EUROPEAN
COMMISSION

Strasbourg, 13.6.2017
SWD(2017) 246 final

COMMISSION STAFF WORKING DOCUMENT

IMPACT ASSESSMENT

Accompanying the document

Proposal for a Regulation of the European Parliament and of the Council

amending Regulation (EU) No 1095/2010 establishing a European Supervisory Authority (European Securities and Markets Authority) and amending Regulation (EU) No 648/2012 as regards the procedures and authorities involved for the authorisation of CCPs and the requirements for the recognition of third-country CCPs

{COM(2017) 331 final}
{SWD(2017) 247 final}

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GLOSSARY AND LIST OF ABBREVIATIONS USED

Glossary

Central Counterparty (CCP)	A legal person that interposes itself between the counterparties to the contracts traded on one or more financial markets, becoming the buyer to every seller and the seller to every buyer.
Clearing	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.
Clearing member/direct participant	An undertaking which participates in a CCP and which is responsible for discharging the financial obligations arising from that participation.
Collateral	An asset or third-party commitment that is used by the collateral provider to secure an obligation to the collateral taker. Collateral arrangements may take different legal forms; collateral may be obtained using the method of title transfer or pledge.
Counterparty credit risk	The risk that a counterparty will not settle an obligation for full value, either when due or at any time thereafter. Credit risk includes pre-settlement risk (replacement cost risk) and settlement risk (principal risk).
Credit risk	The risk of a change in value due to actual credit losses deviating from expected credit losses due to the failure to meet contractual debt obligations. Credit risk comprises default and settlement risk. Credit risk can arise on issuers of securities (in the company's investment portfolio), debtors (e.g. mortgagors), or counterparties (e.g. on derivative contracts, or deposits) and intermediaries, to whom the company has an exposure.

Margin (initial/variation)	An asset (or third-party commitment) that is accepted by a counterparty to ensure performance on potential obligations to it or cover market movements on unsettled transactions. **'Initial margin'** means margins collected by the CCP to cover potential future exposure to clearing members providing the margin and, where relevant, interoperable CCPs in the interval between the last margin collection and the liquidation of positions following a default of a clearing member or of an interoperable CCP default. **'Variation margin'** means margins collected or paid out to reflect current exposures resulting from actual changes in market price.
Non-Financial Counterparty (NFC)	An undertaking established in the European Union that is not a CCP or a financial counterparty, as defined in Article 2(9) of EMIR. The requirements of EMIR vary depending on the profile of a non-financial counterparty. In determining whether an NFC should be subject to the clearing obligation, EMIR gives consideration to the purpose for which that NFC uses OTC derivative contracts as well as to the size of the exposures that it has in those instruments. NFCs are subject to the clearing obligation and risk mitigation techniques requirements where their positions in non-hedging OTC derivatives exceed certain thresholds defined by ESMA. The thresholds are EUR 1 bn in gross notional value for credit and equity derivatives and EUR 3 bn for interest rate, foreign exchange, and commodity or other derivatives. Once an NFC surpasses one of these thresholds in any asset class, it becomes subject to these requirements across all asset classes. These NFCs are commonly referred to as 'NFC+' as opposed to NFCs below the threshold which are known as 'NFC-'.
OTC	The phrase "over-the-counter" (or OTC) can be used to refer to stocks that trade via a dealer network as opposed to on a regulated market. It also refers to debt securities and other financial instruments such as derivatives, which are traded through a dealer network.
OTC derivative	A derivative contract the execution of which does not take place on a regulated market as within the meaning of Article 4(1)(14) of Directive 2004/39/EC or on a third-country market considered as equivalent to a regulated market in accordance with Article 19(6) of Directive 2004/39/EC.

List of abbreviations used

CBI	Central Bank of Issue
CDS	Credit Default Swaps
CCP	Central Counterparty
CMU	Capital Markets Union
EMIR	'European Markets Infrastructure Regulation', short for: Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories
ESA	European Supervisory Authority
ESCB	European System of Central Banks
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
ETD	Exchange-Traded Derivatives
IRS	Interest-Rate Swaps
IRD	Interest-Rate Derivative
NFC	Non-Financial Counterparty
OTC	Over The Counter
TR	Trade Repository

1. INTRODUCTION AND RATIONALE

Use of Central Counterparties (CCPs) required as a response to the financial crisis

Derivatives contracts are used by financial and non-financial economic actors to manage risks related to changes in interest rates, currency fluctuations, the default of a business counterpart etc. However, the opacity of derivatives played a key role in the financial crisis and notably the problems encountered by Lehman Brothers, AIG and others.

In accordance with the 2009 G20 Pittsburgh agreement[1] to reduce the systemic risk linked to extensive use of derivatives, the EU adopted the European Market Infrastructure Regulation (EMIR) in 2012[2]. A key pillar of EMIR is the requirement for standardised OTC derivatives contracts to be cleared through a Central Counterparty (CCP), which entered into force in December 2015[3]. A CCP is a market infrastructure, which reduces systemic risk and enhances financial stability by standing between the two counterparties to a derivatives contract (i.e. acting as buyer to the seller and seller to the buyer of risk) and thereby reducing the risk for both. EMIR also introduced strict prudential, organisational and business conduct requirements for CCPs and established arrangements for their prudential supervision to minimise any risk to users of a CCP and underpin systemic stability. Under EMIR, derivatives transactions which are not centrally cleared by a CCP are subject to additional collateral requirements on the bilateral exposures reflecting a higher implied counterparty risk and potentially higher risk to systemic stability[4].

CCPs have grown in importance since 2012 and will expand further in the coming years

In the five years since the adoption of EMIR, **the volume of CCP activity – in the EU and globally - has grown rapidly not only in scale but also in scope**. At present, around 62% of the global value of all OTC derivatives contracts and asset classes (interest rates, credit default, foreign exchange, etc.) is centrally cleared by CCPs[5], which is equivalent to $337 trillion. About 97% ($328 trillion) of all centrally-cleared derivatives contracts are interest-rate derivatives. At the end of 2009, about 36% of all OTC interest-rate derivatives were centrally cleared, while the corresponding figure by the end of 2015 was 60%[6]. Central clearing has similarly gained in importance in the credit derivatives (so-called CDS) market, with the proportion of outstanding CDSs cleared through CCPs increasing steadily since these data were first reported, i.e. from 10% at the end of June 2010 to 37% at end the end of June 2016[7].

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1 http://www.g20.utoronto.ca/2009/2009communique0925.html

2 Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories. Available at http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02012R0648-20170103&qid=1492599335405&from=EN

3 Commission Delegated Regulation (EU) 2015/2205 of 6 August 2015 supplementing Regulation (EU) No 648/2012 of the European Parliament and of the Council with regard to regulatory technical standards on the clearing obligation (Text with EEA relevance), OJ L 314, 1.12.2015, p. 13–21.

4 See Article 11 of EMIR on risk-mitigation techniques for OTC derivative contracts not cleared by a CCP.

5 BIS, Statistical release, OTC derivatives statistics at end-June 2016, November 2016.

6 See http://europa.eu/rapid/press-release_MEMO-16-3990_en.htm, November 2016.

7 BIS, Statistical release, OTC derivatives statistics at end-June 2016, November 2016.

The rapidly expanding role of CCPs in the global financial system reflects not only the introduction of central clearing obligations across different asset classes[8], but also increased voluntary use of central clearing amid growing awareness of the benefits of central clearing among market participants (clearing obligations have applied only since June 2016). EMIR requires certain interest-rate derivatives and CDSs to be centrally cleared in line with similar requirements in other G20 countries[9]. Bank capital rules have been changed to incentivise central clearing and make bilateral clearing a costlier option in relative terms[10], while bilateral transactions are subject to additional collateral requirements since March 2017[11]. However, many entities now choose to clear voluntarily via a CCP, even in the absence of a regulatory requirement, because of the cost and/or risk mitigation benefits[12].

The expansion in CCP activity is set to continue in the coming years. Mandatory clearing obligations are likely for additional asset classes[13] and the incentives to mitigate risks and costs are likely to lead to even more voluntary clearing. The May 2017 proposal to amend EMIR in a targeted manner, so as to improve its effectiveness and proportionality, will reinforce this trend, by creating further incentives for CCPs to offer central clearing of derivatives to counterparties[14]. Finally, deeper and more integrated capital markets following on from Capital Markets Union will further increase the need for cross-border clearing in the EU, thus further increasing the importance and the interconnectedness of CCPs within the financial system.

Expanding role of CCPs raises concerns about the need to upgrade supervisory arrangements under EMIR

The growing importance of CCPs in the financial system and the associated concentration of credit risk in these infrastructures have drawn the attention of governments, regulators, supervisors, central banks and market participants.

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8 FSB, OTC Derivatives Market Reforms, Eleventh progress report on implementation, August 2016. See in particular section 3.2.1 on central clearing of standardised transactions, as well as Appendixes C and I for further details.

9 In accordance with EMIR, the European Securities and Market Authority (ESMA) is tasked with developing technical standards specifying the class of OTC derivatives that should be subject to the clearing obligation. ESMA also maintains a public register on the clearing obligation. See p. 8-10 of the public register for further details on the clearing obligations: https://www.esma.europa.eu/sites/default/files/library/public_register_for_the_clearing_obligation_under_emir.pdf

10 Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements and amending Regulation (EU) No 648/2012.

11 Commission Delegated Regulation (EU) 2016/2251 of 4 October 2016, OJ L 340, 15.12.2016, p. 9–46.

12 https://www.kfw.de/KfW-Group/Newsroom/Aktuelles/Pressemitteilungen/Pressemitteilungen-Details_407936.html

13 ESMA has analysed several classes of interest rate, credit, equity and foreign-exchange OTC derivatives and proposed some of them for the clearing obligation. As indicated in the following table, ESMA could consider further clearing obligations in the future, including for instance "Equity Lookalike/Flexible equity derivatives and CFD" and "ForEx Non-deliverable Forward (NDF)".

14 Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No 648/2012 as regards the clearing obligation, the suspension of the clearing obligation, the reporting requirements, the risk-mitigation techniques for OTC derivatives contracts not cleared by a central counterparty, the registration and supervision of trade repositories and the requirements for trade repositories.

While the scale and scope of centrally-cleared transactions has expanded, the number of CCPs has remained relatively limited. There are 17 CCPs currently established in the EU, all of which are authorised under EMIR to offer their services within the jurisdiction - although not all CCPs are authorised to clear all asset classes (e.g. only 2 CCPs clear credit derivatives, only 2 CCPs clear inflation derivatives[15])[16]. A further 28 third-country CCPs have been recognised under EMIR's equivalence provisions, allowing them also to offer their services in the EU[17]. Accordingly, **clearing markets are integrated across the EU and are highly concentrated in certain asset classes**. They are also highly interconnected[18].

While increased clearing via properly regulated and supervised CCPs reinforces systemic stability overall, the concentration of risk makes the failure of a CCP a low-probability but potentially extremely high-impact event. Given the centrality of CCPs to the financial system, the increasing systemic importance of CCPs gives rise to concerns. CCPs have themselves become a source of macro-prudential risk, as their failure could cause significant disruption to the financial system and would have systemic effects. For instance, mass, uncontrolled termination and close-out of contracts cleared by CCPs could lead to liquidity and collateral strains across the market, causing instability in the underlying asset market and the wider financial system. Like some other financial intermediaries, CCPs are also potentially susceptible to "runs" due to clearing members losing confidence in the solvency of a CCP. This could create a liquidity shock for the CCP as it attempts to meet its obligations to return the principal collateral (i.e. initial margin). The impact of a CCP failure due to increased concentration of risk would be amplified by a growing interconnectedness between CCPs both directly and indirectly via their members (usually large global banks) and clients (Table 2 on page 22 illustrates how the majority of global systemically important banks – G-SIBs – are clearing members of most CCPs including the most systemic ones).

In response, and in line with the G20 consensus[19], the Commission adopted a proposal for a Regulation on CCP Recovery and Resolution[20] in November 2016. The objective of this proposal is to ensure that authorities are appropriately prepared to address a failing CCP, safeguarding financial stability and limiting taxpayer costs. In the context of preparing the CCP Recovery and Resolution proposal, attention has been refocused on the supervisory arrangements for EU and third-country CCPs included in EMIR and the extent to which these arrangements can be made more effective five years after adoption of the Regulation.

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15 See ESMA, Report EU-wide CCP Stress test 2015, 29 April 2016, 2016/658 and related graph in section 3.1 of this impact assessment.

16 See full list of CCPs established in the EU in table 3 in section 2.3 of this impact assessment.

17 In accordance with EMIR, ESMA provides a list of the third-country CCPs that have been recognised to offer services and activities in the Union. The third-country CCPs are established in 15 countries covered by CCP equivalence decisions adopted by the Commission, including Australia, Hong Kong, Singapore, Japan, Canada, Switzerland, South Korea, Mexico, South Africa and the US CFTC, Brazil, UAE, Dubai International Financial Centre (DIFC), India and New Zealand.

18 See section 2.3 of this impact assessment for further details.

19 At the Cannes summit of November 2011; the G20 Heads of States and Government endorsed the FSB's"Key Attributes of Effective Resolution Regimes for Financial Institutions"(the 'Key Attributes' KA) as "a new international standard for resolution regimes". See Communiqué G20 Leaders Summit – Cannes – 3-4 November 2011, Section 13.

20 Proposal for a Regulation of the European Parliament and of the Council on a framework for the recovery and resolution of central counterparties and amending Regulations (EU) No 1095/2010, (EU) No 648/2012, and (EU) 2015/2365. COM(2016) 856 final.

Supervisory arrangements for EU CCPs

Under EMIR, EU CCPs are currently supervised by colleges of national supervisors, the European Securities and Markets Authority (ESMA), relevant members of the European System of Central Banks (ESCB), and other relevant authorities (e.g. supervisors of the largest clearing members, supervisors of certain trading venues and central securities depositories). These colleges can have as many as 20 member authorities and rely on coordination by the home-country authority. These arrangements raise a series of concerns.

- First, the growing concentration of clearing services in a limited number of CCPs, and the increase in cross-border activity which that entails, implies that CCPs in individual Member States are increasingly relevant for the EU financial system as a whole. On this basis, the current supervisory arrangements relying mainly on the home-country authority (e.g. the home-country authority is ultimately responsible for important decisions such as the extension of the authorisation or the approval of outsourcing and interoperability arrangements) must be reconsidered.

- Second, divergent supervisory practices in respect of CCPs (e.g. different conditions for authorisation or model validation processes) across the EU can create risks of regulatory and supervisory arbitrage for CCPs and indirectly for their clearing members or clients. The Commission has drawn attention to these emerging risks and the need for more supervisory convergence in the Commission Communication on CMU of September 2016[21] and in the public consultation on the operations of the European Supervisory Authorities (ESAs)[22], both of which drew attention to the challenges posed by heterogeneous supervisory practices.

- Third, the role of central banks - as issuers of currency - is not adequately reflected in CCP colleges. While the mandates of central banks and supervisors may overlap (in particular in areas such as interoperability, liquidity-risk controls etc.), there is a potential for misalignment when supervisory actions impact on key responsibilities of central banks in areas such as price stability, monetary policy and the payment systems. In crisis situations, such misalignments could amplify the risks to financial stability if the assignment of responsibilities between authorities remains unclear.

Supervisory arrangements for third-country CCPs

Concerns have also arisen in respect of supervisory arrangements for third-country CCPs operating within the EU. Today, a significant amount of financial instruments denominated in the currencies of the Member States are cleared by recognised third-country CCPs. For example, the notional amount outstanding at CME in the US is EUR 1.8 trillion for euro-denominated interest-rate derivatives, and SEK 348 billion for SEK denominated interest-rate derivatives.

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21 Communication on the "State of the Union 2016: Completing the Capital Market Union – Commission accelerates reform"; 14 September 2016; IP/16/3001.

22 Public consultation on the operations of the European Supervisory Authorities"; 21/03/2017 – 16/05/2017.

– First, the implementation of EMIR's system of equivalence and recognition has shown some shortcomings from the perspective of EU regulators, supervisors and central banks, in particular as regards ongoing supervision. Once a third-country CCP has been recognised, ESMA typically encounters difficulties in accessing information from the CCP, conducting on-site inspections of the CCP and sharing information with the relevant EU regulators, supervisors and central banks. As a result, there is a risk that CCP practices and/or adjustments to risk management models go undetected, with important financial-stability implications for the EU entities.

– Second, the potential for misalignments between supervisory and central-bank objectives within colleges acquires an additional dimension in the context of third-country CCPs where non-EU authorities are involved.

– Third, as within the EU, there is a risk that changes to the CCP rules and/or regulatory framework in a third-country which could negatively affect the regulatory or supervisory outcomes cannot be taken into account, leading to an un-level playing field between EU and third country CCPs and creating scope for regulatory or supervisory arbitrage. There is currently no mechanism to ensure that the EU is informed automatically of such changes.

Such concerns are likely to become more significant in the coming years, as the global nature of capital markets means that the role played by third-country CCPs is set to expand. With 28 third-country CCPs already recognised by ESMA, a further 12 CCPs from 10 jurisdictions have applied for recognition[23] and are awaiting a decision of the Commission as regards the equivalence of their regulatory and supervisory regimes.

Finally, and significantly, a substantial volume of euro-denominated derivatives transactions (and other transactions subject to the EU clearing obligation) is currently cleared via CCPs located in the UK. When the UK exits the EU, there will be a discrete shift in the proportion of such transactions being cleared in CCPs outside the EU's jurisdiction - exacerbating the concerns outlined above. This implies significant challenges for safeguarding financial stability in the EU.

In light of these considerations, the Commission adopted a Communication on 4 May 2017 on responding to challenges for critical financial market infrastructures and further developing the Capital Markets Union[24], indicating that "further changes [to EMIR] will be necessary to improve the current framework that ensures financial stability and supports the further development and deepening of the Capital Markets Union (CMU)".

Need to assess options to improve current supervisory arrangements

As the EU clearing landscape continues to evolve, the arrangements for crisis prevention and management of CCPs must be as effective as possible. EMIR and the Commission proposal for a Regulation on CCP Recovery and Resolution are important steps in this regard. However, five years after the adoption of EMIR, there is a need to revisit the

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23 In accordance with ESMA's indicative list of third-country CCPs that have applied for recognition under Article 25 of EMIR.

24 Communication from the Commission to the European Parliament, the Council, and the European Central Bank on Responding to challenges for critical financial market infrastructures and further developing the Capital Markets Union, Brussels, 4.5.2017, COM(2017) 225 final.

supervisory arrangements for EU and third-country CCPs in light of the growing size, complexity and cross-border dimension of clearing in the EU and globally. By addressing identified problems at an early stage and establishing clear and coherent supervisory arrangements both for EU and third-country CCPs, the overall stability of the EU financial system should be reinforced and the already low probability (but extremely high-impact) risk of a CCP failure should be lowered even further. The development of the CMU can also be strengthened.

This impact assessment considers the costs and benefits of possible amendments to EMIR so as to address emerging challenges relating to the supervision of CCPs established within the EU and those from third countries. It considers a number of options, including the establishment of a single supervisor for EU CCPs, enhanced supervisory cooperation for EU CCPs, and a system of enhanced implementation of equivalence, additional supervisory requirements and/or location policy for third-country CCPs.

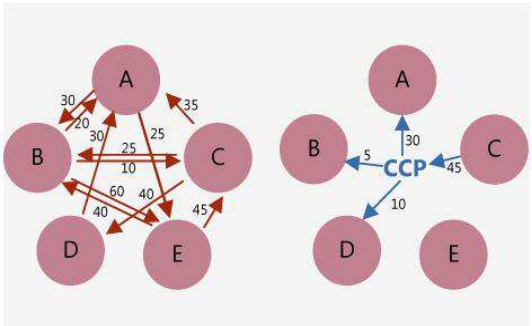
2. BACKGROUND AND POLICY CONTEXT

2.1. The key role of CCPs in the financial system

CCPs are vital infrastructures for the financial system

CCPs are the "central nerve system" of financial markets. They play a key role in mitigating counterparty credit risk in transactions involving a range of financial instruments, thereby contributing to the reduction of systemic risk[25]. By interposing itself between counterparties to transactions in one or more financial markets, a CCP becomes the buyer to every seller and the seller to every buyer. In this way, CCPs simplify the network of counterparty exposures and lower the average counterparty credit risk through multilateral netting techniques (see Figure 1 below). These techniques mediate exposures and, as a result, central clearing may also mitigate systemic risk by reducing the risk that the default of one or several clearing members propagates from counterparty to counterparty.

Figure 1: Exposures network: from non-centrally cleared to centrally cleared derivatives



Source: BIS[26]

[25] Systemic risk is defined in Article 2(c) of Regulation (EU) No 1092/2010 of the European Parliament and of the Council of 24 November 2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board as "risk of disruption in the financial system with the potential to have serious negative consequences for the internal market and the real economy. All types of financial intermediaries, markets and infrastructure may be potentially systemically important to some degree."

[26] "Central clearing: trends and current issues", December 2015, available at http://www.bis.org/publ/qtrpdf/r_qt1512g.htm

CCPs are located at the heart of a complex network of direct and indirect exposures within the financial system. These exposures relate to a limited number of clearing members of the CCP and a wide array of clients (via the clearing members) and indirect clients (via the clients of clearing members) including small financial companies, investment funds or vehicles, insurance companies and non-financial companies. Direct CCP membership is concentrated in a limited number of entities, as clearing members need to meet minimum criteria, notably in terms of financial robustness, operational capacity and product expertise. A typical clearing member is a large financial institution engaging with CCPs for purposes of trading on their own account and/or on account of their clients.

CCPs clear a wide range of products

Contracts cleared by CCPs can be outright purchases and sales of securities (bonds or equities), Securities Financing Transactions (including repurchase agreements i.e. repos) or financial derivatives, whether listed or OTC. At the end of 2014, almost 40% of CCPs globally were simultaneously offering clearing services for derivatives, cash and SFT markets (see Table 1 for product types cleared by CCP by region). This percentage was 20% in 2006[27].

Table 1: Product types cleared by CCPs (percentage of CCPs offering clearing for a specific product type in 2014 by jurisdiction)

	Securities	Derivatives	Repos	All three[2]
Advanced economies	63.6	72.7	31.8	27.3
Europe	60.0	80.0	40.0	40.0
North America	50.0	50.0	25.0	0.0
Asia-Pacific	75.0	75.0	25.0	25.0
Emerging market economies	84.6	76.9	61.5	53.8
Asia	100.0	87.5	87.5	25.0
Latin America	60.0	60.0	20.0	87.5
Total	**71.4**	**74.3**	**42.9**	**37.2**

[1] CPMI Red Book statistics do not include some major CCPs that are not overseen by CPMI members. [2] Percentage of CCPs simultaneously offering clearing services for derivatives, cash (equity and fixed income) and repo markets.

Sources: CPMI, *Statistics on payment, clearing and settlement systems in the CPMI countries* (Red Book); authors' calculations.

Source: BIS[28]

Most CCPs operating in the EU also clear several product classes, from listed and OTC financial and commodity derivatives to cash equities, bonds and repos. Annex 2 provides a definition of derivatives and further detail on the different products cleared by CCPs operating in the EU.

