that ‘a few respondents’ to the FSA’s September 2012 consultation felt that TTCAs were ‘prevalent’ in this context. The FSA seems to query this, but concedes ‘so many people asked us about this’ it was necessary to deal with the topic at some length in the policy statement.

¹⁴⁴ Both are defined in Article 2 of the Financial Collateral Arrangements Directive 2002 /47/EC.

¹⁴⁵ This right of use is protected by the Financial Collateral Arrangements Directive 2002/47/EC and, in the context of the CCP’s holding of the margin and assets in the default fund, the right of use is re-confirmed by Article 39(8) of EMIR.

¹⁴⁶ FSA, PS12/23, n 122 above, 11.

¹⁴⁷ CASS 6.1.7G and CASS 7.11.1R(1) respectively. See also CASS 7.11.5(G): ‘A title transfer financial collateral arrangement under the Financial Collateral Directive is an example of a type of transfer of money to cover obligations where that money will not be regarded as client money.’

¹⁴⁸ See the new CASS rules about how firms document their TTCAs (affecting new and current TTCAs) and clarifying the procedure for clients wishing to swap out of TTCAs and hold assets as ‘client money’ instead as discussed in FCA, Review of the client assets regime for investment business (June 2014) PS14/9, 52-54. (Hereafter, FCA, PS14/9’).

¹⁴⁹ CASS 7A 2.4R(1)(b).

omnibus client account. The use of a sub-pool means that assets belonged to defined beneficiaries, would not form part of a general pool of client assets on the insolvency of the clearing members, and that any shortfall would be confined to a particular pool and not borne by all clients.¹⁵⁰ Most importantly, a sub-pool would facilitate porting,¹⁵¹ in the event of the failure of the clearing member, by making sure enough margin was available on a client-by-client basis.¹⁵² Indeed, the FCA states that this was the underlying objective of this change to the rules.¹⁵³ The use of sub-pools may be reassuring for clients, however, as the FCA concedes, it involves ‘operational complexities’¹⁵⁴ and may open the member up to litigation from clients attempting to share in sub-pools in a default.¹⁵⁵

In addition to these clearing-specific rules, other parts of CASS have been waived solely for clearing members. For example, there is an exemption provided for CCP members from the new rule about the ‘immediate segregation’ of client and house money. Ordinarily, the ‘immediate segregation’ rule requires firms to receive client money direct into the client bank account, rather than through the firm's own account. This requirement would, however, be a problem for CCP members involved in client clearing, because of the interaction of EMIR with this rule. Specifically,

clearing members are likely to be required by CCPs to make and receive single payments that relate to both proprietary accounts and client segregated accounts at the CCP from/into a single bank account.¹⁵⁶

The requirement to segregate client money immediately would therefore not work in this context. The conclusion reached by the FCA was that the final rules had to ‘make specific allowance for this scenario’.¹⁵⁷ As at 1 June 2015, therefore, CASS provides that firms clearing for clients will not be subject to the ‘immediate segregation’ rule if they have used ‘reasonable endeavours’¹⁵⁸ to arrange for the CCP to pay client and house margin separately, and this is still not available. Instead, they have to meet a set of conditions, including using a house account for mixed payments, segregating client assets promptly, and maintaining in the client accounts a ‘prudent’ sum of money which will act as a buffer if something goes

¹⁵⁰ FCA, PS14/9, n 147 above, 25-30.

¹⁵¹ Porting is expressly recognised in CASS 7A.2.4AG(1).

¹⁵² As discussed in one law firm's response to the September 2012 consultation paper: Freshfields Bruckhaus Deringer, ‘Proposed changes to the client assets regime’ (September 2012), Briefing, 5.

¹⁵³ FCA, PS14/9, n 147 above, [4.12].

¹⁵⁴ *ibid*, [4.7]. This may also be traced through from the original proposal for sub-pools to be more broadly available.

¹⁵⁵ *ibid*, [4.6].

¹⁵⁶ *ibid*, [7.117].

¹⁵⁷ *ibid*, [7.121].

¹⁵⁸ CASS 7.13.72R.

wrong with this substitute process and there is a shortfall.¹⁵⁹ Thus, EMIR has resulted in special accommodation in CASS for firms, and a lot of discretion being left to the CCP in this context. Seen alongside the other carve-outs made for CCPs and clearing members,¹⁶⁰ a pattern emerges which suggests that CASS not only applies in a piecemeal way, but that it is an awkward fit when it does so.