2.2. CCPs have increased in size following post-crisis regulatory reforms - and continue to grow in importance

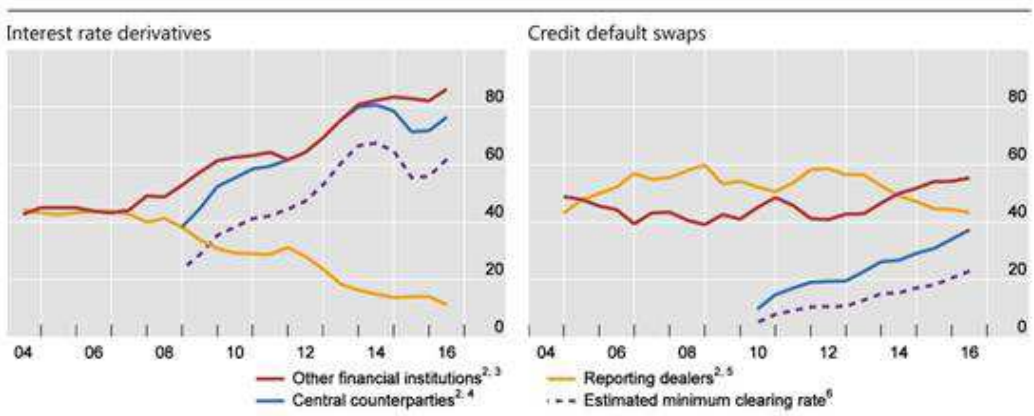
The financial crisis brought the OTC derivatives market to the forefront of regulatory attention. The insolvency of Lehman Brothers, then a major actor in the OTC derivatives market, revealed important shortcomings in the market. Contracts involving Lehman required many years to unwind, complicating the process of loss allocation and undermining confidence across the financial system as a whole. The G20 took a leading

27 Ibid.

28 "Central clearing: trends and current issues", December 2015, available at http://www.bis.org/publ/qtrpdf/r_qt1512g.htm

role in seeking to tackle these market shortcomings and in coordinating a global policy response. In September 2009, the G20 leaders agreed that "All standardised OTC derivatives contracts should be *[...]* cleared through central counterparties by end-2012 at latest. OTC derivatives contracts should be reported to trade repositories. Non-centrally cleared contracts should be subject to higher capital requirements[29]". In this way, G20-inspired reforms have led to the introduction of a clearing obligation for standardised OTC derivatives and created incentives for central clearing; this, in turn, has increased the number of centrally-cleared contracts, in particular for interest-rate and credit derivatives (see Figure 2).

Figure 2: Growth of central clearing (notional amounts outstanding by counterparty in percent)



Further information on the BIS derivatives statistics is available at www.bis.org/statistics/derstats.htm.

[1] As reported in the semiannual survey of OTC derivatives markets, excluding the positions of dealers that report only in the Triennial Survey. [2] As a percentage of notional amounts outstanding against all counterparties. [3] Including central counterparties but excluding reporting dealers. [4] For interest rate derivatives, data for CCPs prior to end-June 2016 are estimated by indexing the amounts reported at end-June 2016 to the growth since 2008 of notional amounts outstanding cleared through LCH's SwapClear service. [5] Adjusted for the double-counting of positions between dealers (that are not novated to CCPs). [6] Proportion of trades that are cleared, estimated as (CCP / 2) / (1 – (CCP / 2)), where CCP represents the share of notional amounts outstanding that dealers report against CCPs. CCPs' shares are halved to adjust for the potential double-counting of inter-dealer trades novated to CCPs.

Sources: LCH.Clearnet Group Ltd; BIS OTC derivatives statistics.

Source: BIS derivatives statistics, November 2016[30]

Regulators across the globe have now transposed the G20 commitment on derivatives into their legal frameworks. In the EU, the adoption of EMIR[31]- together with other pieces of EU legislation[32], implemented the G20 commitment to increase the resilience of the OTC derivatives market by mandating that certain OTC derivatives be cleared through CCPs. Similar initiatives were undertaken across G20 jurisdictions, including the US (via the Dodd-Frank Wall Street Reform and Consumer Protection Act, which was signed into law in July 2010) and several Asian countries (Hong Kong, Japan, Singapore and South Korea). These regulatory reforms have driven a major structural change in the OTC derivatives market and significantly enhanced the systemic importance of CCPs. CCPs are now managing huge volumes of OTC derivatives, which are much more

29 http://www.g20.utoronto.ca/2009/2009communique0925.html

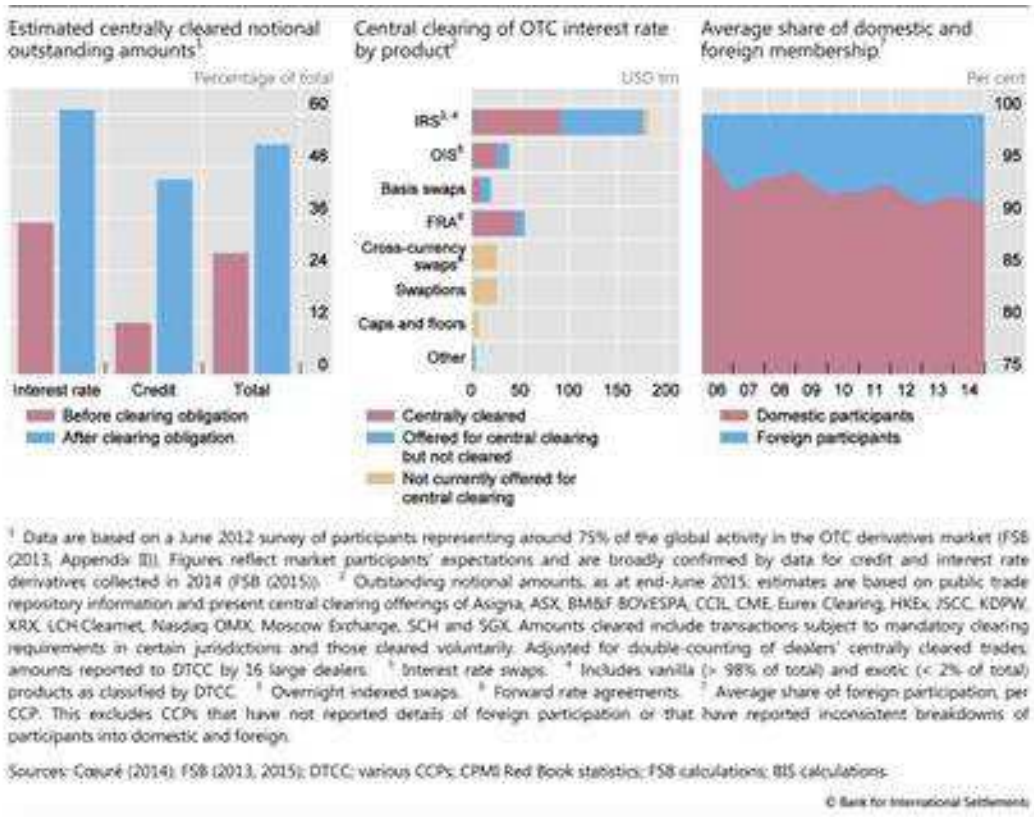
30 "Central clearing predominates in OTC interest rate derivatives markets", BIS Quarterly Review, December 2016, available at http://www.bis.org/publ/qtrpdf/r_qt1612b.pdf

31 Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories, OJ L 201, 27.7.2012, p. 1.

32 Other relevant pieces of EU legislation include the Markets in Financial Instruments Directive and Regulation (MiFID I, II and MIFIR) and the CRD IV package setting out prudential requirements.

complex instruments than those typically managed by CCPs before the post-crisis reforms.

Figure 3: Evolution of the CCP industry



[1] Data are based on a June 2012 survey of participants representing around 75% of the global activity in the OTC derivatives market (FSB (2013, Appendix II)). Figures reflect market participants' expectations and are broadly confirmed by data for credit and interest rate derivatives collected in 2014 (FSB (2015)). [2] Outstanding notional amounts, as at end-June 2015; estimates are based on public trade repository information and present central clearing offerings of Asigna, ASX, BM&F BOVESPA, CCIL, CME, Eurex Clearing, HKEx, JSCC, KDPW, XRX, LCH.Clearnet, Nasdaq OMX, Moscow Exchange, SCH and SGX. Amounts cleared include transactions subject to mandatory clearing requirements in certain jurisdictions and those cleared voluntarily. Adjusted for double-counting of dealers' centrally cleared trades; amounts reported to DTCC by 16 large dealers. [3] Interest rate swaps. [4] Includes vanilla (> 98% of total) and exotic (< 2% of total) products as classified by DTCC. [5] Overnight indexed swaps. [6] Forward rate agreements. [7] Average share of foreign participation, per CCP. This excludes CCPs that have not reported details of foreign participation or that have reported inconsistent breakdowns of participants into domestic and foreign.

Sources: Caruné (2014); FSB (2013, 2015); DTCC; various CCPs; CPMI Red Book statistics; FSB calculations; BIS calculations.

Source: BIS[33]

The gross market value of transactions cleared by CCPs globally is now measured in trillions of dollars. This reflects the introduction of central clearing obligations across asset classes as well as a broad acceptance of the benefits of central clearing by market participants. The notional amounts of centrally cleared OTC derivatives transactions outstanding at the end of December 2016 was estimated at USD 283.5 trillion,[34] of which USD 278.2 trillion was attributable to interest-rate derivatives and USD 4.3 trillion was attributable to credit default swaps. The gross market value of those derivatives represented USD 4.6 trillion and USD 110 billion, respectively. For interest-rate derivatives, 76% of the outstanding notional amount was centrally cleared, with a corresponding share of 44% for credit derivatives. The share of centrally-cleared transactions in other segments of OTC derivatives markets remains negligible (about 1% of the outstanding notional amount for OTC FX derivatives and equity-linked contracts[35]), mainly due to the absence of a central clearing obligation. However, there is a positive trend for central clearing also in these market segments.

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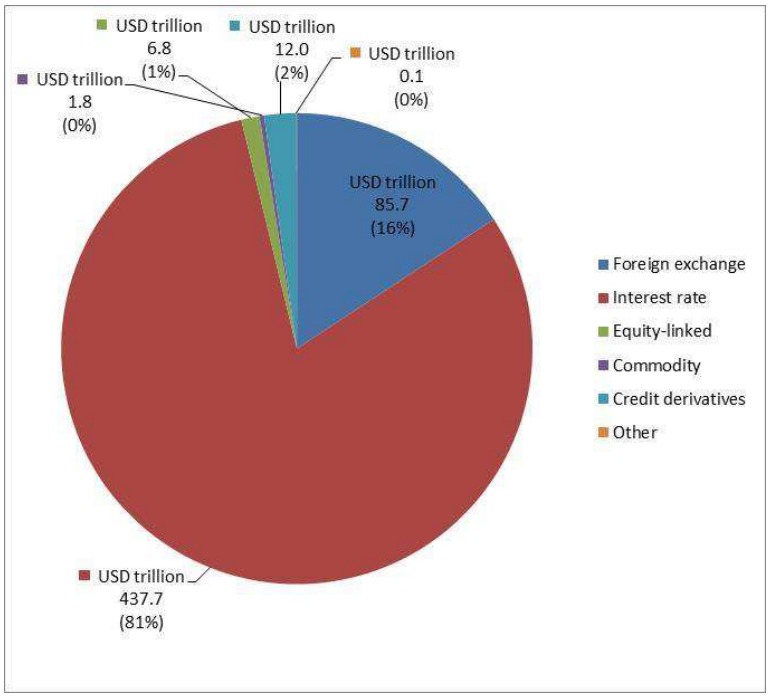
33 "Central clearing: trends and current issues", December 2015, available at http://www.bis.org/publ/qtrpdf/r_qt1512g.htm

34 BIS, Statistical release, OTC derivatives statistics at end-December 2016, on the basis of outstanding positions. http://www.bis.org/statistics/derstats.htm?m=6|32|71

35 There is little benefit to centrally clear FX derivatives as the main risk they pose is settlement risk, a risk better mitigated through payment and settlement systems. Equity derivatives represent a very small portion of the derivatives market and have the characteristic of not being highly standardised as interest rates and credit derivatives can be.

Figure 4: Constituents of the OTC derivatives market as of end-June 2016



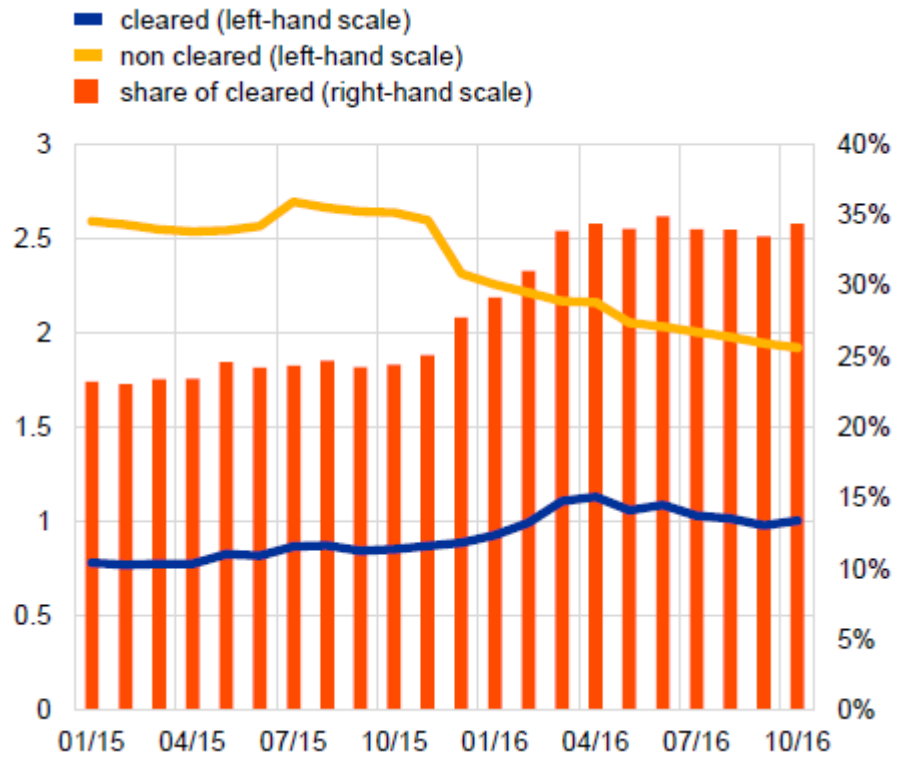
Source: BIS

Since December 2015, the EU has had requirements in force for certain interest-rate and credit derivatives to be centrally cleared (consistent with similar requirements in other G20 countries)[36]; mandatory central clearing for other types of derivatives will follow[37]. In line with global trends, the volume of OTC derivatives transactions, which are centrally cleared, has risen sharply. The evolution in the volume of centrally-cleared interest-rate swap (IRS) transactions is illustrative of this trend. The analysis of EMIR data indicates that the share of cleared OTC trades for IRS has increased steadily since the introduction of the clearing obligation (see Figure 5, which illustrates relative trends in cleared versus non-cleared OTC IRS transactions since January 2015 for two trade repositories DDRL and Regis-TR). The share of centrally-cleared IRS was stable at about 25% in 2015, while it increased to around 35% in the first three quarters of 2016, i.e. after the entry into force of the clearing obligation.

36 Today, the central clearing determination covering OTC interest rate swaps (IRS) related to the Euro, the USD, the Yen, and the British Pound has applied to clearing members (as of 21 June 2016) and financial counterparties with a volume of activity above a threshold of EUR 8 billion in gross notional amounts of outstanding contracts (as of 21 December 2016). For other IRS in European currencies (Norwegian Krone, Polish Zloty, and Swedish Krona) and Credit Default Swaps (CDS), the application has started phasing-in as of February 2017 for clearing members.

37 The detailed compliance deadlines for the central clearing determination applying to various asset classes and to different types of counterparties are available here: https://www.esma.europa.eu/sites/default/files/library/public_register_for_the_clearing_obligation_under_emir.pdf

Figure 5: Cleared versus non-cleared outstanding ITC IRS trades for DDRL and Regis-TR (millions of trades, percentage, end-of-month data)



Source: EMIR data, DDRL and Regis-TR[38]

In addition to the clearing obligation, the Commission adopted new regulatory technical standards on margin requirements[39] in October 2016. The objective of these RTS is to further mitigate risk in bilateral clearing by imposing higher collateral requirements (as agreed by G20) and to strengthen the incentive to move to central clearing.[40] The entry into application of these requirements for bilateral transactions follows a phase-in schedule, which started on 4 February 2017 for CCP clearing members and continued on 1 March 2017 for other larger counterparties. Counterparties are required to exchange two types of collateral in the form of margins, contributing to reduce the price differential between bilateral and centrally-cleared transactions and to establish centrally-cleared derivatives prices as the default price. The higher collateral requirement on bilateral transactions has attracted many entities towards central clearing, even though they do not fall within the scope of the EMIR clearing obligation. For instance, in early April 2017, Germany's KfW, a development bank exempt from EMIR, indicated that it would begin centrally clearing its euro-denominated interest-rate derivatives through Deutsche Boerse's Eurex Clearing platform. KfW highlighted that the use of central clearing was justified both by the need to expand the number of its derivatives partners

[38] "Looking back at OTC derivative reforms – objectives, progress and gaps", ECB Economic Bulletin Issue 8, 2016, 20.12.2016,
available at https://www.ecb.europa.eu/pub/pdf/other/eb201608_article02.en.pdf

[39] Commission Delegated Regulation (EU) 2016/2251 of 4 October 2016, OJ L 340, 15.12.2016, p. 9–46.

[40] These requirements follow international standards developed by the BCBS and IOSCO. For further information, see http://www.bis.org/bcbs/publ/d317.htm

and by the benefits of central clearing from a risk management perspective[41]. This followed a similar move by Germany's sovereign debt agency, Finanzagentur, which began centrally clearing OTC interest-rate derivatives through Eurex in late 2016. This shift towards voluntary central clearing is likely to lead to further increases in the volume of transactions being managed by CCPs.

2.3. The CCP landscape: concentration, integration and interconnectedness

A concentrated and integrated EU CCP landscape

Most EU CCPs (and other market infrastructures) were originally established to serve national needs. Today, many of these CCPs provide their services across national borders regardless of the currency denomination. For instance, according to recent data, about 75% of centrally-cleared euro-denominated interest-rate derivatives are cleared in the United Kingdom, mostly through SwapClear, a service of LCH.Clearnet.[42] On a daily basis SwapClear clears about USD 3 trillion in interest-rate derivatives, with USD 2 trillion in US dollar-denominated contracts, and EUR 475 billion in euro-denominated contracts as the second largest component[43]. These figures are broadly confirmed by BIS triennial data for 2016[44]. The majority of interest-rate derivatives denominated in EU-currencies other than the euro are also centrally cleared outside of national borders (see section 3.2).

While the volume of transactions cleared in the EU has increased substantially in recent years and is measured in trillions of USD, the number of CCPs remains limited. Currently, there are 17 CCPs[45] established in the EU and authorised under EMIR to offer clearing services in the EU (see Table 3).[46] Some of these EU CCPs are also authorised, recognised or registered by third-country authorities to provide clearing services to non-EU clearing members or trading venues.

Not all EU CCPs are authorised to clear all asset classes (See Figure 6 for the number of EU CCPs authorised to clear products per asset classes between February 2014 and October 2015). In the case of some asset classes, there is only a small number of EU CCP offering clearing services (e.g. only one EU CCP clears credit derivatives, only two EU CCPs clear inflation-rate derivatives).

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41 "Swaps clearing soars as margin rules bite", Reuters, 6 April 2017, available at: http://www.reuters.com/article/derivatives-swaps-clearing-soars-as-marg-idUSL5N1HE2IE

42 Calculation on the basis of international data from the BIS and data published by LCH SwapClear (see: http://www.swapclear.com/what/clearing-volumes.html.)

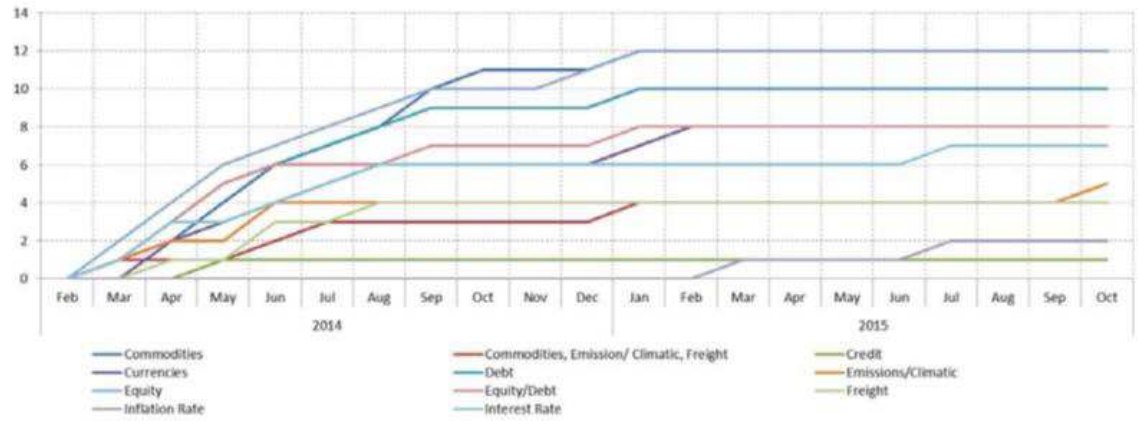
43 http://www.swapclear.com/what/clearing-volumes.html as of 15 May 2017

44 See Table 3.2, BIS Triennial Central Bank Survey 2016, , p. 9, available at: http://www.bis.org/publ/rpfxf16irt.pdf

45 In addition to Table 3, a list of those CCPs and the classes of financial instruments covered by their authorisations can be found here: https://www.esma.europa.eu/sites/default/files/library/ccps_authorised_under_emir.pdf.

46 ADD cross reference to table with list.

Figure 6: Number of CCPs authorised to clear products on asset classes



Source: ESMA, Report EU-wide CCP Stress test 2015, 29 April 2016, 2016/658[47]

In addition to EU CCPs, a further 28 third-country CCPs have been recognised under EMIR's equivalence provisions[48], enabling them to offer their services in the EU.[49] This number is expected to expand as the Commission granted equivalence to six additional third-country CCP regimes in December 2016[50].

The number of recognised third-country CCPs reflects both the attractiveness of the EU's capital markets and the EU's commitment to integrated financial markets and international standards [51] . Once recognition has been granted, EU and non-EU counterparties may use a non EU-based CCP to clear OTC derivatives as required by EMIR, in the same way as an EU CCP. Moreover, a recognised third-country CCP becomes a Qualifying CCP (QCCP) for the purposes of the Capital Requirements Regulation, thereby attracting preferential risk weightings for associated exposures.

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47 ESMA, Report EU-wide CCP Stress test 2015, 29 April 2016, 2016/658, p.65.

48 Further information on the third-country equivalence regime under EMIR and the related third-country CCP recognition provisions is available in section 2.4.

49 In accordance with EMIR, ESMA provides a list of the third-country CCPs that have been recognised to offer services and activities in the Union, including the classes of financial instruments covered by the recognition. The 28 third-country CCPs are established in 15 countries covered by CCP equivalence decisions adopted by the Commission, including Australia, Hong Kong, Singapore, Japan, Canada, Switzerland, South Korea, Mexico, South Africa and the US CFTC, Brazil, UAE, Dubai International Financial Centre (DIFC), India and New Zealand. A list of CCPs established in a third country and recognised by ESMA is available in Annex 2.

50 See European Commission's press release IP-16-4385 of 16 December 2016. These decisions on third-country CCP regime equivalence apply to India, Brazil, New Zealand, Japan Commodities, United Arab Emirates (UAE) and Dubai International Financial Centre (DIFC).

51 See G20 Leaders' St Petersburg Declaration of September 2013 (paragraph 71): "We agree that jurisdictions and regulators should be able to defer to each other when it is justified by the quality of their respective regulatory and enforcement regimes, based on similar outcomes, in a non-discriminatory way, paying due respect to home country regulatory regimes.", as well as the G20 Leaders' Brisbane declaration of November 2014 (paragraph 12): "We call on regulatory authorities to make further concrete progress in swiftly implementing the agreed G20 derivatives reforms. We encourage jurisdictions to defer to each other when it is justified, in line with the St Petersburg Declaration".

Despite having 45 operating CCPs, the sheer volume of transactions now being centrally cleared means that central clearing markets are generally concentrated in the EU and are highly concentrated in respect of some asset classes.

Regionally integrated markets

In spite of the global nature of the derivatives market, , most CCPs operate mainly as regional or national hubs based on the currencies of the instruments they clear. The exceptions are a few CCPs offering services for a broad range of products to a wide spectrum of clearing members and clients. These 'global' CCPs can, however, also be characterised as regional (or even national) hubs for certain instruments which they clear. As a result, the derivatives market tends to be highly concentrated within regional jurisdictions with instruments being traded and cleared by and between local participants in local CCPs.

As illustrated in a study conducted by ISDA over the period 2013-2015, regulatory initiatives can also reinforce an existing "regional bias" in clearing for a given derivatives market. The study considers the impact on cross-border transactions of the introduction of a requirement for electronic trading platforms, which provide access to US persons, to register with the US Commodity Futures Trading Commission (CFTC) and comply with Swap Execution Facilities (SEF) rules from 2 October 2013. The first derivatives products were mandated to trade on these platforms from 15 February 2014 under a process known as made-available-to-trade (MAT). As a result, all US persons are now legally required to trade MAT instruments on SEFs or designated contract markets. The analysis indicates that the cleared euro interest rate swaps market is largely fragmented in US and non-US liquidity pools and that this fragmentation has increased following the entry into force of the SEF rules. This highlights that regulation can strengthen existing trends in the structure of derivatives markets.

Figure 7: The Global Market for Euro IRS: Percentage of Market Share

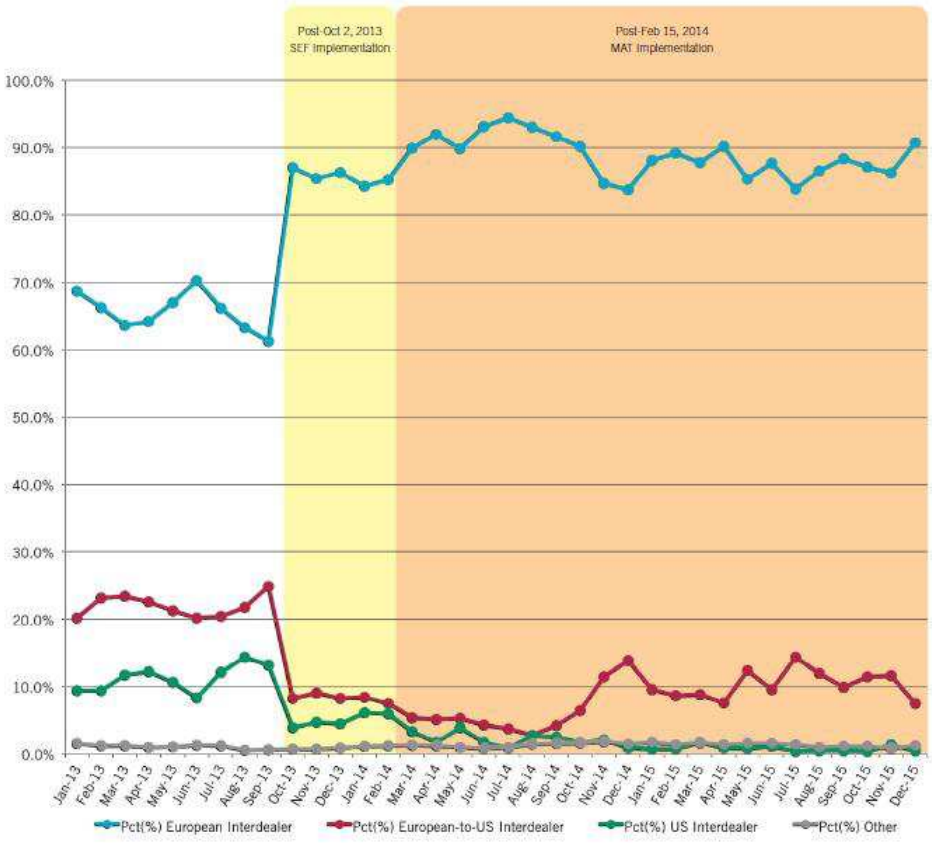
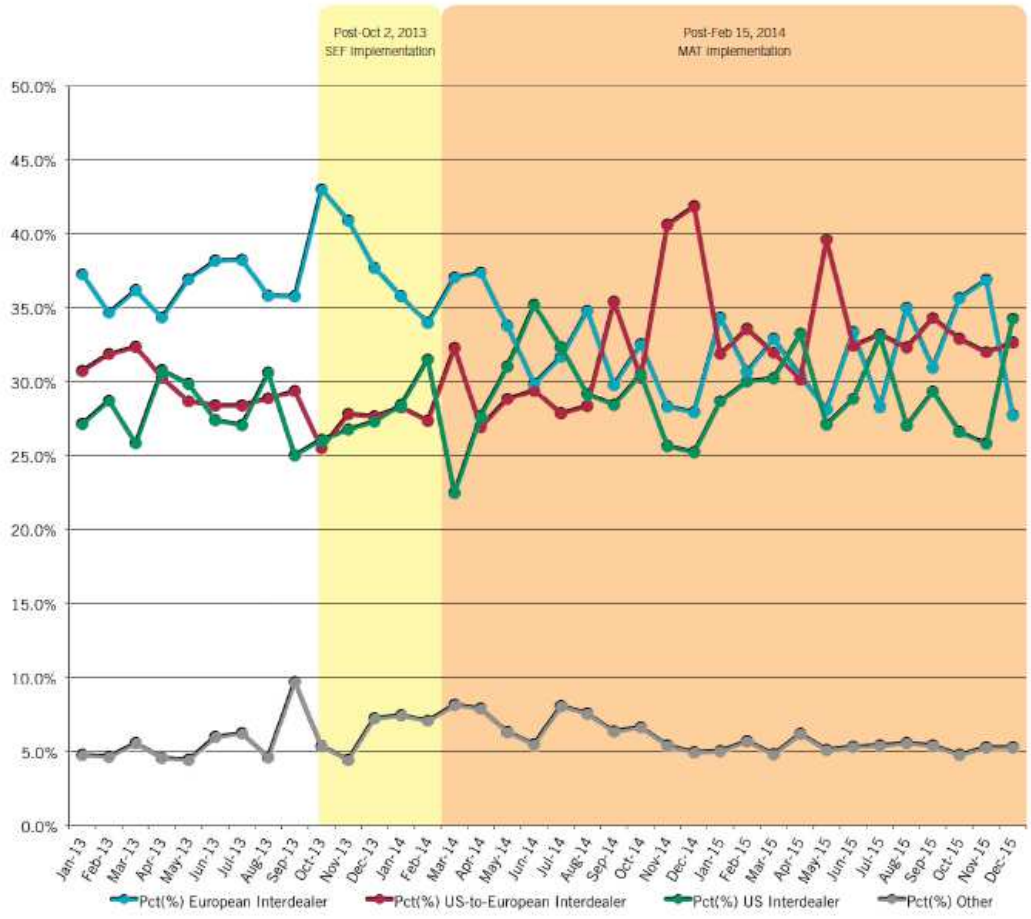


Figure 8: The Global Market for USD IRS: Percentage of Market Share



Source: ISDA[52]

The analysis also indicates that while the notional volume of euro IRS transactions between European counterparties has increased, the notional volume of trades between European and US counterparties has fallen, both on an absolute basis and in percentage terms. This suggests that the regulatory changes have led to a regional shift in the trading patterns of both EU and US market participants.

A high degree of interconnectedness between CCPs and their clearing members

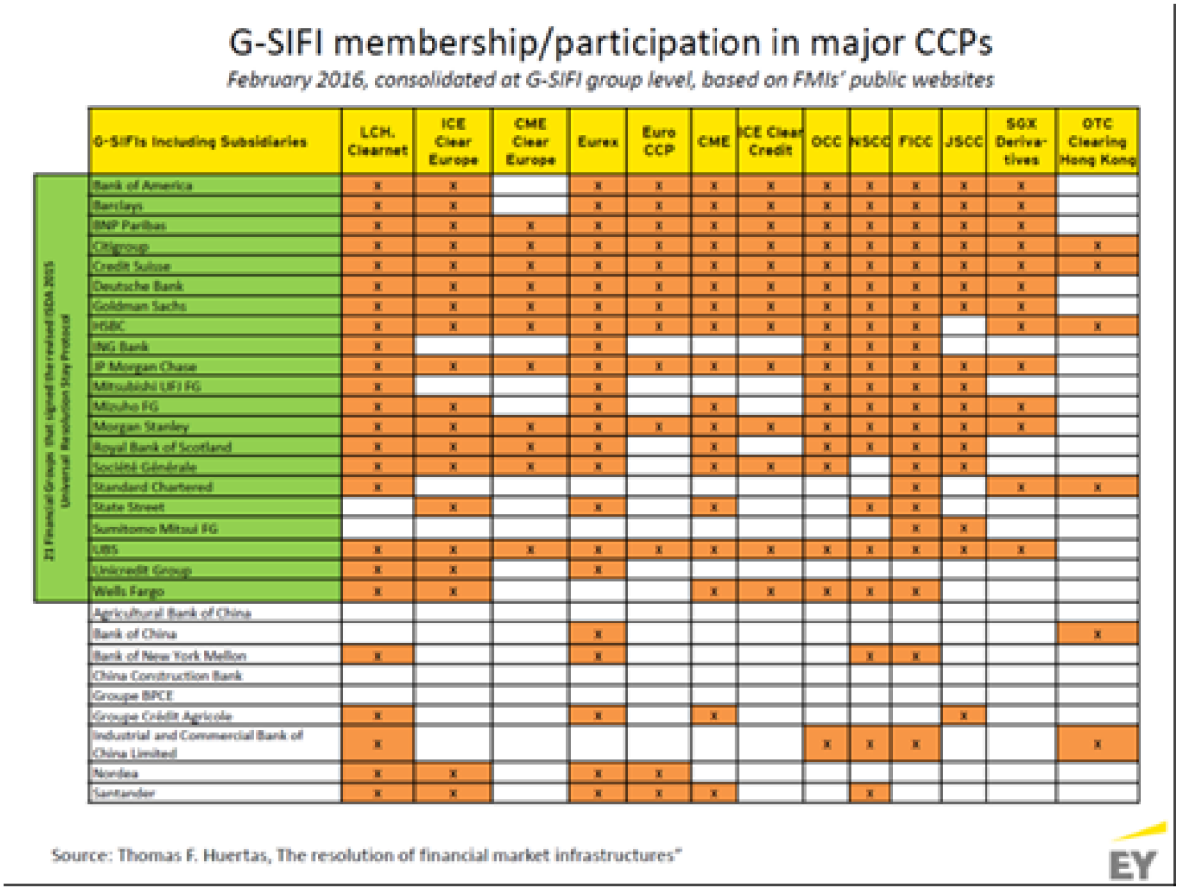
Partly reflecting market concentration and market integration, CCPs operating within the EU are highly interconnected through a range of channels.

First, CCPs are interconnected via their clearing members. Many of the largest global banks are members of multiple CCPs, illustrating the potential for contagion. For example, 24 globally systemically important banks (G-SIBs) are members of Eurex, BNP Paribas is a member of at least five EU CCPs (see Table 2).[53]

52 http://www2.isda.org/attachment/ODM4NQ==/Fragmentation%20FINAL1.pdf

53 The resolution of financial markets infrastructure, Thomas Huertas, Financial Services Risk Advisory Partner, Ernst & Young

Table 2: Interconnectedness between major CCPs and G-SIBs as of February 2016



G-SIFI membership/participation in major CCPs

February 2016, consolidated at G-SIFI group level, based on FMIs' public websites

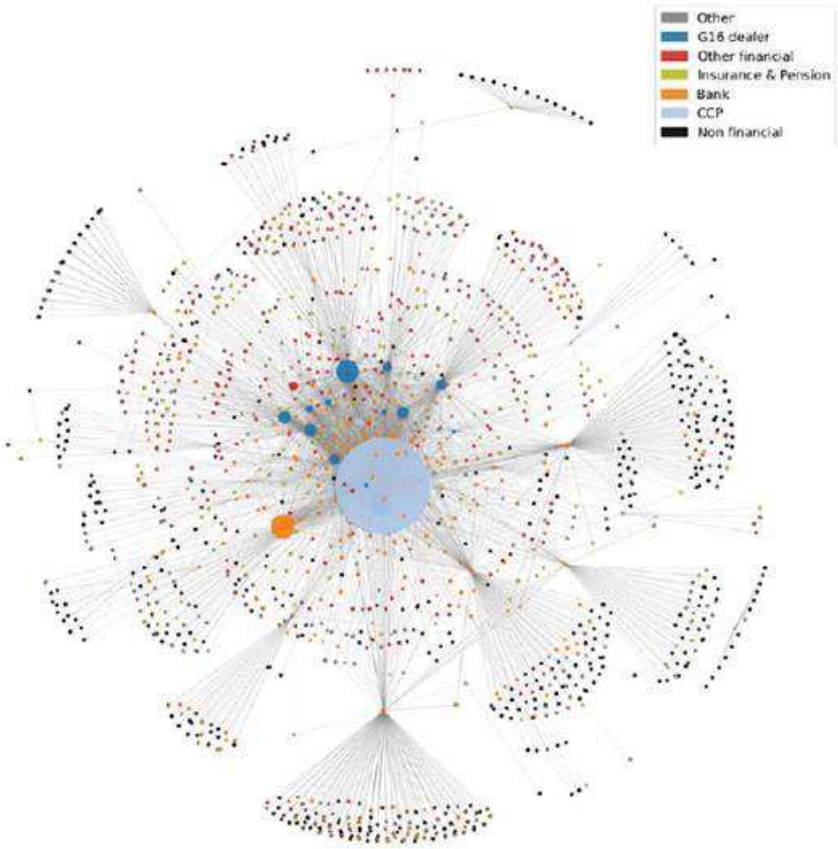
G-SIFIs including Subsidiaries	LCH. Clearnet	ICE Clear Europe	CME Clear Europe	Eurex	Euro CCP	CME	ICE Clear Credit	OCC	NSCC	FICC	JSCC	SGX Deriva-tives	OTC Clearing Hong Kong
21 Financial Groups that signed the revised ISDA 2015 Universal Resolution Stay Protocol													
Bank of America	x	x		x	x	x	x	x	x	x	x	x	
Barclays	x	x		x	x	x	x	x	x	x	x	x	
BNP Paribas	x	x	x	x	x	x	x	x	x	x	x	x	
Citigroup	x	x	x	x	x	x	x	x	x	x	x	x	x
Credit Suisse	x	x	x	x	x	x	x	x	x	x	x	x	x
Deutsche Bank	x	x	x	x	x	x	x	x	x	x	x	x	
Goldman Sachs	x	x	x	x	x	x	x	x	x	x	x	x	
HSBC	x	x	x	x	x	x	x	x	x	x		x	x
ING Bank	x			x				x	x	x			
JP Morgan Chase	x	x	x	x	x	x	x	x	x	x	x	x	
Mitsubishi UFJ FG	x			x				x	x	x	x		
Mizuho FG	x	x		x		x		x	x	x	x	x	
Morgan Stanley	x	x	x	x	x	x	x	x	x	x	x	x	
Royal Bank of Scotland	x	x	x	x		x		x	x	x	x		
Société Générale	x	x	x	x		x	x	x		x	x		
Standard Chartered	x									x		x	x
State Street		x		x		x			x	x			
Sumitomo Mitsui FG										x	x		
UBS	x	x	x	x	x	x	x	x	x	x	x	x	
Unicredit Group	x	x		x									
Wells Fargo	x	x				x	x	x	x	x			
Agricultural Bank of China													
Bank of China				x									x
Bank of New York Mellon	x			x					x	x			
China Construction Bank													
Groupe BPCE													
Groupe Crédit Agricole	x			x		x					x		
Industrial and Commercial Bank of China Limited	x							x	x	x			x
Nordea	x	x		x	x								
Santander	x	x		x	x	x			x				

Source: Thomas F. Huertas, The resolution of financial market infrastructures"

Another way to highlight the degree of interconnectedness between market participants active in the OTC derivatives market is to focus on "who trades with whom". The European Systemic Risk Board (ESRB) published a paper in September 2016 illustrating the network structure of the OTC derivatives market through a visualisation of the outstanding interest-rate swap (IRS) positions (see Figure 9) in the IRS market. The chart shows that CCPs, big clearing members (referred to as G16 dealers[54]) and banks, which appear in the core of the chart, are connected to a large number of counterparties, with many connections between them, suggesting a high potential for system-wide contagion. This indicates both the central role of CCPs and the importance of client and indirect clearing through the clearing members, as the latter serve as "gateways to clearing" for buy-side counterparties and create interconnections between CCPs and the wider system.

[54] The group of G16 dealers includes Bank of America, Barclays, BNP Paribas, Citigroup, Crédit Agricole, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, JPMorgan Chase, Morgan Stanley, Nomura, Royal Bank of Scotland, Société Générale, UBS, and Wells Fargo.

Figure 9: Network of gross notional links between counterparties in a subset of the interest rate swap (IRS) market



Source: Jorge Abad, Iñaki Aldasoro, Christoph Aymanns, Marco *D'Errico,* Linda Fache Rousová, Peter Hoffmann, Sam Langfield, Martin Neychev, Tarik Roukny, Shedding light on dark markets: First insights from the new EU-wide OTC derivatives dataset, ESRB, Occasional Paper Series No 11, September 2016.[55]

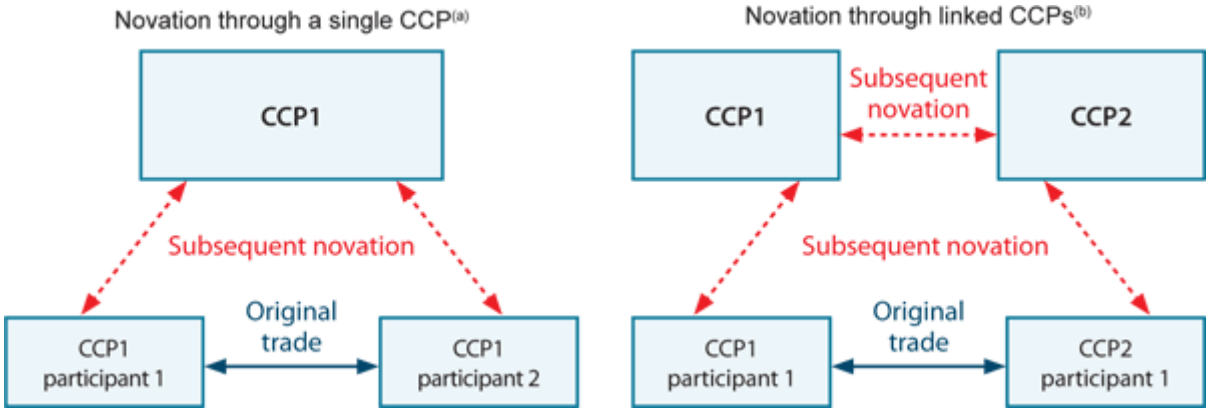
Second, CCPs are interconnected because they clear common trading venues. Some CCPs provide clearing on a cross-border basis to exchanges or other trading venues in Member States other than the Member State in which they are established. For example, Eurex Clearing AG (established in Germany) clears the Irish Stock Exchange, Börse Berlin is cleared by the LCH Ltd (established in the UK), LCH S.A (established in France), EuroCCP (established in the Netherlands) and SIX x-clear (established in Switzerland). Participants on the London Stock Exchange are offered a choice of clearing services from LCH Ltd., EuroCCP and SIX x-clear for all traded instruments (except Polish and Spanish instruments, which are cleared by EuroCCP and LCH Ltd., and US instruments, which are cleared by EuroCCP). European Commodity Clearing established in Germany clears commodity markets across the EU and elsewhere.

Third, CCPs can be interconnected via so-called interoperability arrangements (see Figure 10) which allow clearing members of one CCP to clear transactions with clearing members of another CCP. This is the case for EuroCCP, LCH Ltd. and SIX x-clear in various equities markets, for LCH S.A. and CC&G (established in Italy) in various bond

55 See on p. 18: https://www.esrb.europa.eu/pub/pdf/occasional/20160922_occasional_paper_11.en.pdf?c067e1f68ae0fe23925b88c613c546a8

markets and for LCH Ltd. and SIX x-clear in some markets for exchange traded derivatives.[56] In addition, KELER CCP (established in Hungary) is a clearing member of the European Commodity Clearing and offers access to clearing at ECC to its own clearing members.[57]

Figure 10: Central Clearing with and without interoperability[58]



Source: Nicholas Garvin, Central Counterparty Interoperability, Reserve Bank of Australia, Bulletin | JUNE Quarter 2012, page 64

Risks to financial stability

CCPs were originally designed to facilitate trading in securities and not as "macro-prudential institutions" with a responsibility to improve the safety and soundness of the broader financial system. However, as the OTC derivatives market has grown and mandatory clearing of these instruments has become a feature of regulation, some CCPs have become sufficiently large and interconnected to be systemically important. The economies of scale (due to netting and diversification benefits) attached to central clearing favour the use of a small number of large CCPs, resulting in a significant risk concentration in these infrastructures. The financial resources of such large CCPs are, however, not unlimited. One sufficiently severe shock (or a collection of multiple defaults of clearing members) could potentially threaten their viability. Their financial soundness is therefore essential to ensuring the stability of the entire financial system.

A CCP default would typically follow unforeseen losses as a result of simultaneous default of several of its members. The trigger could be either from a member's insolvency, or its insufficient liquidity to meet a margin (or delivery) settlement obligation. The subsequent knock-on effects could be quite far-reaching. The link

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56 ESMA, Final report, Possible systemic risk and cost implications of interoperability arrangements, 1 March 2016, ESMA/2016/328, https://www.esma.europa.eu/sites/default/files/library/2016-328.pdf. A table of the interoperability arrangements existing in the EU and the products, trading venues and Central Securities Depositories and Security Settlement Systems affected by them can be found in the annex to that report (pages 30 to 33).

57 http://www.ecc.de/ecc-en/about-ecc/partners-products/clearing-members

58 (a) illustrates a trade being novated through a single CCP – after the trade occurs, the CCP transforms the original trade contract into two contracts, one between it and each participant; both participants must be members of the same CCP, as it is necessary to have continuity in the obligations that flow from one side of the trade to the other.
(b) illustrates a trade being novated through a CCP link (the link permits the CCPs to hold trading obligations to each other) – after a trade occurs between participants of separate CCPs, the trade is novated into three contracts, between each participant and its CCP and between the two CCPs; trades that occur between participants of the same CCP take place as they would without the CCP link, i.e. as in the left-hand side diagram.

between CCPs and systemic risk is addressed in a commentary prepared for the ESRB and published in 2013[59]. The commentary suggests that the risk concentration within clearing members themselves would build up due to the need for indirect access to CCPs. In addition, the large banking groups tend to exhibit significant overlaps across many CCP memberships. Thus, a significant cross-section of CCPs and their members could be affected by a globally systemic event. To address the potential contagion risks between CCPs as a result of interoperability arrangements, EMIR specifically requires CCPs to identify and manage the risks arising from such arrangements. It also provides for these arrangements to be assessed and approved by the competent authorities[60].

If the defaulter's margin with the CCP is insufficient to cover its obligation, the CCP would have to call upon other financial resources, including its equity and default fund and its ability to call on additional capital contributions by members. If all of these resources are exhausted as a result of the default of one or more members, the CCP would default on its obligations to other members and their clients. The failure of a large CCP could possibly result in spreading financial contagion, as all major financial institutions will be interconnected via direct and indirect linkages to CCPs.

As noted above, a CCP could also default due to a lack of liquidity. Just like other financial intermediaries, CCPs are potentially susceptible to 'runs' due to a loss of confidence in their solvency. This could create a liquidity shock for the CCP as it attempts to return collateral. For instance, in the event of a member default, the CCP will have to make a timely payment to those owed variation margin payments. This will require the CCP to liquidate the collateral of defaulters, and perhaps some of its own assets. The CCP may also attempt to borrow to meet its obligations. If such collateral sales and borrowings occur during stressed market conditions (which is when a large member default is most likely), the CCP may be unable to raise sufficient funds to meet its obligations.

The cessation of operations of a CCP would deprive market participants of certain basic functions, such as trade processing, thereby entailing the shutdown of entire markets with knock-on effects.