Implications

It was only to be expected that CASS was thoroughly overhauled after the recent LBIE and MF Global litigation. However, this process has been severely complicated by the fact that, because of client clearing, CASS applies in the CCP context. The interaction between CASS and EMIR has impacted upon the FCA's reforms, and resulted in multiple carve-outs and special rules solely for clearing, though significant practical and conceptual difficulties still remain. The UK client asset regime has become, as a result, more fragmented and sector-specific, for example, as regards the rules about 'sub-pools'. In turn, carve-outs and special rules serve to exacerbate the piecemeal regime governing assets deployed for client clearing. They increase the complexity for firms required to comply with CASS, for clients and for CCPs, and, as regulators have speculated, they may intensify legal risk in the clearing sector.

How might this complexity be addressed? The particular clashes and complexities described above would, of course, be immediately addressed if firms that were clearing members of CCPs were exempted from the CASS regime for their client clearing activities. In favour of this approach is the fact that it would drastically simplify the current piecemeal rules affecting margin in CCP context. This move would, however, remove a swathe of protections for certain clients using this UK market infrastructure. Given recent high profile client asset failures, and the very recent reforms to CASS which made bespoke arrangements for firms involved in clearing, a wholesale carve-out seems very unlikely to happen in practice.

In this context, the best option is to look to the EU. As part of the ongoing EMIR review,¹⁶¹ regulators should seek to improve the legal regime governing client clearing, including by addressing the inconsistent application of, and interaction with, client asset rules. Given the heightened significance of client clearing under a mandatory clearing regime, as outlined above, this would be a highly appropriate use of the review process outlined in Article 85 of EMIR.¹⁶² One possibility is to consider requiring CCPs to use their membership agreements

¹⁵⁹ CASS 7.13.71R-7.13.79G inclusive. This buffer is called the 'clearing arrangement mandatory prudent segregation amount' or 'CAMPSA' as discussed in FCA, PS14/9, n 147 above, [7.121].

¹⁶⁰ E.g., to the process of letters which have to be written to third party holders of client money. *Ibid*, [7.327].

¹⁶¹ Article 85 of EMIR requires that the Commission shall review and prepare a general report on EMIR by 17 August 2015.

¹⁶² The FMLC suggested permitting Delegated Regulation setting out technical standards with respect to Article 39 and 48 of EMIR in the context of conflicting claims over excess margin held by the CCP member. FMLC, n 124 above, 17.

to apply those client asset rules specially designed for clearing members (e.g., CASS 7.19 on clearing member client sub-pools), to all members clearing for clients, regardless of whether they were authorised firms. In this way, CCPs would be using contracts to replicate protections which are currently imposed by public sector regulation on only a portion of members and transactions. This article has identified several other issues which could usefully be addressed in the course of this review. First would be to rectify the unjustified separate treatment of client clearing (dealt with in EMIR) and indirect clearing (dealt with in Commission Delegated Legislation). Given the fundamental legal structures shared by these two types of access arrangement, they should be addressed together, in the same, more comprehensive, set of rules. In any event, the EMIR review should also seek to resolve other, basic uncertainties around access to client clearing, including around de facto exclusion of membership, and the transparency of client and indirect clearing arrangements. But this article has argued that the overriding objective of any review of client clearing under EMIR should be to protect clients' margin in a consistent and legally certain way. The aim should be to tackle those important questions of law which are currently unresolved or governed by piecemeal rules, while leveraging, rather than reducing, CCPs' autonomy to govern their members and thereby run safe and robust clearing services.

CONCLUSION

While the new regulatory regime for OTC derivatives depends on safely functioning CCPs, CCPs depend on selecting their own members and requiring them to post margin. As CCPs start to assume a greatly enhanced role in the OTC derivatives markets, there are many implications for lawyers to consider. This article has focused on some of them, by exploring how the posting of assets for clearing purposes is complicated by arrangements allowing access in the first place.

Ultimately, the importance of the specific legal issues highlighted in this article is inversely proportionate to how inclusive CCPs are towards new members. If CCPs were to drastically lower entry and monitoring criteria, if membership became cheaper and less onerous, and if more parties were willing and able to sign up, client clearing would become less important an aspect of the clearing regime. However, such changes would be nothing short of a revolution for the CCP industry, and there are, as yet, no signs that this will happen on a significant scale. The PFMI and EMIR fall far short of calling for such changes, ultimately upholding the principle of CCP autonomy in their respective provisions about membership criteria. Assuming, therefore, that client clearing is here to stay, lawyers must do more to join economists and bankers in debating its impact and effects. Client clearing is rich in legal issues. It involves assets moving around networks of contracts between clients, indirect clients and a small number of

members. For this reason, it disrupts the neat ‘hub and spoke’ picture of CCPs preferred by many commentators, but recognising this more legally complex reality is essential if CCPs are to safely fulfil the systemically important role which regulators have chosen to assign to them.