So, CCPs are key players in a very large, heavily integrated and interconnected market for central clearing of OTC derivatives, which can lead to systemic risk

Since the crisis, the market for centrally-cleared derivatives has expanded sharply with a limited number of CCPs resulting in heavy concentration (particularly for some asset classes) and high levels of interconnectedness. These trends are set to continue. Further

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[59] ESRB, Macro-prudential Commentaries, Central counterparties and systemic risk, Lieven Hermans, Peter McGoldrick and Heiko Schmiedel, November 2013, available at: https://www.esrb.europa.eu/pub/pdf/commentaries/ESRB_commentary_1311.pdf?c7bdc8da2a559dc321fd51018bfc9502

[60] In January 2016, the ESRB provided its assessment of interoperability arrangements in response to a Commission's request and as required by Article 85(4) of EMIR. The ESRB indicates that CCP interoperability arrangements can have implications for financial stability in two different ways. On the one hand, such arrangements can help to contain systemic risks in a situation where a number of different CCPs clear the same financial instruments, insofar as they allow intermediaries to hold their position with one CCP, instead of "fragmenting" it across different CCPs. On the other hand, CCP interoperability arrangements can have systemic risk implications, since the establishment of interoperable links introduces a significant element of complexity into the overall risk management system and adds a channel for direct contagion between two or more CCPs. See ESRB Report to the European Commission on the Systemic Risk Implications of CCP Interoperability Arrangements, https://www.esrb.europa.eu/pub/pdf/other/2016-01-14_Interoperability_report.pdf

mandatory clearing obligations are likely to follow[61] and incentives to mitigate risks and costs are likely to lead to more voluntary central clearing. The May 2017 proposal to amend EMIR in a targeted manner to improve its effectiveness and proportionality will also contribute to these trends, by creating further incentives for CCPs to offer central clearing of derivatives to counterparties in order to make the financial system even safer.[62] Finally, deeper and more integrated capital markets following on from Capital Markets Union are likely to lead to a further increase in cross-border activity in the EU, thus further increasing the interconnectedness of the financial system and CCPs.

While the migration of OTC derivatives transactions to CCPs has reduced the risk of another episode like the Lehman failure, new risks have emerged that are linked to the concentration of so many transactions within a limited number of separate but interconnected infrastructures. Concentration of OTC derivatives clearing is driven by the nature of the business, which is characterised by low marginal cost, economies of scale and a high premium on liquidity - all of which promote the emergence of large market providers. Concentration risk in CCPs is not a problem per se, but it necessitates that CCPs are superior risk managers, (i.e. acting as risk poolers rather than gross risk takers[63]) and that they are adequately regulated and supervised.

2.4. The current supervisory arrangements under EMIR

EMIR establishes different supervisory models for CCPs operating in the EU, depending on whether the CCP is established in the EU or outside of the EU.

Supervisory arrangements for CCPs established in the EU

EMIR introduced new supervisory arrangements to ensure that CCPs established in the EU are subject to adequate supervision. Under EMIR, CCP supervision is mainly conducted at national level (see figure 11 below). This was a conscious choice of the co-legislators at the time of EMIR's adoption in 2012, in recognition of the fact that any fiscal responsibility for managing a failing CCP remains at national level, even though the impact of a CCP failure immediately could have a cross-border reach (at EU level and even beyond). This is illustrated in the following table that compares stressed exposure amounts for LCH Clearnet Ltd and clearing volumes for the SwapClear service with the GDP and public debt figures of UK and FR respectively.

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61 EMIR Article 5 gives ESMA an ongoing mandate for determining the asset classes subject to the clearing obligation.

62 Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Regulation (EU) No 648/2012 as regards the clearing obligation, the suspension of the clearing obligation, the reporting requirements, the risk-mitigation techniques for OTC derivatives contracts not cleared by a central counterparty, the registration and supervision of trade repositories and the requirements for trade repositories, COM/2017/0208 final.

63 See Coeuré (2017) https://publications.banque-france.fr/sites/default/files/medias/documents/fsr21_web.pdf

Table 3 – SwapClear clearing volumes and LCH Clearnet Ltd stressed exposures compared to UK and FR GDP and public debt

Benchmark			**LCH Clearnet Ltd**		**SwapClear service**	
GDP (2015)		Public debt (2015)	CPMI-IOSCO report (Q1 2016)		Notional amounts outstanding (as of 12 May 2017)	
UK	EUR 2.58 trillion	EUR 2.27 trillion	Total default resources for OTC IR derivatives	EUR 4.04 billion	All products	EUR 269.5 trillion
FR	EUR 2.18 trillion	EUR 2.10 trillion	Peak stressed LGD (12 past months)	EUR 2.46 billion	Interest Rate Swaps	EUR 128.5 trillion

Sources: LCH Clearnet Ltd – SwapClear website; TradingEconomics.com

On this basis, EMIR tasks home supervisors with the full supervision of CCPs established in their Member State, including (1) the authorisation of the relevant CCP(s)[64]; and (2) the organisation of a cooperation and information-sharing framework among other Member State authorities (supervisors and central banks) within supervisory colleges. Meanwhile, ESMA is allocated responsibility for promoting supervisory convergence and cross-sector consistency, mediating conflicts between authorities within the supervisory college, addressing any breaches of EU law, and creating a harmonised set of prudential, organisational and conduct of business requirements for CCPs ensuring the adequate coverage of their exposures to risks. Considering the inherent interconnectedness of the clearing business, EMIR recognises the need for other Member-State authorities and ESMA to have a role in the authorisation of a CCP, alongside the home authority (either in a voting capacity for Member-States authorities or in a non-voting advisory capacity for ESMA). A blocking mechanism is provided for, granting binding mediation powers to ESMA if the home authority fails to obtain a favourable opinion of the supervisory college before the authorisation of a CCP. The other Member State authorities also act in different capacities within the supervisory colleges, being responsible for the supervision of clearing members, CSDs or trading venues, being responsible for the supervision of CCPs with which interoperability arrangements have been signed.

EMIR refers specifically to the role of central banks when participating in colleges, both as overseer of the CCP[65] and as central bank of issue[66]. The role of central banks is closely linked to the tasks attributed to the ESCB under the Treaty to promote the smooth operation of payments systems[67]. The participation of CBIs in a supervisory college is determined by the currency of denomination of the financial instruments cleared. For

64 The Member States can entrust National Central Banks with supervisory functions under national law as allowed under Article 14.4 of the ESCB Statute. These National Central Banks then act as NCAs. This function is different from the function of a central bank of issue that is responsible for central bank oversight. Both functions are strictly separated within the National Central Banks.

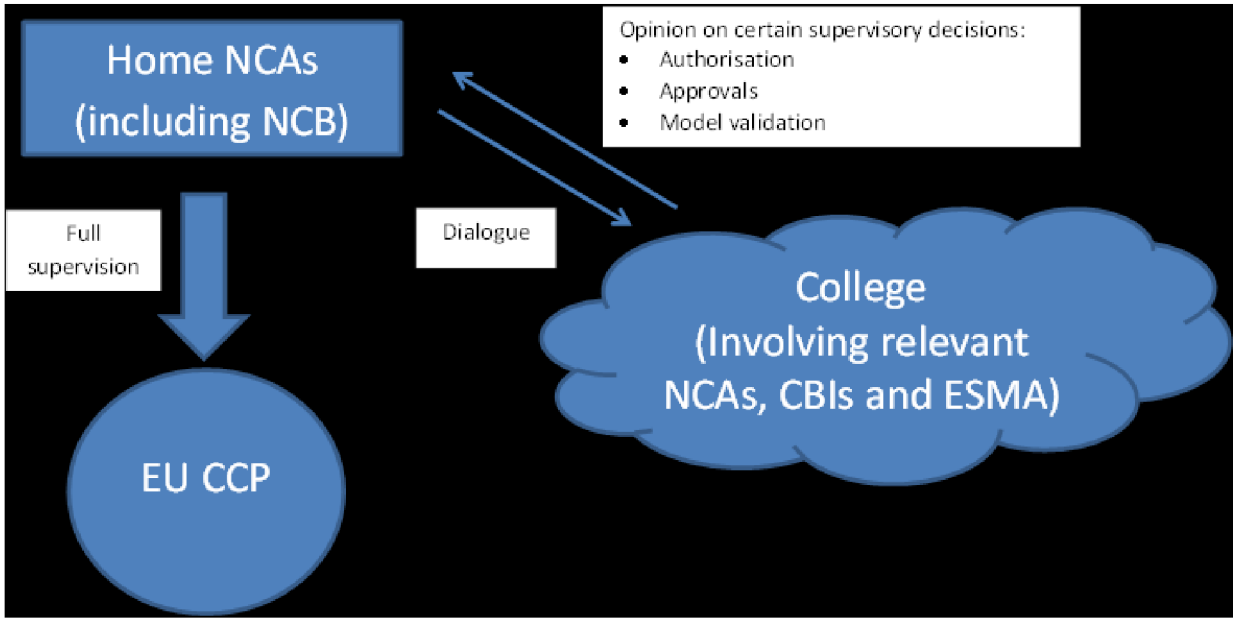
65 EMIR Article 18(2)(g).

66 EMIR Article 18(2)(h).

67 Article 127(2) TFEU.

financial instruments denominated in the currency of one of the Member States of the EU, the CBI is always a member of the European System of Central Banks (ESCB), i.e. the ECB for the Member States whose currency is the euro or the relevant national central bank for Member States whose currency is not the euro. In order to ensure safe and sound transmission channels for monetary policy, the CBI has a genuine interest in promoting the smooth operation of payment, clearing and settlement systems, also considering that monetary policy operations typically take the form of central bank credit collateralised by securities. In particular, the CBI should be in a position to safeguard price stability, which is closely related to financial stability[68]. In this context the CBI has also normally extensive expertise in these areas.

Figure 11: Current supervisory arrangements for EU CCPs



Source: European Commission services

While the current EMIR supervisory arrangements for CCPs established in the EU recognise the need for several authorities to be involved in supervision, the relative complexity of these arrangements and the tension between national and cross-border supervision raise concerns about whether the assignment of responsibilities between authorities and their ability to react swiftly to developments is sufficient to mitigate the risks related to the increasing concentration, integration and interconnectedness of the CCP ecosystem.

Supervisory arrangements for third-country CCPs

In line with G20 commitments and international standards[69], EMIR enables a mechanism for CCPs based outside of the EU to provide clearing services to EU counterparties. This aims to promote safe cross-border OTC derivative transactions, avoid market fragmentation and regulatory arbitrage.

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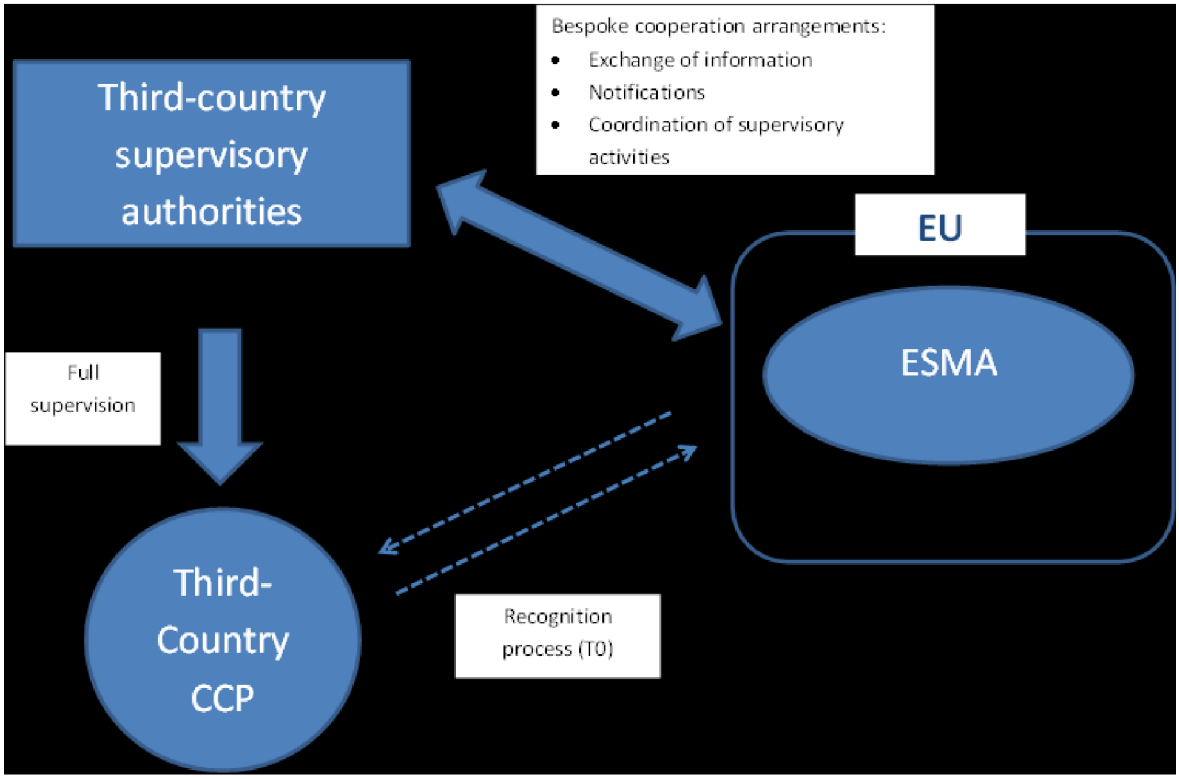
[68] See Papademos (2006) for an extensive view of the tight relationship between price stability and financial stability.
https://www.ecb.europa.eu/press/key/date/2006/html/sp060707.en.html

[69] In light of the global nature of the OTC derivatives market, the FSB encourages jurisdictions that have implemented the G20 commitments to provide capacity to defer in some way to other jurisdictions through cross-border arrangements.

This mechanism is based on a three-step approach. First, the third-country CCP needs to apply to ESMA for recognition. Second, the European Commission must examine the legal and supervisory framework of the third country in which the CCP is established in order to assess whether it is equivalent with the requirements laid down in EMIR. There are three main criteria to consider: (i) whether the legal and supervisory arrangements of a third country ensure that CCPs authorised in that third country comply with legally binding requirements that are equivalent to the requirements laid down in Title IV of EMIR; (ii) whether those CCPs are subject to effective supervision and enforcement in the third country on an ongoing basis; and (iii) whether the legal framework of the third country provides for an effective equivalent system for the recognition of CCPs authorised under third-country legal regimes. Based on the outcome of this assessment, the European Commission may adopt an equivalence decision. Third, ESMA must then be able to assess whether the applying third-country CCP may be recognised. When a third-country CCP has been recognised, the third-country supervisory authorities remain primarily responsible for supervision, while ESMA engages in cooperation with them, on the basis of bespoke cooperation arrangements (see Figure 12). In contrast to the supervisory arrangements for CCPs established in the EU, no specific competences are envisaged for national authorities (supervisors or CBIs) with regard to the recognition or supervision of third-country CCPs.

Figure 12: Current supervisory arrangements for recognised third-country CCPs



Source: European Commission services

Other jurisdictions can have different approaches with a more extensive application of their requirements to CCPs established in a third country. For example in the US, the Commodity and Exchange Act and CFTC regulations require that third-country CCPs wishing to provide clearing services to trading venues established in the US must be registered with the CFTC and comply with CFTC regulations. In addition, third-country CCPs that clear derivatives with a sufficient nexus to US commerce must also register with the CFTC.

EMIR's supervisory arrangements for third-country CCPs are therefore markedly different both from the supervisory system for CCPs established in the EU, since they do not provide a role for national supervisors or CBIs, and from the approach of other major countries towards relations with third-countries, as they do not establish requirements allowing direct supervision over third-country CCPs. In addition, while the starting point of the EMIR supervisory architecture for CCPs established in the EU is that all EU CCPs are of a systemic nature regardless of their size or of their activities, the third-country regime under EMIR does not take into account whether third-country CCPs are systemic, as long as the related third-country regime complies with the equivalence criteria laid down under EMIR. The combination of these elements raises concerns about whether the current equivalence and recognition process for third-country CCPs is sufficiently robust to mitigate the potential systemic risks associated with the increasing size, concentration, integration and interconnectedness of CCPs.

2.5. Relevant international standards and EU initiatives on CCPs

Relevant international standards for CCPs are insufficient to mitigate systemic risk

Following the G20 Pittsburgh summit in 2009, as part of an overall move to enhance the strength of the global financial system, the Financial Stability Board (FSB) was established to coordinate at international level the work of national competent authorities and international standard setting bodies and to develop and promote the implementation of effective regulatory, supervisory and other financial sector policies in the interest of financial stability.

While the reforms of derivatives markets seek to enhance financial stability by increased use of central clearing, fully realising the benefits of central clearing requires CCPs to be subject to strong regulatory, oversight and supervisory requirements. International standard setters, led by the FSB, are therefore working on several initiatives with regard to CCPs. In particular, in 2015, global standard-setting bodies launched a comprehensive work plan on CCP resilience, recovery, resolution and clearing interdependencies to further enhance the existing framework[70].

With regard to CCP resilience, in April 2012, the then Committee on Payments and Market Infrastructures (CPMI) and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Commissions (IOSCO) published the Principles for Financial Markets Infrastructures71 (PFMIs). According to the PFMIs, all systemically important financial market infrastructures (FMIs) should have comprehensive and effective recovery plans. The PFMI raises minimum requirements, provides more detailed guidance and broadens the scope of the standards to cover new risk management areas for FMIs, including additional detailed guidance for CCPs. CPMI-IOSCO is currently working on providing additional guidance on CCP resilience, work that is yet to be completed and not meant to add any further requirements to the 2012 PFMIs.

In October 2014, CPMI and IOSCO published a report on Recovery of Financial Market Infrastructures,[72] which is based on the PFMI and provides guidance to FMIs, including CCPs, on how to develop plans to enable them to recover from threats to their viability and financial strength that might prevent them from continuing to provide critical

[70] For a complete overview, see ECB, Central clearing: reaping the benefits, controlling the risks, April 2017, https://www.ecb.europa.eu/press/key/date/2017/html/ecb.sp170420_tBdF-FSR21.en.pdf

[71] CPMI and IOSCO (2012), www.bis.org/cpmi/publ/d101.htm

[72] www.bis.org/cpmi/publ/d121.htm

services to their participants and the markets they serve. It also provides guidance to relevant authorities in carrying out their responsibilities associated with the development and implementation of recovery plans.

Following the financial crisis and G20 commitments to end 'too big to fail', the FSB published its Key Attributes of effective resolution regimes for financial institutions (Key Attributes)[73] in October 2011. Additional guidance on the application of the Key Attributes to FMIs was published in October 2014, in the form of an Annex. The FSB has led work to develop further guidance on CCP resolution, due to be finalised by the time of the G20 Summit in July 2017. In addition, crisis management groups (CMGs) are being established for CCPs that are systemically important in more than one jurisdiction.

Additional initiatives of relevance also include the work of CPMI-IOSCO on the requirements for qualitative and quantitative disclosure by CCPs[74], and the joint work of the Basel Committee on Bank Supervision (BCBS), CPMI and IOSCO on prudential requirements for the exposure of banks to CCPs[75].

EMIR complies with these international standards and implements them into EU law. The Commission's proposal on CCP Recovery and Resolution also aims to integrate standards on recovery and resolution into the EU framework. However, while international standards help coordinate the policy response of various jurisdictions to global and cross-border risks, there is no guarantee that these standards will be sufficient to address the increasing concentration, integration and interconnectedness of the CCP ecosystem, as long as these are not implemented and enforced consistently by jurisdictions. This is particularly true in the context of the withdrawal of the UK from the EU.

Related EU initiatives on CCPs do not address EMIR's supervisory arrangements

EMIR is the only piece of EU legislation establishing direct requirements over CCPs. As such, it is the primary tool governing the EU's supervisory arrangements for CCPs established within or outside of the EU.

The Commission has recently presented two proposals amending EMIR, which aim to address the systemic importance of CCPs on the one hand, and to promote further the use of central clearing while keeping costs at a minimum for market participants on the other hand. While these proposals are consistent with the ultimate objective of EMIR to reduce systemic risk in the OTC derivatives market, neither of them specifically addresses the current supervisory arrangements under EMIR.

First, the **Commission's proposal[76] for a Regulation on CCP Recovery and Resolution** adopted in November 2016 aims to ensure that, in the unlikely scenario where CCPs face severe distress or failure, the critical functions of CCPs are preserved while maintaining financial stability and helping to avoid that costs associated with the restructuring and the resolution of failing CCPs fall on taxpayers. While the proposal seeks to ensure that EU and national authorities are appropriately prepared to address a failing CCP, it mainly focuses on amendments to help lower and mitigate the systemic

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73 www.fsb.org/wp-content/uploads/r_141015.pdf

74 http://www.bis.org/cpmi/publ/d125.pdf

75 http://www.bis.org/publ/bcbs282.pdf

76 Proposal for a Regulation of the European Parliament and of the Council on a framework for the recovery and resolution of central counterparties and amending Regulations (EU) No 1095/2010, (EU) No 648/2012, and (EU) 2015/2365.

risk related to the failure of CCPs, through the introduction of recovery and resolution measures. The proposal does not include, however, amendments to enhance the ongoing supervision of CCPs operating in the EU in a non-crisis scenario. Such amendments could nevertheless contribute to strengthening the ability of EU and national authorities to prevent the failure of CCPs, in line with the objective of the CCP Recovery and Resolution proposal to diminish further the probability of such an event.

Second, the **Commission's proposal for targeted amendments to EMIR**[77], adopted in May 2017, seeks to simplify certain EMIR requirements and make them more proportionate in order to reduce excessive costs for market participants, without compromising financial stability. This proposal is part of the Commission's 2016 Regulatory Fitness and Performance programme (REFIT)[78] to ensure that EU legislation delivers results for citizens and businesses effectively and at minimum cost. As such, the proposal focuses on issues where targeted amendments can help alleviate existing burdens without compromising EMIR's objective of increasing financial stability. However, by tackling some of the costs and obstacles associated with access to clearing, this proposal should provide further incentives for market participants to use central clearing – again reinforcing the importance of CCPs within the financial system.

Third, other relevant EU initiatives relate to the broader European Union framework, and may therefore not be sufficiently specific to address the systemic nature of CCPs. They consist of various initiatives related to the overall EU financial services supervisory architecture, including the **Commission's ongoing efforts to further develop the Capital Markets Union (CMU)**, which call for further supervisory convergence at EU level to support the development of deeper and better integrated capital markets, and **the review of the operations of the European Supervisory Authorities (ESAs)**[79], which explores how to strengthen and improve the effectiveness and efficiency of the ESAs. Another initiative of relevance is the **Staff Working Document (SWD) on equivalence**[80], which sets out DG FISMA's experience with the implementation and enforcement of third-country provisions in EU financial legislation. While providing examples of best practices on how to promote an effective and ongoing supervision of third-country entities within the EU's framework on relations with third countries, the SWD mainly takes stock of the current state of play across EU financial legislation and does not offer concrete recommendations on the possible way forward for enhancing the supervision of third-country CCPs.

There is an urgent need for the EU act to enhance supervision in order to mitigate the systemic risks related to CCPs operating in the EU

As the EU clearing landscape continues to evolve and the role of CCPs expands further in the future, the arrangements for crisis prevention and management of CCPs must be as effective as possible. International standard-setting bodies are working towards

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77 Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No 648/2012 as regards the clearing obligation, the suspension of the clearing obligation, the reporting requirements, the risk-mitigation techniques for OTC derivatives contracts not cleared by a central counterparty, the registration and supervision of trade repositories and the requirements for trade repositories.

78 See European Commission, REFIT and the 10 Priorities of the Commission, 25 October 2016. http://ec.europa.eu/atwork/pdf/201621025_refit_scoreboard_summary_en.pdf

79 "Public consultation on the operations of the European Supervisory Authorities", 21.03.2017, available at https://ec.europa.eu/info/finance-consultations-2017-esas-operations_en

80 "EU equivalence decisions in financial services policy: an assessment", 27.02.2017, SWD(2017) 102 final, available at https://ec.europa.eu/info/sites/info/files/eu-equivalence-decisions-assessment-27022017_en.pdf

guidelines to address the inherent cross-border nature of CCPs. The Commission's proposal for a Regulation on CCP Recovery and Resolution is also an important step in this regard, together with other horizontal EU initiatives to improve supervisory convergence at EU level.

However, five years after the adoption of EMIR, there is an urgent need to revisit the supervisory arrangements for EU and third-country CCPs in light of the growing size, interconnectedness and cross-border dimension of clearing in the EU and globally. First, the growth of CCPs in scale and significance is expected to accelerate as recent initiatives, including the application of clearing obligations, the margin requirements for uncleared derivatives and the REFIT proposal to make EMIR more efficient and more proportionate, will further promote the shift towards central clearing. Likewise, the EU's exposure to third-country CCP risks is expected to grow as the interconnected nature of CCPs increases further, and as additional third-country CCPs apply for recognition. The EU's exposure to third-country CCP risks will also be exacerbated by the foreseen withdrawal of the UK from the EU in 2019, as this will lead to a shift of risk from within to outside the EU.

It is therefore necessary for the EU to move swiftly to address the concerns relating to any shortcomings in the supervisory arrangements for CCPs. By acting at an early stage, the overall stability of the EU financial system will be reinforced and the already low probability (but extremely high-impact) risk of a CCP failure will be lowered even further. The development of the CMU will also be strengthened.

3. PROBLEM DEFINITION

This section outlines how the assessment of the effectiveness and efficiency of EMIR's current supervisory arrangements for CCPs established in the EU and recognised third-country CCPs has been carried out.

Based on the analysis in the previous section and on the outcome of the evaluation of the functioning of the colleges presented in Annex 6, this section identifies the problems with current supervisory arrangements and considers the key issues to be addressed in the proposal to amend EMIR. The problems include: (1) incoherence in arrangements for the supervision of CCPs established in the EU and notably the need for an adequate reflection of the responsibilities of the CBI; and (2) the insufficient mitigation of risks relating to the operation of recognised third-country CCPs.

3.1. Analysis of current EMIR supervisory arrangements

The impact assessment report analyses the performance of the current supervisory arrangements of EMIR, based on the previous formal EMIR Review evaluation and additional available material, without a formal evaluation under the Better Regulation principles.

A formal evaluation of EMIR accompanied the EMIR REFIT proposal adopted by the Commission in May 2017. That evaluation focused mainly on the objectives of EMIR to increase transparency, reduce counterparty credit risk and mitigate the operational risks associated with OTC derivatives.

According to the impact assessment accompanying the 2012 Commission's proposal on EMIR[81], the general objective of the supervisory requirements for CCPs under EMIR is to increase the safety and efficiency of CCPs established in the EU. The related operational objective is to remove obstacles to the cross-border provision of CCP services in the EU, while the specific objective is to ensure a level-playing field for the provision of CCP services, by promoting supervisory convergence. However, that impact assessment did not consider the third-country dimension of EMIR's supervisory arrangements, meaning that an evaluation of EMIR's third-country supervisory regime for equivalence and recognition cannot be carried out against its initial objectives.

The observation period of how the EMIR supervisory architecture, and more specifically the supervisory colleges, works in practice, has been relatively short. Within the EU, while the first colleges of supervisors were established in 2013, the authorisation of the 17 CCPs established in the EU spanned from the first half of 2014 (Nasdaq OMX Clearing AB) until September 2016 (ICE Clear Europe Limited), with the authorisation of an 18th CCP in Croatia[82] still pending. Likewise, the recognition of the first third-country CCPs started as recently as the first half of 2015[83], following the adoption of corresponding equivalence decisions in October 2014 (for the CCP regimes of Japan, Australia, Hong Kong and Singapore).

While for these reasons no formal evaluation beyond the EMIR Review evaluation has been carried out, this impact assessment report provides an analysis of the extent to which the existing EMIR supervisory arrangements for CCPs established inside and outside the EU have met their objective of ensuring a level-playing field for the provision of CCP services in an effective and efficient way, while at the same time being coherent, relevant and providing EU added-value. This analysis is largely based on the outcome of two peer reviews on the functioning of the supervisory colleges under EMIR conducted by ESMA in 2015[84] and 2016[85]. In addition, this builds on input by ESMA assessing the current EMIR third-country equivalence and recognition regime as part of a report prepared for the Commission in the context of the review of EMIR[86]. The main findings of the peer reviews carried out by ESMA are presented in Annex 6, while ESMA's assessment of the current recognition process under EMIR is presented in Annex 4. On the basis of these analyses, of additional feedback from stakeholders available in Annex 4, and of Commission research, the following preliminary findings can be presented.

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81 Commission Staff Working Document Impact Assessment Accompanying document to the Proposal for a Regulation of The European Parliament and of The Council on OTC derivatives, central counterparties and trade repositories {COM(2010) 484 final} {SEC(2010) 1059}, p.72. Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1481725916037&uri=CELEX:52010SC1058

82 For further details, see ESMA's list of Central Counterparties authorised to offer services and activities in the Union: https://www.esma.europa.eu/sites/default/files/library/ccps_authorised_under_emir.pdf

83 ESMA's list of CCPs established in a third country that have been recognised to offer services and activities in the Union offers further information: https://www.esma.europa.eu/sites/default/files/library/third-country_ccps_recognised_under_emir.pdf

84 ESMA review of CCP colleges under EMIR, January 2015 https://www.esma.europa.eu/sites/default/files/library/2015/11/2015-20-_report_on_esma_review_of_ccp_colleges.pdf

85 ESMA, Peer Review under EMIR Art. 21 Supervisory activities on CCPs' Margin and Collateral requirements, 22 December 2016, ESMA/2016/1683 (ESMA peer review 2016) https://www.esma.europa.eu/sites/default/files/library/2016-1683_ccp_peer_review_report.pdf

86 ESMA, EMIR review report no. 4, ESMA input as part of the Commission consultation on the EMIR Review, 13 August 2015, ESMA/2015/1254 https://www.esma.europa.eu/sites/default/files/library/2015/11/esma-2015-1254_-_emir_review_report_no.4_on_other_issues.pdf

Regarding the **effectiveness** of the EMIR supervisory arrangements applicable to CCPs established in the EU, practical experience suggests that the cooperation between members of the colleges in their current structure have allowed the views of supervisors of different actors involved in central clearing to be represented, thereby contributing to the objectives of supervisory convergence and a level playing field amongst CCPs established in the EU. However, there are concerns about the consistency of CCP supervision across Member States, suggesting room for a more effective approach to cross-border CCP supervision. In particular the degree of cooperation between members of the colleges varies significantly depending on the role of the college in the decision-making process. While during the authorisation process, "ESMA observed that in general the CCP colleges facilitated two-way cooperation: on the one hand, the chairing NCAs received good and constructive input from the college members which fed into their risk assessments; while on the other hand, college members received the information they required in order to vote on the adoption of the joint opinion."[87], a reduced level of cooperation occurs where there is no need for such an opinion. Thus, ESMA sees a "risk that following authorisation CCP colleges may become simply a mechanism for the exchange of information, rather than an effective supervisory tool." In addition, preliminary observations suggest that: (i) different college members participate to different degrees in college discussions; and (ii) the supervisory approaches of NCAs vary to a significant extent even in cases involving comparable CCPs. Common templates provided by ESMA to support supervisory convergence between NCAs have failed to solve that problem, because NCAs exercise their discretion differently. There is therefore room for improvement to help strengthen the consistency of CCP supervision at EU level, improve level playing field in the EU and achieve more effective supervisory convergence.

On the effectiveness of supervision of third-country CCPs, the current arrangements have allowed ESMA to recognise 28 third-country CCPs to provide clearing services to EU counterparties. This is in line with the G20's objectives to promote cross-border arrangements. At the same time, most respondents to the EMIR consultation (mainly companies from the financial sector and industry associations) considered that the EMIR equivalence regime for third-country CCPs has de facto created a situation where the requirements for CCPs established in the EU are heavier than third-country CCPs, leading to an un-level playing field which is detrimental to the former. ESMA also highlighted that the EMIR approach regarding third-country CCPs is extremely open, with full reliance on third country rules and supervisory arrangements, while the majority of third-country jurisdictions consider third-country CCPs as systemically relevant infrastructures and apply to them closer scrutiny. ESMA argued that, although the current EMIR approach should be a model in terms of mutual reliance, if the EU remains the only jurisdiction relying extensively on third country rules and authorities, this might put it at risk and does not benefit CCPs established in the EU.

Regarding **efficiency**, a majority of respondents to the EMIR consultation supported the objective of ensuring a level playing field between CCPs established in the EU by promoting a homogeneous application of EMIR. At the same time, they pointed to the length of the approval processes, underlining that, in certain cases, the timeline for approval could be postponed indefinitely by the NCA, giving rise to legal uncertainty. Certain respondents also pointed to the need for greater transparency in the functioning of colleges, not only regarding CCPs for the authorisation and extension of services processes but also regarding users of CCPs in order to allow them to get more visibility

[87] ESMA peer review 2015, p. 16, para. 30.

of the authorisation process and its consequences. Moreover, several authorities and industry participants, and market infrastructure operators asked for more clarity in the process and timeframe for the authorisation and extension of services provided by CCPs. Respondents suggested that EMIR should clarify the modalities for the college process, in particular the roles and responsibilities of different college members. There is therefore room for improvement, in particular in relation to a more streamlined supervision of CCPs established in the EU. This could contribute to a more efficient collaboration between national and EU supervisors, thereby avoiding the duplication of supervisory tasks and reducing the corresponding allocation of time and resources.

Regarding the current supervisory regime for third-country CCPs, industry associations that responded to EMIR consultation indicated that the Commission takes too long to complete its equivalence assessments. ESMA also raised a series of concerns about the efficiency of the process of recognition of third-country CCPs. First, it argued that the process is rigid and burdensome, as demonstrated by the limited number of recognition decisions taken in 2015. Second, it pointed out that the recognition of third country CCPs imposes a significant administrative burden on ESMA.

Regarding **relevance**, the supervisory arrangements of EMIR remain integral to international efforts to increase the stability of the global OTC derivatives market, while facilitating cross-border deference arrangements between jurisdictions. EMIR's supervisory arrangements also ensure that financial markets continue to play their role in contributing to sustainable, long-term growth to further deepen the internal market in the interests of consumers and businesses, as part of the Commission's efforts to support investments, growth and jobs.

As described in Section 2, the supervisory arrangements of EMIR are **coherent** with other pieces of EU legislation that aim to: (i) address the systemic importance of CCPs; (ii) promote further the use of central clearing, and (iii) enhance the efficiency and effectiveness of EU-level supervision, both within and outside the EU.

Finally, in terms of the **EU added value**, the supervisory arrangements of EMIR covered a gap by introducing a new mechanism facilitating supervisory convergence at EU level in order to address the systemic risks of CCPs offering clearing services to EU counterparties.

3.2. Inconsistency in the arrangements for supervision of EU-based CCPs and role of the CBI

Concerns have arisen in respect of supervisory arrangements for CCPs established in the EU. Annexes 4 and 6 provide detailed feedback from stakeholders and public authorities on the current EMIR supervisory arrangements for CCPs established in the EU.

The central supervisory role of home NCAs does not adequately reflect the increasingly pan-European nature of EU CCPs

Under EMIR, authorisation of a CCP relates to the EU as whole. Authorised CCPs are currently supervised by colleges comprising the home-supervisor, ESMA, relevant members of the ESCB, and other relevant authorities (e.g. supervisors of the largest clearing members, supervisors of certain trading venues and central securities depositories). The central role in these colleges is played by the home-supervisor, which coordinates the other participant authorities. However, the increasing scale and scope of EU CCPs, their cross-border integration, concentration and interconnectedness in the financial system as described earlier point to shortcomings in this arrangement.

In contrast to the concentration and interconnection in the market for central clearing, CCP-related supervisory powers across the EU are fragmented. Table 4 below highlights the variations in CCP supervisory responsibilities across Member States. Numbers in brackets in the second column refer to the number of CCPs established in that Member State. It illustrates that a majority of Member States rely on their financial-market authority to supervise EU CCPs, while others rely on central banks, and a few combine both types of authorities.

Table 4: Competent authority for the supervision of EU CCPs under EMIR as reported to ESMA

Designated Competent Authority	Member State (number of EU CCPs in that country)	Number of Member States with the particular supervisory model
Central Bank	CZ (0), IE (0), LT (0), HU (1), NL (2), SK (0), UK (4)	7
Financial Market Authority	BU (0), DK (0), DE (2)*, EE (0), EL (1), ES (1), HR (1), CY (0), LU (0), MT (0), AT (1), PL (1), PT (1), RO (0), SL (0), SE (1)	16
Combination of the two above	BE (0), IT (1), FR (1)**	3
Other model	FI (0)***	1

* Plus central bank (supervisory function) that performs some supervisory tasks on behalf of the financial market authority
** Plus the prudential authority (ACPR).
*** Combination of central bank and ministry of finance.

Source: ESMA[88]

Within a Member State, supervision can also be carried out by several national competent authorities (NCA). For instance, there are three NCAs in France (ACPR, AMF and BdF), two NCAs in the Netherlands (AFM, DNB) and two NCAs in Italy (BdI, Consob). In Germany, BaFin is the NCA under EMIR, but the Deutsche Bundesbank conducts parts of the ongoing supervision and provides specialised inspectors for the annual on-site inspections on BaFin's behalf.[89] As a result, from an EU perspective, there are currently 16 NCAs in 12 Member States that supervise the 17 EU CCPs. As well as allowing different allocation of tasks among NCAs, EMIR allows Member States to decide how to entrust specific supervisory powers to ensure that its/their NCA(s) has/have "the supervisory and investigatory powers necessary for the exercise of its functions"[90]. EMIR also leaves to the NCAs the ultimate decision on the authorisation of a CCP established in the EU and other important supervisory decisions such as the extension of authorisation, the validation of significant changes to EU CCP risk models and parameters or the approval of outsourcings and interoperability arrangements.

Within the EU, CCPs are supervised by colleges of home authorities and relevant authorities from other Member States. Colleges can comprise over 20 authorities with

[88] See https://www.esma.europa.eu/ncas-ccps. According to ESMA's homepage, Latvia did not designate a competent authority.

[89] Peer Review under EMIR Art. 21, Supervisory activities on CCPs' Margin and Collateral requirements, 22 December 2016, ESMA/2016/1683, https://www.esma.europa.eu/sites/default/files/library/2016-1683_ccp_peer_review_report.pdf, page 9.

[90] Article 22(2) of EMIR.

some (for example ESMA and the ECB) needing to refer to internal governing bodies before reaching a position. In order to promote supervisory convergence and to facilitate efficient decision-making, EMIR provides ESMA with binding mediation powers in the event of disagreement between the members of the college if a specified blocking quorum is reached. ESMA is also provided with specific supervisory tasks such as the validation of significant changes of risk management models and parameters. In addition, while EMIR provides requirements on the composition of the college(s), the composition requirements do not fully reflect the different functions of the various authorities and central banks within the colleges. It particularly does not take into account the different perspectives of supervisory authorities (typically micro-prudential) and central banks (typically monetary and macro-prudential). While the mandates of all college participants are taken into account, this complex structure does not foster efficient decision-making, e.g. there have been instances of long delays for the authorisation of EU CCPs.

The fragmentation of EU CCP-related supervisory powers makes it difficult to compare EU CCP practices, to supervise interoperable or otherwise linked CCPs and groups to which EU CCPs in different Member States belong. It is also difficult to properly supervise areas which are related to more than one EU CCP e.g. CCP links and interoperability arrangements, outsourcings arrangements or otherwise interconnected EU CCPs. All these fields require a revised and more holistic approach to supervision across the different EU CCPs. The CMU Communication of September 2016 and the recently launched consultation on the review of the European Supervisory Authorities (ESAs)[91] already draw attention to the challenges posed by heterogeneous supervisory practices of EU CCPs.

Diverging supervisory practices can create risks of regulatory arbitrage

The fragmented supervisory arrangements under EMIR lead to differences in the allocation and nature of supervisory powers depending on the EU CCP concerned. Notwithstanding ESMA's competence to promote supervisory convergence,[92] the powers of national supervisors and the requirements for CCPs are interpreted differently across the EU resulting in a significant heterogeneity in supervisory practices. In its 2016 CCP Peer Review[93], ESMA noted the following issues:

- four national supervisors did not complete the annual review under Article 21 of EMIR in the respective year[94];
- the approaches of the national supervisors to identifying new activities and services that require an extension of the authorisation of the EU CCP under Article 15 of EMIR were diverse[95];
- the same is true for the validation of significant changes to CCP risk models and parameters[96]. Although a framework for the determination of new activities and

[91] Public consultation on the operations of the European Supervisory Authorities"; 21/03/2017 – 16/05/2017

[92] ESMA's work on supervisory convergence is described here: https://www.esma.europa.eu/convergence/supervisory-convergence

[93] Peer Review under EMIR Art. 21, Supervisory activities on CCPs' Margin and Collateral requirements, 22 December 2016, ESMA/2016/1683, https://www.esma.europa.eu/sites/default/files/library/2016-1683_ccp_peer_review_report.pdf.

[94] Peer Review Report, page 6.

[95] Peer Review Report, page 7.

[96] Peer Review Report, page 8.

services and the significance of changes of risk models has been promoted by ESMA and agreed among the national supervisors, this did not solve the problem of different approaches[97]. This implies the possibility that a CCP that is located in one Member State may be required to go through the authorisation extension or validation process before offering a new activity or service, while a CCP located in another Member State can offer the same new activity or service without being required to do so. Furthermore, this implies the risk that significant changes to CCP risk models and parameters may remain unnoticed and would, therefore, not be assessed from a risk management perspective;

- there are different approaches regarding the execution of supervisory tasks by the national supervisors, e.g. desk-based reviews and on-site inspections[98];

- there are divergences between the national supervisors approach to margin[99] and collateral[100] requirements. In particular, there is a low level of convergence with regard to portfolio margining [101] which is important for the adequate risk management in the CCP (i.e. the appropriate collateralisation considering correlations between asset classes) as well as for the efficient use of collateral. Such divergence can significantly influences the relative costs of clearing for CCPs.

Differences in interpretation by national supervisors have also been highlighted by respondents to the EMIR consultation. These include differences relating to the EMIR requirements for authorisation, risk management, conflicts of interest and the calibration of financial resources of EU CCPs.

While the regional specificity of CCPs within the EU or the specialisation by asset class can make it difficult for this arbitrage possibility to manifest itself, there are several instances where two CCPs offering the same clearing services in two different services have been able to leverage differences in supervisory approaches or interpretations to attract business.

Differences in supervisory approaches create issues of competition and level playing field between CCPs established in different Member States. These differences can also be associated with a 'race to the bottom' in supervisory quality, which would be detrimental to adequate risk management frameworks and practices. This, in turn, creates scope for regulatory and supervisory arbitrage among market participants. Additional risks include**:**

- higher regulatory costs for clearing members and other market participants as they have to deal with the different interpretation of the law by different EU CCPs and their supervisors;

- possible inadequate collateral requirements;

- difficulties in the supervision of interoperable or otherwise interlinked CCPs where different NCAs are responsible for the supervision of the EU CCPs that take part in such arrangements; and

97 Peer Review Report, page 8.
98 Peer Review Report, page 10.
99 Peer Review Report, page 29.
100 Peer Review Report, page 39.
101 Peer Review Report, page 22.

- difficulties to compare and establish best practices across EU CCPs as each NCA is responsible for only one or two EU CCPs.

In addition, the supervisory fragmentation makes it difficult for market participants to identify contact points, which could be particularly problematic in stressed market conditions.

Lack of clarity with respect to the role of the central bank of issue (CBI)

The overarching public policy objective of a central bank is to maintain the value of, and public confidence in, its currency[102]. In payment, clearing and settlement systems, central banks aim mainly to: (i) prevent systemic risk, thereby maintaining financial stability; (ii) promote the efficiency of payment systems and instruments; (iii) ensure the security of and public trust in the currency as the settlement asset; and (iv) safeguard the transmission channel for monetary policy.

Where systemic risk impedes the functioning of markets or threatens the existence of solvent critical players, a central bank may need to step in. Assistance can be granted to the market as a whole or to individual institutions. Central banks decide on a case-by-case basis whether or not to inject liquidity into the market by means of extraordinary and/or non-conventional market operations, and whether and how to provide funding to individual banks that are illiquid but solvent. The latter is often referred to as "emergency liquidity assistance or "acting as the lender of last resort" to banks.

As issuers of money, the functions of central banks in the area of payment, clearing and settlement systems are closely related to their functions in the areas of monetary policy and financial stability. On the latter, and with regard to financial market infrastructures, a central bank's primary focus is on systemic risk, with a view to ensuring that systems are safe and efficient. Were a system to be insufficiently protected against risk, a significant disturbance could lead to its participants being disrupted or give rise to systemic disruptions in the wider financial system. Systemic importance is determined mainly by the size or nature of individual transactions or their aggregate value. Payment, clearing and settlement systems specifically handling large-value transactions, as is the case for collateral underpinning margin in clearing transactions, are normally considered to be systemically important. The role and responsibilities of a central bank is to preserve the safety and efficiency of individual payment, clearing and settlement systems or arrangements and the safety of the market as a whole (i.e. looking at all infrastructures together).

It is important to adequately reflect the role of CBIs in the supervisory arrangements under EMIR. While the specific perspectives of supervisory authorities and CBIs are different, their overall interest in the safe and sound functioning of a CCP naturally overlaps in several areas, such as interoperability arrangements, liquidity risk controls, collateral requirements and settlement questions. However, their objectives may not always be aligned in the context of the central bank's responsibility in the field of monetary policy. While the CBIs of the most relevant currencies and the central banks responsible for the oversight of the CCP and possible interconnected CCPs are – under the current legal framework – "normal" college members[103], EMIR does not assign

[102] ECB, Eurosystem, The Payment System - Payments, securities and derivatives, and the role of the Eurosystem, 2010, Chapter 7 on the role of central banks, available at: https://www.ecb.europa.eu/pub/pdf/other/paymentsystem201009en.pdf

[103] A particular situation is that of the ECB. According to Article 18(h)(g) and (c) EMIR respectively, the ECB can be part of a college in the different capacities of CBI, ESCB member responsible for

specific competences to them. This could lead to a potential misalignment between the actions undertaken regarding CCPs and the associated effects on the monetary policy for the currencies involved.

The lack of clarity in the scope of the central bank competences with regard to clearing systems has been a longstanding issue. In July 2011, the ECB published on its website the Eurosystem[104] Oversight Policy Framework (Policy Framework), which described the Eurosystem role in the oversight of 'payment, clearing and settlement systems'. According to the ECB, the oversight of those systems and that infrastructure as a whole stemmed from the task assigned to it of promoting the smooth operation of payment systems.

In a judgment delivered on 4 March 2015[105], the General Court annulled the Policy Framework published by the ECB in so far as it set a requirement for CCPs involved in the clearing of securities to be located within the Eurozone. Stating that creation of such a requirement goes beyond mere oversight by intervening in the regulation of their activity, the General Court held that the ECB lacks the competence to adopt such a requirement[106].

Following this judgment, the ECB and the Bank of England (BoE) announced measures[107] to enhance financial stability in relation to centrally cleared markets within the EU for CCPs with significant cross-border systemic risk implications. These included: (i) enhanced arrangements for information exchange and cooperation regarding UK CCPs with significant euro-denominated business; and (ii) the extension of the scope of their standing swap line in order, should it be necessary and without pre-committing to the provision of liquidity, to facilitate the provision of multi-currency liquidity support by both central banks to CCPs established in the UK and euro area respectively. Both the ECB and the BoE highlighted that CCP liquidity risk management remains first and foremost the responsibility of the CCPs themselves.

Need to address inconsistencies in current supervisory arrangements for CCPs established in the EU

The current supervisory arrangements under EMIR are the outcome of a delicate political balance, which recognises that the fiscal responsibility in the unlikely event of a CCP

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oversight and competent authority responsible for the supervision of the clearing members of the CCP that are established in the three Member States with the largest contributions to the default fund of the CCP referred to in Article 42 on an aggregate basis over a one-year period. In its Opinion ESMA/2015/838 of 7 May 2015 ESMA has considered that when the ECB exercises direct supervision over the largest clearing members in accordance with EMIR, it should participate in the college in this role. At the same time, ESMA has also opined that when the ECB participates in the same college as CBI and/or ESCB member responsible for oversight, it should have only one voting right, irrespective of the different roles. A further clarification of the allocation of voting rights is thus necessary, also in consideration of the principle of separation in the performance of the ECB tasks as a central bank and as a banking supervisor.

104 The Eurosystem comprises the European Central Bank (ECB) and the national central banks of the Member States that have adopted the euro as a common currency.

105 Judgment of the General Court (Fourth Chamber), 4 March 2015, United Kingdom of Great Britain and Northern Ireland v European Central Bank (ECB), Case T‑496/11, regarding the clearing of financial instruments denominated in euro, available at http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:62011TN0496. The related press release can be found on https://curia.europa.eu/jcms/upload/docs/application/pdf/2015-03/cp150029en.pdf

106 According to Article 127(2) of the FEU Treaty.

107 See joint press release of 29 March 2015, available at: https://www.ecb.europa.eu/press/pr/date/2015/html/pr150329.en.html

failure would lie with the Member State in which the EU CCP is established. While the proposal for a framework for the recovery and resolution of CCPs aims at providing the necessary tools and powers to minimise the risk of losses allocated to taxpayers, the growing systemic importance of EU CCPs both in terms of size and interconnectedness strongly highlights inconsistencies related to the current allocation of responsibilities between EU and national authorities (including the CBI) in the supervision of CCPs established in the EU.

3.3. Insufficient mitigation of third-country CCP risks

Concerns have also arisen in respect of supervisory arrangements for recognised third-country CCPs within the EU. Annexes 4 and 6 provide detailed feedback from stakeholders and public authorities on the current EMIR regime for third-country CCPs recognised by ESMA to provide their services to EU counterparties and trading venues.

Singularity of EU supervisory arrangements for third-country CCPs

The EU's approach to supervision of third-country CCPs relies on the capacity of the third-country home supervisory authority to ensure that the third-country CCP effectively complies with the rules enforced in its jurisdiction. This allows the EU to meet international standards on deference to the rules of a third country, while ensuring that safeguards related to the equivalence criteria are in place.

ESMA has received a large number of applications for recognition from third-country CCPs[108]. Third-country CCPs have made such applications so as to be able to provide activities and services in the EU, and/or with the objective of receiving the more favourable QCCP status for their clearing members from the perspective of the CRR. This large interest for recognition demonstrates the global nature of the derivatives market and the attractiveness of the EU clearing market, thus highlighting the importance of a solid process to determine from the EU perspective the list of third-country CCPs that meet the necessary safeguards to offer their services to EU counterparties.

The table below provides an overview of existing deference decisions applying to CCP regimes amongst FSB jurisdictions. It shows that the EU is one of the jurisdictions with the highest number of cross-border CCP arrangements in place.

Table 5: Central clearing-related deference decisions (FSB member jurisdictions, as at end-June 2016)

Jurisdiction making deference decision	Jurisdiction receiving deference
Australia	EU, US (CFTC)
Canada	UK, US (CFTC)
EU	Australia, Canada, Hong Kong, Japan, Korea, Mexico, Singapore, South Africa, Switzerland, US (CFTC)
Hong Kong	Australia, Brazil, Canada, EU, Japan, Singapore, Switzerland and US

[108] A list of third-country CCPs that have applied is available on the ESMA website at the following address: http://www.esma.europa.eu/page/Registries-and-Databases

Mexico	US (CFTC)
Singapore	UK, US (CFTC)
US (CFTC)	Australia, EU, Hong Kong, Japan, Korea

Source: FSB[109]

As described in section 2.3, under EMIR, third-country CCPs are not required to register and become subject to the rules and the competent authorities in the EU. Rather, they must be recognised by ESMA under Article 25. First, CCP must apply for registration by ESMA. Second, the Commission must adopt an implementing act determining the equivalence of the third-country CCP regime with a number of requirements set out in EMIR. Third, ESMA must formally recognise the applicant CCP.

Article 25 of EMIR provides that ESMA may recognise a CCP where the four conditions listed in Article 25(2) are met. These conditions are: (i) the adoption of a corresponding equivalence decision by the European Commission; (ii) the fact that the CCP is authorised in the relevant third county and is subject to effective supervision and enforcement ensuring full compliance with the prudential requirements applicable in that third country; (iii) the establishment of cooperation arrangements between ESMA and the relevant competent authorities of the third country; and (iv) the fact that the CCP is established or authorised in a third country that is not considered by the Commission as having strategic deficiencies in its national money laundering and counter financing of terrorism regime that poses significant threat to the financial system of the EU.

The cooperation arrangements that ESMA must establish with the relevant supervisors of the third-country CCP prior to granting recognition should specify at least the mechanisms for (a) the exchange of information, (b) the notification to ESMA in case of a breach of the conditions of the third-country CCP's authorisation by the home country, (c) the notification to ESMA when a CCP is recognised to provide services in the EU and most importantly (d) the procedures concerning the coordination of supervisory activities including on-site inspections. ESMA should consult with the competent authorities of the Member States in which the third-country CCP intends to provide services or in which currency services are provided.

EMIR also provides that ESMA may withdraw recognition under strict conditions: (i) where the formal conditions of recognition are no longer met; and (ii) in the same circumstances as those described in Article 20 of EMIR (withdrawal of authorisation).

Once it has been recognised, a third-country CCP continues to be subject to its jurisdiction's regime and is supervised by its relevant supervisor in cooperation with ESMA. This means that, in spite of the ex-ante criteria that apply prior to recognition, the EUs approach towards third-country CCPs is relatively open, with full reliance on third country rules and supervisory arrangements.

Post-recognition, the cooperation arrangements that ESMA have concluded to date provide, however, for only limited powers to ESMA to intervene should an emergency situation arise in a third-country CCP.

Furthermore, once the four conditions of Article 25(2) are met, there is no provision in EMIR that allows ESMA to deny recognition on the basis of any material risk emerging

[109] OTC Derivatives Market Reforms / Eleventh Progress Report on Implementation (2016) http://www.fsb.org/wp-content/uploads/OTC-Derivatives-Market-Reforms-Eleventh-Progress-Report.pdf (Since the publication of this report the EU has adopted another six equivalence decisions.)

from its review of a CCP application. As a result, as long as the four conditions are met, ESMA has to recognise the applicant CCP, even though ESMA may identify a significant risk through the processing of an application for a specific third-country CCP, or the consulted authorities may flag significant concerns.

This approach contrasts with the approach to third-country CCP authorisation of other major jurisdictions. According to ESMA[110], the majority of other jurisdictions consider third-country CCPs as systemically relevant infrastructures and apply to them a much closer scrutiny. In general, the process envisages a full registration in the relevant jurisdiction and as part of such authorisation process, the third country authority may decide to rely on certain rules of the home jurisdiction of the CCP and of certain cooperation arrangements with the home authority of the CCPs, but the CCP would become subject to the rules and the authority of the jurisdiction registering it.

For instance, under the US financial supervisory regime, entities providing clearing services as a CCP in the US or to US market participants are required to be registered with either the Securities and Exchange Commission (SEC) or the CFTC, or both, depending on the type of asset being cleared. CCPs registered and supervised by the CFTC are known as Derivatives Clearing Organizations[111] (DCOs). Section 5b of the Commodities and Exchange Act (CEA) requires a DCO to register with the CFTC and prescribes the Core Principles of US rules with which the DCO must comply in order to obtain and maintain its registration. There are 18 Core Principles. The Core Principles address compliance, financial resources, participant and product eligibility, risk management, settlement procedures, treatment of funds, default rules and procedures, rule enforcement, system safeguards, reporting, recordkeeping, public information, information sharing, antitrust considerations, governance fitness standards, conflicts of interest, composition of governing boards, and legal risk.

In addition, Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act gives the Financial Stability Oversight Council[112] the authority to designate certain CCPs as systemically important and therefore subject to heightened prudential standards and heightened supervision by the relevant supervisory agency (the CFTC or the SEC) and by the Board of Governors of the Federal Reserve System. The regime is intended for those CCPs which are, or are likely to become, systemically important because the failure of or a disruption to the functioning of the CCP could create, or increase, the risk of significant liquidity or credit problems spreading among financial institutions or markets and thereby threaten the stability of the United States financial system.

Furthermore, instead of a full equivalence approach, the US regime relies on 'substituted compliance' where DCOs must fully comply with the Core Principles before the US authorities take into account third-country requirements. As a consequence the US requirements always apply. This approach therefore contrasts markedly with that of the EU.

[110] EMIR Review Report no.4, https://www.esma.europa.eu/sites/default/files/library/2015/11/esma-2015-1254_-_emir_review_report_no.4_on_other_issues.pdf

[111] List of DCOs including CCPs established in the EU: https://sirt.cftc.gov/sirt/sirt.aspx?Topic=ClearingOrganizations

[112] https://www.treasury.gov/initiatives/fsoc/about/Pages/default.aspx

Shortcomings in supervisory arrangements for third-country CCPs

ESMA[113] has highlighted a number of shortcomings in the current EU regime governing third-country CCPs, in particular as regards ongoing supervision.

- First, following the adoption of an equivalence decision and once the formal conditions for recognition of a third-country CCP under EMIR are met, ESMA cannot refuse to grant recognition on the basis of a material risk emerging from its review of an application by that CCP. ESMA must therefore recognise a third-country CCP, even though it or the consulted authorities may have identified a significant risk during the processing of the application of that CCP.

- Second, while in theory the equivalence framework under EMIR should allow ESMA to supervise third-country CCPs while relying on the supervisory regime of the third country, in practice it has proven difficult for ESMA to gain access to information directly from third-country CCPs or even from the third-country competent authorities as well as to exercise its on-site inspection power as on-site inspections must be pre-approved by the third-country competent authority[114]. Therefore, although the EU regime relies on cooperation arrangements between ESMA and third-country supervisory authorities, there is no more direct involvement of EU supervisory bodies in the day-to-day supervision of third-country CCPs. As a result, there is a risk that third-country CCP practices and/or adjustments to risk management models go undetected.

- Third, there is currently no mechanism to ensure that the EU is informed automatically of changes to third-country CCP rules and/or regulatory frameworks in third-countries. There is also a lack of flexibility in the tools available to ESMA to respond to such changes, i.e. ESMA may only withdraw recognition. This leads to a risk of regulatory or supervisory arbitrage at the global level.

- Fourth, a number of NCAs[115] and industry representatives have suggested as part of the EMIR consultation that the EU supervisory regime of third-country CCPs is less robust than the EU supervisory regime of EU CCPs. On the one hand, EU CCPs must comply with all relevant EMIR requirements under Titles IV and V and are subject to supervision by its NCA(s) and the college defined in Article 18 which includes the CBIs of the most relevant EU currencies of the financial instruments cleared. On the other hand, once the Commission had adopted an equivalence decision and ESMA has recognised the third-country CCP, the supervision of third-country CCPs is based on full reliance on third country rules and supervisory arrangements, without a possibility for EU authorities to intervene if necessary. As such, respondents to the EMIR consultation, including companies from the financial sector and industry associations, consider that the equivalence regime for CCPs as developed in EMIR de facto creates a situation where the requirements for EU CCPs are heavier than third-country CCPs, leading to an un-level playing field detrimental to EU CCPs.

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[113] EMIR Review Report no.4, https://www.esma.europa.eu/sites/default/files/library/2015/11/esma-2015-1254_-_emir_review_report_no.4_on_other_issues.pdf

[114] See for example: https://www.esma.europa.eu/sites/default/files/library/esma70-708036281-19_letter_to_com_-_emir_review_and_sanctioning_powers.pdf

[115] See NL-DNB, FR-AMF, NL-AFM, FR, ECB

Financial stability risks and monetary policy considerations linked to third-country CCPs

EMIR does not allow CBIs or EU authorities to intervene in relation to financial instruments denominated in EU currencies which are cleared to a significant extent in CCPs located outside the EU. This raises concerns regarding whether EU authorities are adequately positioned to react to a crisis situation such as liquidity stress.

The role of CBIs is particularly relevant with regard to CCPs located outside of their jurisdiction and active in the currency they issue because of the CBI's responsibility for the stability of its currency. By contrast, the mandate of the CBI of the third country where the CCP is located accounts is focused on the potential risks associated with transactions cleared by the CCP that are denominated in its own currency. This may lead to a misalignment of mandates between third-country and EU CBIs related to the fact that one CBI may be willing to intervene to stabilise its currency while the other does not see the need for such intervention.

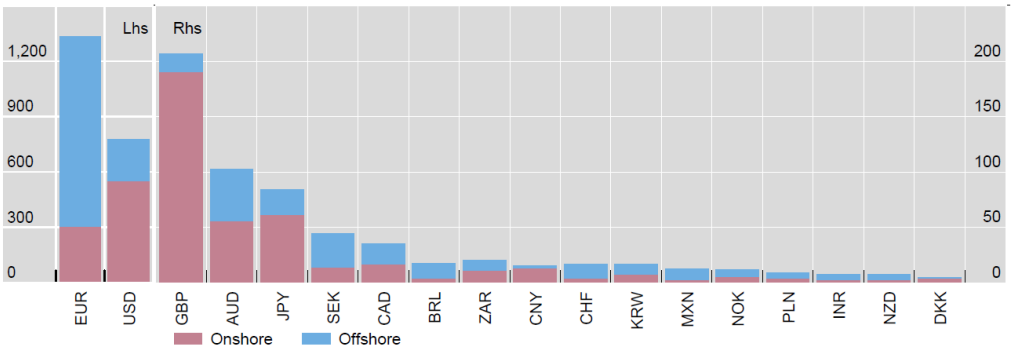
The involvement of the relevant CBIs in the ongoing supervision of third-country CCPs is therefore essential, in particular for third-country CCPs clearing large volumes of transactions denominated in the currency issued by those CBIs. Although cooperative arrangements have been agreed in line with international guidance (see notably PFMI responsibility E[116]), they are of a limited scope considering the monetary policy implications explained above. Consequently, the responsibilities of EU CBIs are not adequately reflected with regard to third-country CCPs that offer clearing services for financial instruments denominated in the currency of CBIs of the EU Member States.

The larger the volume of transactions being cleared, the larger the potential risks, and the need for involvement of the CBI in monitoring and mitigating those risks. Figure 13 below illustrates that contracts in most currencies are more heavily traded outside than inside their country, reflecting the market's global character. The bulk of transactions in contracts denominated in currencies as diverse as the Brazilian real, Mexican peso, Swiss franc and the euro are traded offshore. Paradoxically, the least internationalised currencies include the British pound and the US dollar, the home currencies of the two largest financial centres.

The United Kingdom dominates offshore trading in European currencies and the South African rand (Figure 14, left-hand panel). Contracts on Latin American interest rates are traded mainly in the United States (Figure 14, right-hand panel) and those on Asian rates in Hong Kong and Singapore (Figure 14, centre panel). But there are exceptions. The United Kingdom is only slightly behind the United States in trading derivatives on Brazilian rates. The yen, the Australian dollar and the New Zealand dollar are more heavily traded in the United Kingdom than in the Asian centres, although there is also significant New Zealand dollar activity in Australia.

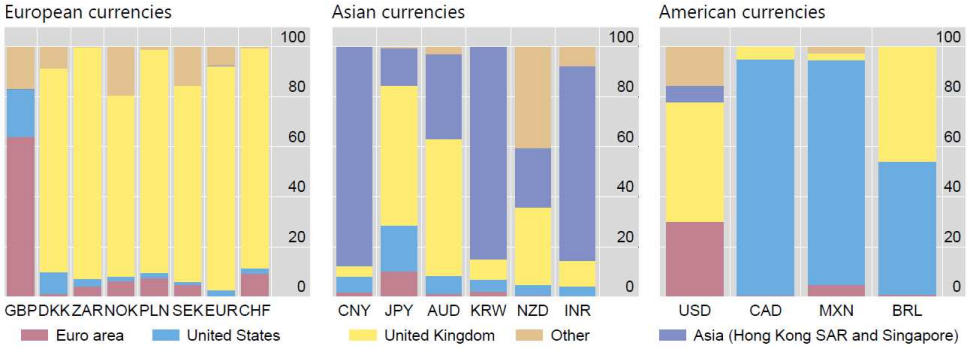
[116] The Principles For Market Infrastructures (PFMI) global standards that apply to Financial Markets Infrastructures, including CCPs. The PFMIs also outline the general responsibilities of relevant authorities for FMIs in implementing these standards. Responsibility E relates to cooperation with other authorities. See for more information: http://www.bis.org/cpmi/info_pfmi.htm

Figure 13: Onshore and offshore trading, Net-gross basis (adjusted for double counting) daily averages in April 2013, in billions of US dollars



Source: BIS[117]

Figure 14: Offshore trading by financial centre (in per cent)



Source: BIS[118]

Increasing exposure of the EU to third-country CCP risks

Concerns about supervisory arrangements for third-country supervisors are likely to become more significant in the future, as the global nature of capital markets means that the role played by third-country CCPs is set to expand. There are already 28 third-country CCPs recognised by ESMA and a further 12 CCPs from 10 jurisdictions have applied for recognition and are awaiting a decision of the Commission as regards the equivalence of their regulatory and supervisory regimes.

Today, a significant amount of financial instruments denominated in the currencies of the Member States are cleared by recognised third-country CCPs. For example, the notional amount outstanding at CME in the US is EUR 1.8 trillion for euro-denominated interest-rate derivatives, and SEK 348 billion for SEK denominated interest-rate derivatives.

[117] See: BIS Quarterly Review, December 2013, p. 75, http://www.bis.org/publ/qtrpdf/r_qt1312h.pdf
[118] Ibid, p. 76.

Table 6: Notional amount outstanding of OTC IRDs denominated in EUR – March 2017 (in USD tn)

CCP	Notional amount outstanding of OTC IRD (all currencies)	% market share (all currencies)	Notional amount outstanding of OTC IRD in EUR	% market share EUR
LCH Ltd (Swapclear)	288,5	91%	**84,3**	**97%**
CME US	16,0	5%	**1,8**	**2%**
JSCC	10.7	3%	**0**	**0%**
EurexOTC	1,2	0,4%	**0,9**	**1%**
Nasdaq OMX	0.09	0%	**0**	**0%**

Source: CCPs' websites

Exposure to third-country CCPs raises issues related to the mandate of external supervision and the management of risks to financial stability in the EU. This is particularly relevant in the context of the UK decision to leave the EU, and consequentially, removing UK CCPs from the EU legal framework governing those CCPs. The UK currently plays a key role in providing clearing services in Europe (e.g. 75% of interest-rate OTC derivatives denominated in euro are currently cleared in the UK, with a daily turnover of $574 billion, and $77 billion of margin to be held against these cleared trades; there is a notional outstanding volume of EUR 84.3 trillion in LCH Swapclear alone). In terms of trading alone the last triennial BIS survey shows that for EU27 currencies such as the euro, the Polish Zloty or the Swedish Krona, more than 80% of transactions in interest-rate derivatives take place in the UK.

When the UK exits the EU, there will be a shift in the proportion of OTC derivatives transactions being cleared by third-country CCPs outside the EU's jurisdiction - exacerbating the concerns outlined above. This will imply challenges for EU authorities in safeguarding financial stability in the EU.

Need to address incoherence in current supervisory arrangements for third-country CCPs

Several problems have emerged in respect of supervisory arrangements for recognised third-country CCPs and these problems are likely to be exacerbated in the coming years. The growing role of third-country CCPs both in terms of numbers and volumes of transactions in EU27 currencies forcefully points to the need for enhanced supervision of third-country CCPs. Such enhanced supervision would seem all the more necessary when some of the most important EU CCPs are or soon will be established in a third country.

3.4. Potential risks from inaction

A failure to address the problems described above relating to current CCP supervisory arrangements both within and outside the EU would undermine the achievement of the EMIR objective of reducing the risks associated with OTC derivatives in two ways.

- First, NCAs, CBIs and ESMA would not be in an optimal position to prevent the risks related to the failure of a CCP within the EU. A CCP failure could have major impacts on financial stability and the real economy.

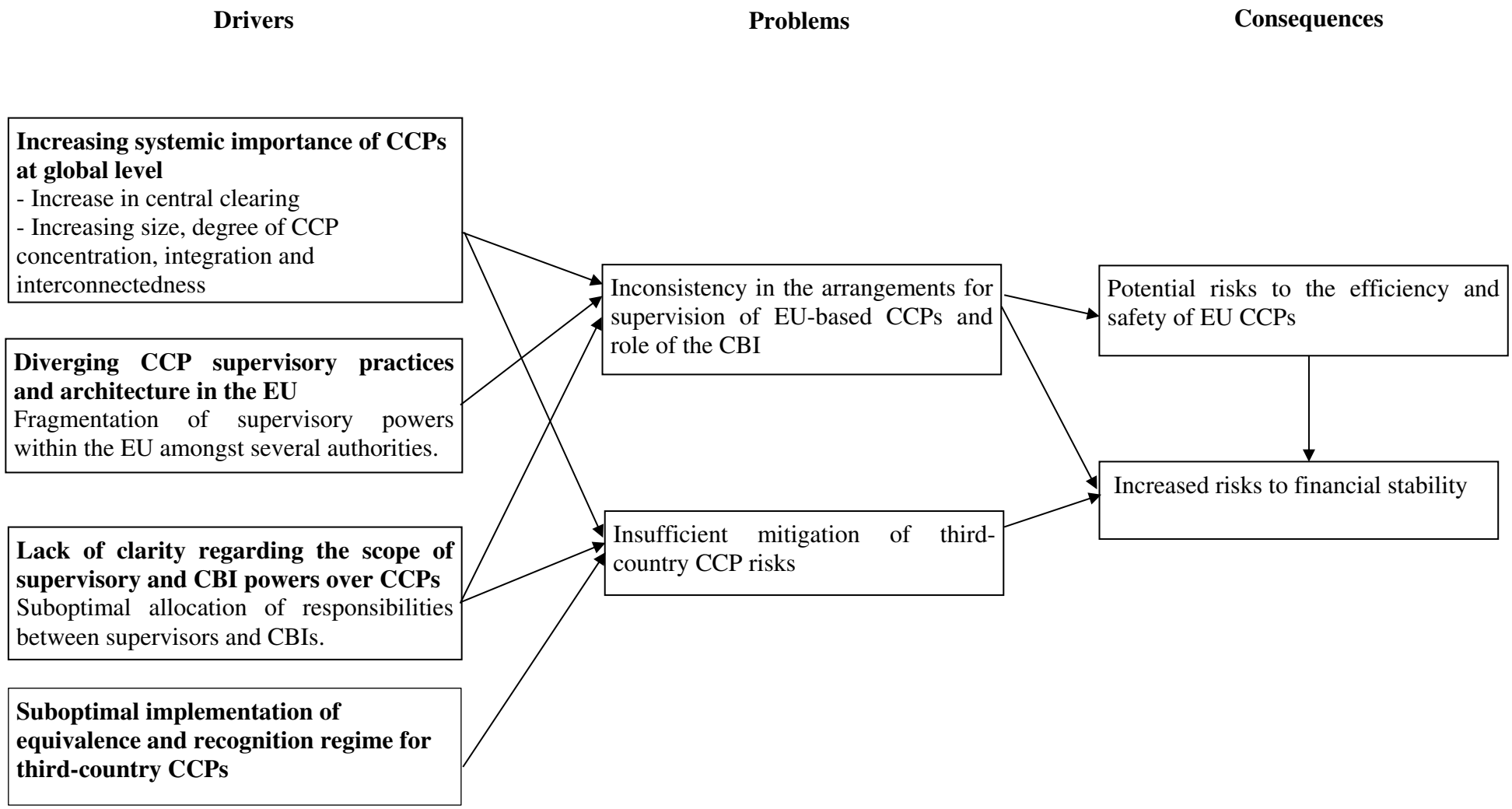
– Second, the EU would continue to lack the relevant tools to mitigate exposure from third-country CCP risks. This could facilitate the contagion of systemic risk from third countries to the EU, again with potentially major impacts on financial stability and the real economy.

On this basis, it is necessary for the EU to respond in a timely manner and to mitigate the risks related to shortcomings in the supervisory arrangements for CCPs. The growth of CCPs in scale and significance is expected to continue as recent initiatives, including the application of clearing obligations, the margin requirements for uncleared derivatives and the REFIT proposal to make EMIR more efficient and more proportionate, will further promote the shift towards central clearing. Likewise, the EU's exposure to third-country CCP risks is expected to grow as the interconnected nature of the global CCP market further increases, and as additional third-country CCPs apply for recognition. The EU's exposure to third-country CCP risks will also be exacerbated by the foreseen withdrawal of the UK from the EU, as this will lead to a shift of risk from within to outside the EU.

In order to address these challenges, action at EU level is necessary, in line with the Commission's Communication of 4 May 2017 responding to challenges for critical financial market infrastructures and further developing the Capital Markets Union. The recently-adopted EMIR REFIT proposal did not address these issues, as it focused on targeted amendments to simplify EMIR and make it more proportionate, with a view to reducing costs for market participants.

By addressing the identified problems at an early stage and establishing clear and coherent supervisory arrangements both for EU and third-country CCPs, the overall stability of the EU financial system will be reinforced and the already low probability (but extremely high-impact) risk of a CCP failure will be lowered even further.

Problem tree



4. OBJECTIVES

4.1. Subsidiarity

EMIR is a regulation which is binding in its entirety and directly applicable in all Member States. The legal basis for EMIR is Article 114 of the Treaty on Functioning of the European Union ('TFEU') and any changes to it would have the same legal basis.

EMIR sets out the supervisory framework applying both to CCPs established in the EU and to third-country CCPs that provide clearing services to clearing members or trading venues established in the EU. Under EMIR, the Member State of establishment of the CCP plays a major role in the supervisory arrangements. However, Member States and national supervisors cannot solve on their own the systemic risks posed by highly integrated and interconnected CCPs, which operate on a cross-border basis beyond the scope of national jurisdictions. In addition, Member States cannot mitigate on their own risks arising from diverging national supervisory practices. In addition, Member States and national authorities cannot address on their own the systemic risks that third-country CCPs can pose to the financial stability of the EU as a whole,

As such, the objectives of EMIR to increase the safety and efficiency of CCPs by laying down uniform requirements for the performance their activities cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale of actions, be better achieved at EU level in accordance with the principle of subsidiarity as set out in Article 5 of the TFEU.

4.2. Objectives

The broad **general objectives** behind the initiative are (i) to safeguard the safety and efficiency of EU CCPs and (ii) to enhance financial stability in the EU.

These can be broken down in the following **specific objectives**:

- S1: Enhance CCP supervision and CBI role at EU level (see table A below)
- S2: Enhance the EU's ability to monitor, identify and mitigate third country risks (see table B below)

Table A:

Problem	Problem drivers	Specific objective
Incoherence in the arrangements for supervision of EU-based CCPs and role of the CBI	**Increasing systemic importance of CCPs at global level** **Diverging CCP supervisory practices and architecture in the EU** **Lack of clarity regarding the scope of supervisory and CBI powers over CCPs**	Enhance CCP supervision and CBI role at EU level

Table B:

Problem	Problem drivers	Specific objective
Insufficient mitigation of third-country CCP risks	**Increasing systemic importance of CCPs at global level** **Lack of clarity regarding the scope of supervisory and CBI powers over CCPs** **Suboptimal implementation of equivalence regime for third-country CCPs**	Enhance the EU's ability to monitor, identify and mitigate third-country CCP risks

4.3. Consistency of the objectives with other EU policies

The objectives of the initiative are consistent with a number of other EU policies and ongoing initiatives that aim to: (i) address the systemic importance of CCPs; (ii) develop the CMU; (iii) enhance the efficiency and effectiveness of EU-level supervision, both within and outside the EU; and (iv) promote further the use of central clearing.

- First, this initiative is consistent with the **Commission's proposal [119] for a Regulation on CCP Recovery and Resolution** adopted in November 2016. That proposal seeks to ensure that EU and national authorities are appropriately prepared to address a failing CCP, maintain financial stability and avoid that costs associated with the restructuring and the resolution of failing CCPs fall on taxpayers. The Commission's proposal aims to ensure that, in the unlikely scenario where CCPs face severe distress or failure, the critical functions of CCPs are preserved while maintaining financial stability and helping to avoid that costs associated with the restructuring and the resolution of failing CCPs fall on taxpayers. The crisis-management arrangements for recovery and resolution of CCPs included in that proposal are based on the existence of the highest quality arrangements for crisis prevention (i.e. for CCP regulation and supervision) under EMIR. By further enhancing the supervision of CCPs under EMIR, the likelihood, however small, of needing to resort to recovery and resolution measures should be further diminished.

- Second, it is consistent with the **Commission's ongoing efforts to further develop the Capital Markets Union ('CMU')**. Further supervisory convergence of CCPs at EU level can support the development of deeper and better integrated capital markets, as more efficient and resilient CCPs are essential elements for the well-functioning of CMU. The urgency of further developing and integrating EU capital markets was stressed in the Communication on CMU of September

[119] Proposal for a Regulation of the European Parliament and of the Council on a framework for the recovery and resolution of central counterparties and amending Regulations (EU) No 1095/2010, (EU) No 648/2012, and (EU) 2015/2365.

2016[120]. Conversely, the emergence of larger and more liquid financial markets implied by CMU will result in even more transactions being cleared via CCPs, and will increase the systemic relevance of CCPs. Given the potential for increased volumes as well as the current opportunities for regulatory and supervisory arbitrage (See Section 3), further enhancements of the supervisory framework are required in order to ensure a strong and stable CMU.

– Third, it is consistent with the March 2017 consultation launched by the Commission on the operations of the ESAs[121], with a view to strengthening and improving the effectiveness and efficiency of the ESAs.

– Fourth, it is consistent with DG FISMA's experience with the implementation and enforcement of third-country provisions in EU financial legislation, as set out in its Staff Working Document on equivalence[122]. The Staff Working Document provides a factual overview of the equivalence process with third countries in EU financial services legislation. It sets out DG FISMA's experience with the implementation and enforcement of third-country provisions in EU financial legislation. It also presents the key aspects of equivalence (e.g. exercise of empowerments, assessment, ex-post monitoring) and provides more clarity on how DG FISMA approaches these tasks in practice.

– Fifth, it is consistent **with the Commission's proposal[123] for an amendment to the Capital Requirements Regulation (CRR)[124]** adopted in November 2016. The proposal seeks to exclude from the calculation of the leverage ratio thresholds the initial margins on centrally-cleared derivative transactions received by clearing members in cash from their clients and passed on to CCPs. It will, therefore, ease access to clearing – as the capital requirements to offer client or indirect clearing services will diminish – again reinforcing the importance of CCPs within the financial system.

– Sixth, it is consistent with the **Commission's proposal for targeted amendments to EMIR[125], adopted in May 2017**. The proposal seeks to simplify certain EMIR requirements and make them more proportionate in order to reduce excessive costs for market participants, without compromising financial stability.

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120 "Capital Markets Union - Accelerating Reform", 14.9.2016, COM(2016) 601 final, available at https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-601-EN-F1-1.PDF

121 "Public consultation on the operations of the European Supervisory Authorities", 21.03.2017, available at https://ec.europa.eu/info/finance-consultations-2017-esas-operations_en

122 "EU equivalence decisions in financial services policy: an assessment", 27.02.2017, SWD(2017) 102 final, available at https://ec.europa.eu/info/sites/info/files/eu-equivalence-decisions-assessment-27022017_en.pdf

123 Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements and amending Regulation (EU) No 648/2012.

124 Regulation (EU) no 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms.

125 Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No 648/2012 as regards the clearing obligation, the suspension of the clearing obligation, the reporting requirements, the risk-mitigation techniques for OTC derivatives contracts not cleared by a central counterparty, the registration and supervision of trade repositories and the requirements for trade repositories.

This proposal should therefore provide further incentives for market participants to use central clearing – again reinforcing the importance of CCPs within the financial system.

This impact assessment considers the interplay between possible amendments to EMIR rules and the above pieces of EU legislation and Commission proposals, as well as the Commission's broader political priorities.

4.4. Consistency of the objectives with fundamental rights

The EU is committed to high standards of protection of fundamental rights and is signatory to a broad set of conventions on human rights. In this context, the proposed objectives as discussed above are not likely to have a direct impact on these rights, as listed in the main UN conventions on human rights, the Charter of Fundamental Rights of the European Union which is an integral part of the EU Treaties, and the European Convention on Human Rights ('ECHR').

5. POLICY OPTIONS AND ANALYSIS OF THEIR IMPACT

This section analyses the policy options for enhancing EU supervisory arrangements for CCPs established in the EU and in third countries and the impact of those policies on stakeholders. The comparative analysis reflects how the policy options respond to the problems identified in section 3, highlighting the relative costs and benefits of each option. The policy options considered are consistent with relatively targeted amendments of EMIR, which address specific concerns with CCP supervisory arrangements due to developments in the market for central clearing since the entry into force of the Regulation and the likely implications of the United Kingdom’s decision to leave the EU. The policy options address arrangements for the supervision of CCPs established in the EU and for the mitigation of third-country CCP risks.

The choice of policy options to be assessed draws on inputs from public and private stakeholders, provided via the public consultation on the EMIR Review, reports received pursuant to Article 85(1) of EMIR from ESMA, ESRB and ESCB, the public consultation on the ESAs Review, and the public consultation on the CMU mid-term review. These inputs were carefully screened for their relevance and feasibility in addressing the problems identified, while reinforcing EMIR's overall objective to enhance financial stability. The policy options developed consist of one or several combined measures. To the extent possible, the impact assessment is based on quantitative analysis but relies on more qualitative analysis when data availability is restricted.

When comparing the policy options, the tables illustrate how each of the policy options contributes to meeting the objectives in terms of effectiveness and efficiency (cost-effectiveness) when compared to the 'Do nothing' option. The following schema is used: 0 (baseline scenario, no policy change), ++ (strongly positive contribution), + (positive contribution), -- (strongly negative contribution), - (negative contribution), ≈ (marginal/neutral contribution), ? (uncertain contribution), n.a. (not applicable) and 0 (neutral contribution).

5.1. Baseline scenario

The baseline scenario would maintain the status quo and would obviously imply no policy action in respect of EU supervisory arrangements for CCPs established in the EU or for mitigating the risks from third-country CCPs. This scenario would leave the current supervisory arrangements unchanged so that:

(a) CCPs established in the EU would continue to be mainly authorised and supervised by their home supervisor within a college of other authorities responsible for ancillary aspects. ESMA would retain a binding mediation role in specific cases; and

(b) third-country CCPs wishing to provide clearing services within the EU would remain subject to the current recognition process by ESMA, following the adoption of an equivalence decision by the European Commission.

(c) Under the baseline scenario and absent a pre-agreed arrangement between the EU and the United Kingdom when the United Kingdom will effectively leave the EU, all CCPs located in the UK would become third-country CCPs which would not be authorised or recognised under EMIR and CRR. Although UK CCPs could ask for recognition, which could be granted following an equivalence process determination by the Commission, this could take several months or years. Without a timely equivalence determination, this would mean that EU counterparties could no longer use UK CCPs to meet their clearing obligation under EMIR. There would also be a shift in the proportion of OTC derivatives transactions being cleared by third-country CCPs outside the EU's jurisdiction. The basis for bilateral central bank arrangements that rely on the current EMIR structure, as described in section 3.2, could also change. Cooperation and arrangements arrived at in EMIR colleges would no longer be subject to the safeguards and procedures of the EMIR Regulation, including the ultimate role of the European Court of Justice. This will imply challenges for EU authorities in safeguarding financial stability in the EU.

The initiatives from international standard setters launched since the entry into force of EMIR could contribute to provide further guidance, particularly as far as CCP resilience, recovery and resolution are concerned. For instance, the work of CPMI-IOSCO on the recovery of CCPs and that of the FSB on resolution of CCPs are both being implemented in the EU under the Commission initiative on CCP Recovery and Resolution.

However, some of these standards are yet to be implemented in other jurisdictions and would not in any case address the problems defined in this report as they neither address CCP supervision per se nor tackle cross-border issues. Finally, while the implementation of such new or forthcoming standards could give comfort to the EU with regard to third-country CCPs, there is no guarantee that such standards would be enforced in a coherent manner, if at all, in all major jurisdictions. This is particularly true in the context of the foreseen withdrawal of the UK from the EU following which a very high volume of financial instruments denominated in EU currencies as a percentage of the total will be cleared outside of the EU jurisdiction.

5.2. Options for improving the consistency of supervisory arrangements for CCPs established in the EU

The objective of the policy options considered under this heading is to enhance at EU level the supervision of CCPs established in the EU and the specific role of the central bank of issue (CBI). More specifically, the operational objectives of these options are to: (i) streamline CCP supervision in the EU; and (ii) reflect more adequately the mandate of ESMA, CBIs and national supervisors in the supervision of CCPs established in the EU. The effect of these policy options should be to improve the effectiveness and efficiency of current arrangements by fostering greater cross-border supervisory convergence, aligning supervisory responsibility with related national fiscal responsibility, and ensuring the involvement of CBIs in the authorisation and day-to day supervision of CCPs. The three policy options to be assessed are summarised below:

Policy option	Description
1. No policy action	The baseline scenario applies.
2. Establishment of enhanced EU supervisory arrangements for CCPs established in the EU	National supervisors would largely retain their existing supervisory powers. However, a European supervisory mechanism in an appropriate decision-making formation would be introduced. This formation would handle areas of a common interest on a more centralised basis. In a limited number of areas, CBIs would be able to issue a binding opinion on decisions taken by the executive session.
3. Establishment of an EU-level supervisor for CCPs established in the EU	A single EU supervisor for CCPs would be established. CCP supervision would no longer be conducted at national level.

Option 1 - No policy action

In the absence of any policy action, the baseline scenario applies. CCPs established in the EU would continue to be mainly authorised and supervised by their home supervisor within a college of other authorities responsible for ancillary aspects. ESMA would retain a binding mediation role in specific cases.

This option received the support of a number of respondents to the 2015 EMIR Review consultation, which expressed overall satisfaction with the current supervisory arrangements applying to EU-based CCPs. Other respondents (notably including some national supervisors and other public authorities[126]) argued that it would be premature to consider changes to the current supervisory arrangements. They pointed to the fact that most CCPs established in the EU have been (re-)authorised under EMIR only since 2014 and so there is insufficient evidence that the supervision of these CCPs does not allow for a consistent application of EMIR.

However, this option would fail to streamline the supervision at EU level of CCPs established in the EU, by omitting the existing inconsistencies in the current supervisory arrangements of EMIR. Respondents to the consultation [127], including industry associations (CCP, markets, clearing members and buy-side associations) but also some national supervisors and public authorities[128] highlighted important shortcomings and malfunctions in the current framework for the authorisation and supervision of CCPs established in the EU, for example a lack of transparency in the authorisation process and a lack of clarity in the modalities for the college process, in particular the roles and responsibilities of different college members. Many respondents, including those satisfied with the functioning of colleges, emphasised the need for more clarity on the role of ESMA and more generally on the role of the college after a CCP has been authorised. This option would also fail to adequately reflect the mandate of the CBI in the supervisory arrangements, as pointed out by several respondents to the EMIR consultation, which saw a confusion in the roles of different authorities within the college, in particular that of the ECB as both prudential supervisor (SSM) and as a CBI.

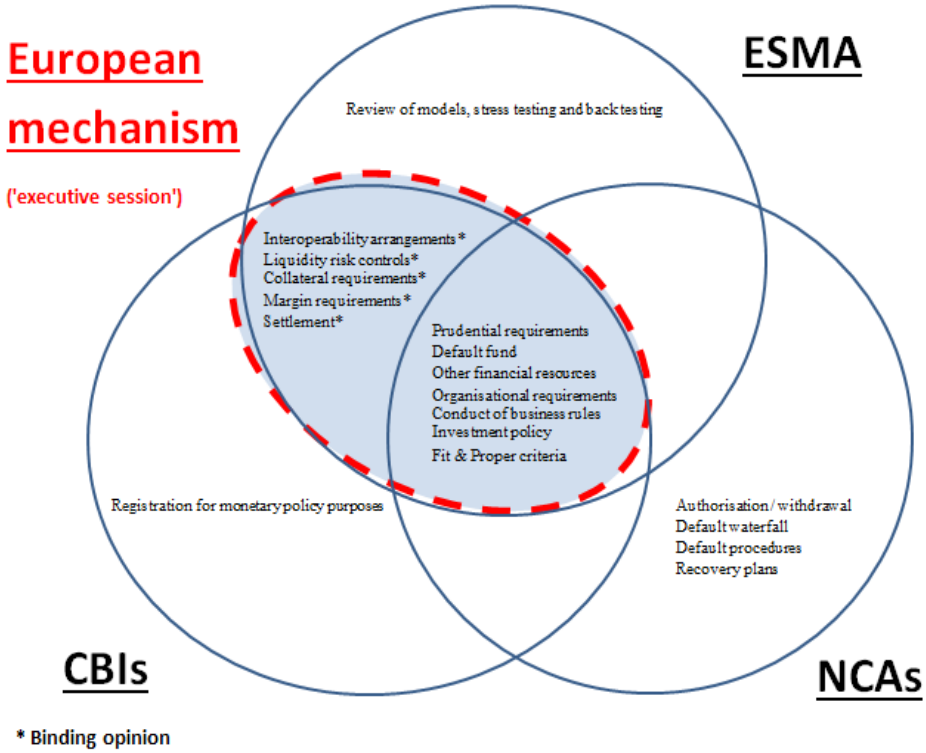
[126] See FR, NL, UK
[127] See AMAFI, FBF, Euronext
[128] See FR-AMF, SE-Riksbank, NL-AFM

As a result, the baseline scenario of "no policy action" would leave the identified shortcomings in the current supervisory arrangements unaddressed. These shortcomings undermine the effectiveness of EMIR in delivering the highest-quality supervision for CCPs, which in turn are meant to play a key role in mitigating systemic risk. Complicated procedures and a lack of clarity on the respective roles of different authorities reduce the efficiency of the current supervisory arrangements, which implies an ongoing economic cost and could threaten systemic stability in episodes of stress.

Option 2 – Establishment of an EU supervisory mechanism

Under this option, national supervisors would retain many of their current responsibilities. However, in order to enhance the effectiveness and efficiency of supervisory arrangements at EU-level, an EU mechanism could be established to balance better the objectives of EU and national authorities in the process of supervision and to clarify the roles of the various authorities with supervisory responsibility in respect of CCPs established in the EU. Operationally, the mechanism could for instance be established within ESMA in an appropriate decision-making formation, such as an executive session, and granted specific tasks. Such a formation could consist of a limited number of permanent members, as well as the national supervisor(s) and, other relevant national authorities and CBIs of the most relevant Union currencies of the financial instruments cleared. All of these authorities would be granted with adequate voting rights within the executive session. While the EMIR colleges would not disappear, they could be headed by the chair of the executive session in order to foster supervisory convergence.

Under this option, national supervisors would retain primary responsibility for those supervisory tasks which could potentially impact on national fiscal responsibilities such as the authorisation/withdrawal of authorisation of the CCP, the default waterfall, default procedures, and recovery plans. However, in other areas of common interest, decisions by national supervisors would be subject to an ex-ante process requiring consent by the executive session within ESMA, for example in areas relating to the validation of risk models and parameters or the stress-testing framework. In practice, this could mean that the national supervisor would present complete draft decisions to the executive session for prior consent. For a limited number of matters closely related to their specific tasks, and reflecting their responsibility such as liquidity risk controls or collateral requirements, the CBIs would be able to express a binding opinion. A dispute resolution mechanism would be introduced so as to provide national competent authorities with tools to contest the decisions of the executive session. In addition to amendments of EMIR initiated by the Commission, this option might also require an amendment of Article 22 of the Statute of the ESCB and of the ECB which can either be initiated by the ECB or the Commission. An indicative example of the allocation of tasks currently listed under EMIR is illustrated in the diagram below.



On the one hand, this option would align supervisory and fiscal responsibilities by leaving the supervisory powers linked to the recovery and resolution of a CCP with the national supervisor, responding to CCP-specific comments by respondents to the ESA consultation, including public authorities, which highlighted that an EU supervisor would lack financial resources to cater for a failing CCP, no matter how limited the risk of such an event, and the fact that CCPs pose a systemic risk within their Member State of establishment. However, it would take more account of the mandates of other relevant authorities and CBIs by strengthening their input to the supervisory process (within the executive session), relative to their current input in supervisory colleges. The option would also help to clarify ESMA's role, which had been criticised as being unclear by respondents to the 2015 consultation, especially with regards to the requirements laid out in Article 15 (extension of services) and Article 49 (review of models). By having ESMA, NCAs and CBIs share responsibilities in a more coherent arrangement, this option would allow for a more holistic supervision of the CCP which more adequately responds to the increasingly systemic nature of these infrastructures within the EU financial system. In this way, it would meet the operational objective of reflecting more adequately the role of the CBI, ESMA and NCAs.

While this option would introduce a new EU mechanism to the current supervisory arrangements in EMIR, where responsibility for CCP supervision is more concentrated in the national supervisor, this new mechanism would help streamline and balance the various roles and responsibilities across different relevant authorities by effectively promoting convergence in the supervision across the EU of CCPs established in the EU. While several authorities would remain associated with supervision, the EU mechanism would de facto ensure single supervision of CCPs established in the EU by promoting a coherent application of EMIR throughout the Internal Market. This would help make the current supervisory arrangements in EMIR more effective and respond to most of the criticism of the current supervisory arrangements emerging from the 2015 consultation on the EMIR Review and the 2017 ESA consultation, in which a vast majority of the stakeholders representing a company highlighted the need for the further centralisation at EU level of the supervision of CCPs established in the EU, in order to improve the

fragmentation of the current regime. This option would also help avoid overlapping supervision and reduce inefficiencies.

On the other hand, by setting up a new and dedicated CCP supervisory arrangement, this option could generate costs to ensure the proper functioning of the executive session. Depending on the solutions found and on any potential changes to the ESMA regulation, it may be necessary to fund additional resources for ESMA. Nevertheless, as ESMA is already a member of supervision colleges, albeit in a non-voting capacity, the additional needs in terms of human and financial resources would be limited.

Option 3 – Establishment of a single EU supervisor

Under this option, a single supervisor would be established for CCPs established in the EU. The single supervisor could be ESMA, the ECB, or a new entity as was the case for the Single Supervisory Mechanism (SSM) in the field of banking. The single supervisor would be given full responsibility for the supervision of CCPs in the EU, including powers to authorise CCPs and oversee compliance with conduct of business rules. In performing these tasks, the single supervisor would be required to cooperate closely with the SSM (which supervises the main clearing members), the ESRB (for macro prudential purposes), as well as the ESAs. However, none of these authorities would have binding powers over the single supervisor.

This option would ensure a coherent application of EMIR within the EU and address effectively the need for supervisory convergence. The arrangement would also substantially simplify the supervisory framework in comparison to the current supervisory arrangements. This would meet effectively the operational objective of streamlining the current supervisory arrangements of EMIR, as supervision would primarily be conducted at EU level.

However, the shortcomings of this option would be twofold. First, supervisory and fiscal responsibilities would not be fully aligned, implying that decisions taken by the single supervisor might not take adequately into account the fiscal implications at national level, including potentially the use of taxpayer money in resolution. Nevertheless as described in the CCP Recovery & Resolution Impact Assessment, the opportunity costs of any ex ante form of financing would be significant, in particular given the remote probability of default. Second, the monetary policy mandates of the relevant CBIs would not be reflected appropriately, although arrangements could be envisaged to associate them in the decision-making process, as the responsibility for supervision would reside entirely with the single supervisor. As such, Option 3 would fail to address the need to reflect adequately the mandates of NCAs and CBIs.

To a greater extent than Option 2, Option 3 would require a significant extension of supervisory capacity inside ESMA (should ESMA be retained as the single supervisor) or the creation ex nihilo of a single supervisor and would therefore have major budgetary consequences for the EU.

Comparison of policy options against effectiveness and efficiency criteria

Objectives / Policy option	EFFECTIVENESS		EFFICIENCY (cost-effectiveness)
	Objective 1 Streamline CCP supervision in the EU	**Objective 2** Reflect adequately the mandate of ESMA, CBIs and national supervisors	
Option 1 No policy action	0	0	0
Option 2 Establishment of an EU supervisory mechanism	+	++	+
Option 3 Establishment of a single EU supervisor	++	-	-

Magnitude of impact as compared with the baseline scenario (the baseline is indicated as 0): ++ strongly positive; + positive; – – strongly negative; – negative; ≈ marginal/neutral; ? uncertain; n.a. not applicable

The preferred option is Option 2. It corresponds to the objective of improving the coherence of supervisory arrangements for CCPs established in the EU, while enabling that specific areas of supervisory responsibility and related national fiscal responsibility remain adequately aligned, notably by ensuring the proper involvement of CBIs and NCAs within the scope of their responsibilities. By streamlining and increasing the centralisation of CCP supervision, the preferred option will provide CCPs and market participants with more clarity and predictability as well as greater legal certainty in the way CCPs are supervised within the EU. The preferred option will also contribute to lower costs both at an institutional level, by avoiding supervisory overlaps between authorities, and for CCPs, by simplifying their supervisory framework simplified and by limiting the risk of duplication.

5.3. Mitigation of third-country CCP risks

The objective of the policy options considered under this heading is to enhance the EMIR supervisory arrangements in order to strengthen the EU's ability to identify, monitor and mitigate the risks related to third-country CCPs. More specifically, the operational objectives of these options are to: (i) enhance mechanisms for EU supervisors and CBIs to address third-country CCP risks; (ii) ensure a level-playing field between EU-based and third-country CCPs; and (iii) provide for better ongoing enforcement and compliance of third-country CCPs. The effect of these policy options should be to provide EU supervisors with more effective tools and procedures for managing such risks. The three policy options to be assessed are summarised below:

Policy option	Description
1. No policy action	The baseline scenario applies.
2. Location policy	Third-country CCPs would be required to be established and authorised in the EU in order to provide services to EU counterparties or trading venues or to provide clearing services in EU currencies.
3. Supervision based on criteria or thresholds	The degree and intensity of EU supervision would be proportionate and depend on the risks posed by third-country CCPs to the EU. Different criteria or thresholds could be set: low-impact CCPs could be subject to an enhanced implementation of the EMIR equivalence and recognition regime; medium to high-impact CCPs could be subject to a sliding scale of additional supervisory requirements.

Option 1 - No policy action

In the absence of any policy action, the baseline scenario applies.

The baseline scenario consists in leaving the equivalence and recognition regime envisaged in EMIR Article 25 unchanged. Under this scenario, third-country CCPs wishing to provide clearing services in the Union would be recognised by ESMA following the adoption of an equivalence determination by the Commission.

The main advantage of this option is that a large number (28) of third-country CCPs have already been recognised and that their status would not have to be reassessed, notwithstanding the fact that all of the equivalence decisions adopted by the Commission require a regular assessment in any event. However, this option would not address several important concerns with the current arrangements, e.g. proportionality, involvement of the CBIs and unlevel playing field. As highlighted in the 2015 EMIR consultation [129], the regulatory framework of a third-country CCP may be deemed equivalent to EMIR but the intensity of supervision may be less for third-country CCPs than for CCPs established in the EU. This option would also not address the lack of tools available to ESMA in monitoring and managing equivalence on an ongoing basis.

The baseline scenario would also fail to address the consequences of the decision of the UK to leave the EU. CCPs located in the UK will become third-country CCPs once the UK effectively leaves the EU. Some of these CCPs have significant outstanding positions denominated in currencies of the Member States and large exposures with clearing members established inside the EU. While this impact assessment does not intend to cover the contingency considerations related to the interim period between the withdrawal of the UK from the EU and the moment that any equivalence decision is taken by the omission with regard to the UK's future supervisory framework for CCPs, it does take into consideration the potential future exposure of the EU financial system to an abrupt change in the third-country environment.

[129] See NL-DNB, NL-AFM, BlackRock, Natixis, EFAMA,

Option 2 – Location policy

Under this option, EMIR would be modified so that third-country CCPs would be required to be established and authorised in the EU in order for them to provide services to EU counterparties or trading venues or to provide clearing services in EU currencies.

In conjunction with the preferred policy option for enhancing supervisory arrangements for CCPs established in the EU, this option would allow for full supervision of third-country CCPs and adequate mitigation of any associated systemic risk, including in particular the risk that a disruption to the functioning of a highly concentrated global third-country CCP occurs. The UK being one of the jurisdictions of establishment of such CCPs, this risk will be increased once the UK leaves the EU.

This option could however potentially lead to market fragmentation, depending on its precise articulation, raising additional costs for market participants due to losses in netting efficiencies. That said the potential costs to the financial system would have to be weighed against the gains in systemic risk mitigation, although the exact monetary benefits of a reduction of systemic risk are difficult to quantify in advance. Experience shows that these costs can only be accurately calculated after a financial crisis in terms of economic and social losses.

Market fragmentation might occur should EU counterparties be mandated or incentivised through prudential rules to clear specific transactions through EU CCPs. Two markets could coexist without interconnecting bridges, a less liquid and perhaps potentially more expensive market would cater for the limited needs of EU counterparties and a more liquid market would continue to exist outside of the EU. While figures are not public and differ widely depending on the source, it is estimated that between 7 and 30% of interest rates derivatives currently cleared in the United Kingdom involve an EU counterparty. However the study conducted by ISDA[130], already presented in section 2.3, finds that the percentage of euro denominated interest rate swaps (IRS) traded exclusively between European dealers and cleared at LCH at the end of 2015 stood at 91.2%. In April 2016, the interdealer market accounted for 26% of the global turnover in OTC IRDs[131]. Thus, European dealers alone represent about 24% of the global activity in the euro denominated IRS market.

While it is of course not possible to quantify in a meaningful manner the costs related to relocation and potential market fragmentation, it is possible to list the drivers that will influence these costs. These drivers can be divided into five (overlapping) categories, some of them being more significant than others:

1. Transaction costs. Should all existing outstanding cleared transactions be required to be moved to CCPs inside the EU, EU counterparties could choose to enter so-called 'switch trades' in which they would unwind transactions cleared through third-country CCPs and reopen and clear them in EU CCPs. This would generate friction costs as third-country counterparties would have no interest in doing those switch trades for free. There is no guarantee that all existing transactions could be transferred this way, even at a higher cost for EU counterparties.

[130] http://www2.isda.org/attachment/ODM4NQ==/Fragmentation%20FINAL1.pdf
[131] See http://www.bis.org/publ/rpfx16ir.pdf

2. Legal costs. Another possibility for existing cleared transactions would be to close and novate[132] these transactions from one CCP to another. If the move is initiated by CCPs themselves (in the case of a third-country CCP having an affiliate inside the EU or being part of a group owning a CCP located inside the Union or through arrangements between CCPs) then the costs of repapering could be limited, albeit not zero, as the novation would be done in a bulk format. If initiated by EU counterparties this would require extensive legal work as EU counterparties would have to renegotiate and repaper all existing trades with their initial counterparties.

3. Loss in margin efficiencies. While margin efficiencies are one of the most significant drivers, the potential loss in margin efficiencies is difficult to assess and is the object of controversial and often opposing views between stakeholders. CCPs may reduce margin requirements to reflect the benefits of the correlation of risk factors within clearing portfolios. This applies in particular to CCPs clearing interest rate derivatives (IRDs) which can gain efficiencies in margin requirements by offsetting risks arising from transactions in a given currency (e.g. EUR) with risks arising from transactions in other currencies (e.g. USD or JPY).

If EU counterparties would need to restructure their clearing portfolios both within and outside the EU, they could incur costs. This is because the EU currency-denominated part of EU counterparties' portfolios would no longer benefit from offsets with other currencies if they are not able to be relocated in a similar multi-currency CCP inside the EU. Similarly, trades in non-EU currency-denominated transactions cleared by EU counterparties outside of the EU would no longer benefit from offsets with EU currency-denominated transactions. Non-EU counterparties would also incur costs as they would clear fewer EU currency-denominated transactions (with EU counterparties) and therefore have fewer benefits from currency offsets. This would also have potential indirect effects on costs linked to portfolio compression and default fund contributions.

A key question is to what extent an EU-based CCP receiving any new EU currency-denominated trades would have capacity to offer a similar degree of cross-portfolio margining benefits to offset these costs. Anecdotal evidence from industry provides different perspectives, as some CCPs indicate a capacity to accommodate clearing such trades against similar costs, while others have noted that it depends on the type of trades and period of time required to build that capacity. The following seeks to quantify the associated costs, making the important proviso that there are data limitations: the necessary data is proprietary to CCPs while data for third-country CCPs is not available to EU authorities and institutions. The distribution of costs between market participants cannot be accurately assessed and all estimated costs may be assumed to be passed-on from large dealers to their direct and indirect clients, such as non-financial counterparties (including SMEs). Finally, there are two perspectives: on the one hand, considering the 'stock' of outstanding positions that are currently cleared at CCPs with maturities ranging from overnight to up to 51 years; on the other hand, the 'flow' of new transactions that market participants must or may wish to clear in the future.

(a) On the basis of confidential and proprietary data available to the Commission, the estimate (weighted average) of an increase in initial margin following a divide or 'split' of existing cleared IRDs would be in the range of 8% to 12 %, depending on the related margin and netting efficiencies after a divide or 'split', including cross-margining

[132] In contract law and business law, novation is the act of either: replacing an obligation to perform with another obligation; or adding an obligation to perform; or replacing a party to an agreement with a new party.

opportunities between exchange-traded and OTC IRD portfolios. The 8% figure reflects a scenario where market participants would transfer their stock of EUR denominated IRD portfolios to a CCP that is already established in the EU and where a degree of netting benefits could already occur (i.e. the transfer would not take place to a new CCP or to a CCP with no existing positions). The 12% figure assumes no such efficiencies and only accounts for the loss of cross-currency margining efficiencies within the OTC IRD portfolio. This increase in initial margin represents the difference between the total amount of initial margin before the stock of EUR denominated portfolios is transferred to another CCP, to the total amount of initial margin after that transfer, accounting for the net change in cross-currency portfolio margin efficiencies across the OTC IRD portfolios. The exact impact on individual market participants of course varies, depending on their portfolio composition.

(b) Other estimates have also been made. For example, one study[133] suggests that the impact of transferring the stock of EUR-denominated IRDs would incur a cost of $77bn (a 92% increase) in additional initial margin requirements. However, this study implies that the CCP concerned currently applies a 50% margin discount, which appears questionable under the current regulatory framework. Furthermore, the extreme hypotheses and scenarios of the study mean that the costs calculated need to be read in context (e.g. it assumes that the entire portfolio of the CCP examined would be reduced to only one interest rate swap while in reality the actual portfolio of the CCP extends across multiples of clearing members and client accounts. Furthermore, the study analyses an interest rate swap portfolio reduction for a single long EUR/Short USD 12y swap, assuming that the market as a whole conducts a directional correlation trade between both currencies: this is not the practice where clients and dealers have genuine specific interests and ignores other cross-currency and cross-products offsets.)

Comparing both scenarios (a) and (b), the additional initial margin under scenario (a) would therefore amount to a range between EUR 6.8 billion to EUR 10 billion (corresponding to the 8% and 12% figure scenarios quoted above, respectively). This initial margin increase would also be associated with a higher contribution to the default fund. Based on current practice, this would imply an increase in the default fund contribution in the range of EUR 478 million to EUR 705 million.

Importantly, the required amount of additional margin and default fund contribution does not represent the actual cost for market participants as margin is posted in the form of collateral, a resource that is accessible and must be funded. The real cost for market participants is therefore the actual cost of funding this additional collateral requirement and the increased default fund contribution. For the purposes of this impact assessment, taking into account current money market rates and different credit profiles of market participants, a funding cost of 0.50% p.a. can be reasonably applied to estimate the overall financial impact from the increased initial margin requirement. This leads to an additional cost in the range of EUR 34 million to EUR 50 million p.a. Assuming that the default fund contribution is financed by capital at 10% cost, the additional cost to fund this contribution would fall in the range of EUR 48 million to EUR 71 million p.a. Thus, scenario (a) to transfer a portfolio of Euro denominated IRDs from one CCP to another would result in additional aggregate cost in the range of EUR 82 million to EUR 121 million p.a.

It is also possible that a transfer of a portfolio of Euro denominated IRDs from one CCP to another may increase efficiency and result in a reduction of costs. The scenarios

[133] https://www.clarusft.com/moving-euro-clearing-out-of-the-uk-the-77bn-problem/

discussed above limit themselves to the transfer of Euro-denominated OTC IRD portfolios. A possible, but remote scenario may also be studied according to which the entire OTC IRD portfolio is transferred from one CCP to another. This would assume that that there is a reason to maintain a maximum benefit of existing cross-currency portfolio margin efficiencies. According to such a scenario, the costs would even be lower than under scenario (a). According to Commission analysis, the weighted average change in the required initial margin in this scenario would constitute a reduction of up to 3%. This scenario therefore implies an aggregate annual gain from lower initial margin requirements and reduced default fund contribution in the range of EUR 5 million to EUR 34 million. Indeed, it is not sure whether a move of euro clearing to the continent will automatically lead to higher clearing costs in the long run. A concentration of the clearing business can also happen in Europe – and lead to possible netting advantages for counterparties[134].

These costs or benefits would likely fall on the relevant counterparties. Only a minority of the volume of derivatives is concluded by non-financial counterparties[135], while the large majority of these counterparties are financial institutions. Incidentally, some of these costs/benefits may be passed on to their end customers.

As a final comment, the scenarios above only consider the stock of existing transactions. A policy approach that would only cover the flow of new transactions would generate only limited temporary losses of cross-margining opportunities in a CCPs receiving those transactions and would not affect in the short term the cross-margining benefits in third-country CCPs in which the stock is cleared.

4. Operational costs. This would represent the costs and capital-related prudential costs related to the additional risk incurred to repaper, renegotiate, re-execute or re-book existing transactions.

5. Liquidity costs. Liquidity costs are the costs linked to the market fragmentation. As explained above, two markets could coexist without bridges between them, a less liquid and therefore potentially more expensive market would cater for the limited needs of EU counterparties and a more liquid market would continue to exist outside of the EU, resulting in a level-playing field issue between EU and non-EU counterparties. These costs could be avoided if clearing of a large part of a market segment, for example all Euro-denominated transactions of a certain type, would for economic or other reasons concentrate at a single CCP within the EU.

However, it should be noted that market fragmentation is already present in the global OTC IRD markets, resulting in different pricing of two identical IRS contracts, depending on where they are cleared. Using appropriate assumptions would yield a broad estimate of several hundred million Euros in annual costs which can be divided between financial institutions (accounting for the majority of costs) and non-financial customers.

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[134] Sustainable Architecture for Finance in Europe (SAFE) policy blog, available at: http://safe-frankfurt.de/policy-blog/details/euro-clearing-in-london-is-unacceptable.html. For further information, see SAFE Policy papers, "Predatory' Margins and the Regulation and Supervision of Central Counterparty Clearing Houses', Jan Pieter Krahnen and Loriana Pelizzon, September 2016: http://safe-frankfurt.de/fileadmin/user_upload/editor_common/Policy_Center/Krahnen_Pelizzon_CCP.pdf

[135] According to ESMA's report on Non-financial counterparties, NFCs only represent 2% of the overall amount of reported derivatives transactions. (See Table 2, page 8 of the ESMA report) https://www.esma.europa.eu/sites/default/files/library/2015/11/esma-2015-1251_-_emir_review_report_no.1_on_non_financial_firms.pdf

It should be noted, however, that this estimate represents the maximum theoretical impact, which is very unlikely to materialise in full and is also likely to be temporary due to the nature of the adjustment process.

To conclude, even these theoretical costs would be significantly reduced if the clearing obligation were to be introduced only for the flow of new transactions rather than also for the stock of already cleared 'legacy' transactions.

In implementing this option, the following approaches merit consideration:

1. Requiring clearing members established in the EU to fulfil their clearing obligation under EMIR Article 4 only with CCPs established and authorised in the EU. This could either be restricted to OTC derivatives for which a clearing obligation has been introduced and which are denominated in an EU currency or be extended to all OTC derivatives for which a clearing obligation has been introduced (including OTC derivatives denominated in non-EU currencies). The scope of the clearing obligation could eventually be modified and enlarged so that it includes other financial instruments such as Securities Financing Transactions (SFTs).

2. Introducing the concept of 'EU person' in EMIR (cf. the approach adopted in the USA) and require that an 'EU person' can only clear OTC derivatives or more broadly financial instruments denominated in EU currencies in CCPs established and authorised in the Union. This requirement could be restricted to certain classes of OTC derivatives or financial instruments either in Level 1 or through delegated acts. An 'EU person' could consist of (but not be limited to) any financial counterparty and its affiliates, non-financial counterparty and its affiliates, pension scheme arrangement, institutions for occupational retirement provision and any other authorised and supervised entities or arrangements providing retirement benefits, in each case that is established in the EU. This option could be broader in scope compared to Option 1 as under Option 1 the obligation to clear transactions through EU CCPs would only be introduced via the clearing obligation.

3. Requiring all transactions of a certain market segment in an EU currency to be cleared within the EU. This option would be even broader in scope compared to Options 1 and 2. It would however depend on the possibility to impose such requirements also on non-EU counterparties.

The first approach is the simplest to implement but would only affect transactions subject to the clearing obligation between two counterparties (or clients) at least one of which is established in the EU. All transactions between two non-EU counterparties (or clients) would be out of the scope and EU-denominated transactions would continue to be cleared within third-country CCPs, unless those transactions were to be included. For some classes of financial instruments (Interest Rate Derivatives for example) this could lead to a market fragmentation detrimental to EU counterparties as the bulk of the transactions are traded between non-EU counterparties. For other financial transactions such as SFTs, the fragmentation would most likely end up being beneficial to EU counterparties as this market is more locally anchored and cross-currency netting effects within CCPs are less evident. It could also lead to a competitive disadvantage for EU counterparties regarding non-EU counterparties.

Approach 2 has the same inconvenience of only targeting EU counterparties but is wider in scope, thus potentially more effective in reaching the risk mitigation objective. This possibility would most likely see the establishment of a transition regime where 'EU

person' would face costs due to market fragmentation and loss in netting efficiencies before the clearing market re-equilibrates.

Approach 3 is the most effective with regard to the objective of financial stability in the EU and price stability of EU currencies, a responsibility of the ESCB. It introduces a high degree of extraterritoriality and could be detrimental to the usage of EU currencies, and in particular the Euro, as an international settlement currency.

This option would fulfil all operational objectives but could present high and unpredictable costs for EU counterparties while not being proportionate in its implementation. In particular a generalised location policy would be excessively fragmenting and disrupting for financial markets, thereby potentially generating substantial costs as described above.

Option 3 – Supervision based on criteria or thresholds

Under this option, the nature and extent of supervision by EU authorities would depend on the risks posed by third-country CCPs to the EU system. In order to be proportionate, different criteria or thresholds would need to be set, taking into account the different nature and risks of products cleared by the CCPs. Criteria or thresholds could be either communicated publicly or could be 'internal', non-public indicators developed by and for authorities to signify that certain supervisory actions need to be taken. The role of ESMA would be enhanced, in an appropriate decision-making formation involving relevant CBIs, in a way consistent with the preferred option for the supervision of EU-based CCPs. The framework could be articulated as follows:

- 'Tier 1' CCPs. For low-impact (i.e. posing limited exposure risk for the EU) third-country CCPs (Tier 1): the implementation of the equivalence and recognition regime would be clarified and enhanced, in order to provide an improved toolbox for EU authorities with respect to third-country CCPs

    - Targeted changes would be introduced to reinforce ESMA's position in its relationship with third-country CCPs and their home supervisors including: (i) improved access for ESMA to information directly (or indirectly via home supervisors) in third-country CCPs; (ii) powers to enable ESMA to legally and confidentially share the information it obtains on third-country CCPs with all relevant EU authorities (i.e. central banks, national competent authorities) as appropriate; and (iii) the ability to conduct regular on-site inspections of third-country CCPs.
    - No further supervisory requirements or involvement of EU central banks of issue would be introduced.

- 'Tier 2' CCPs. For medium-impact and high-impact third-country CCPs (Tier 2), a registration and gradual risk-based supervision regime would apply with additional supervisory requirement or involvement of EU CBIs:

    - Tier 2 CCPs willing to service clearing members or trading venues established in the EU would be authorised by, and registered with, ESMA and relevant CBIs, following an authorisation process comparable to that of CCPs established in the EU. The registration with the CBIs would enable them to carry out their mandates and fulfil their responsibilities as described under section 3.2. In order to register with the relevant CBIs, the CCP would provide the same documentation as required for full authorisation under EMIR. Supervision of the third-country CCP would be conducted by ESMA,

with full and appropriate consultation of the relevant CBIs. As under the CFTC supervisory framework, a scalable and proportionate system of 'deference' and 'substituted compliance' to third-country rules that are similar to EU requirements would be introduced so as to avoid duplication and potential conflicts between requirements;

- ESMA and the relevant CBIs would have full access to information and the same powers as for a CCP established in the Union. The supervision by ESMA and the relevant CBIs would grow in intensity with the risk posed to the EU by the activity of the CCP;
- Tier 2 CCPs could be subject to additional supervisory requirements by EU authorities in close cooperation with third-country home authorities in order to minimise operational burdens;
- The intensity of requirements could possibly include a requirement for Tier 2 CCPs to be established and fully re-authorised in the EU. This would be a last resort requirement where the risks of the third-country CCP to the stability of the EU financial system could not be appropriately mitigated through additional supervisory requirements. This could imply requiring a high-impact third-country CCP to establish a branch or a subsidiary in the EU or to transfer part or all of the business to an existing CCP already established in the EU.

This option has the advantage of being scalable and proportionate in its effects. A third-country CCP would be subject to a 'sliding scale' of additional and appropriate supervisory requirements by ESMA and relevant CBIs. The intensity of the EU supervision could range from an "equivalence plus registration" requirement for a first tier of non-systemically important third-country CCPs to a "full supervision" requirement for a second tier of systemically important third-country CCPs, depending on a variety of factors including the degree of risk exposure. At the same time, the relevant CBIs would be able to exercise their prerogatives[136].

Operationally, ESMA and the relevant CBIs could assess the systemic relevance of third-country CCPs on the basis of a range of pre-established criteria or thresholds. These could take into account for example elements such as the size and complexity of the third-country CCP's business, the third-country CCP's interdependencies with other financial market infrastructures or the aggregated amount of financial instruments denominated in EU currencies cleared.

This option would imply an important change in current supervisory arrangements for third-country CCPs and would need to be carefully explained to stakeholders including the EU's international partners. However, the broad approach outlined above has major similarities with that applied in other jurisdictions, and in particular the US. CCPs are acquainted with and accustomed to operating under such arrangements.

[136] This approach is currently broadly followed in the US under the Dodd-Frank Act which requires all EU CCPs that engage in business with US counterparties to register with the CFTC and be subjected to full US supervision, including access to data and on-site inspections, subject to the possibility for the CFTC to waive compliance with certain requirements based on "substitute compliance" in the home jurisdiction. This effectively requires a CCP to be subject to two sets of regulatory requirements at the same time – US and EU – and sometimes raises instances of incompatibility and conflict of rules.

If thresholds to distinguish between tiers were to be introduced publicly, they should rely on clear and objective criteria and could either be set directly by the relevant CBIs or by the Commission after having consulted the relevant CBIs, This would communicate clearly to market participants at which point supervisory action and intervention may be expected. The possible downside of such thresholds is that financial market responses may be designed to circumvent those thresholds by re-arranging business activities. A further issue that requires consideration is the potential fragmentation of global business into currency zones if supervisory arrangements become too onerous, which could increase inefficiencies and costs.

If such criteria or thresholds are to apply for internal purposes for authorities, i.e. as indicators for the need to take measures or to intensify the scrutiny of CCPs, such thresholds could be determined through internal decisions of the authorities, still relying on public clear and objective criteria. This approach would avoid the issues noted in the previous paragraph and would permit a system based on discretion of the authorities to respond the specific needs and risks on case by case basis. This could ensure greater degree of proportionality in the practical application of supervisory decisions. Under both options for thresholds (publicly communicated or internal), the ultimate decision to change the supervisory regime or its intensity would be left to the discretion of the public authorities concerned: ESMA and the relevant CBIs.

Furthermore, regular monitoring and review of third-country CCPs business operations would be required. Importantly, there would need to be regulatory consequences for threshold breaches (e.g. exposures to those CCPs would no longer be considered to be in compliance with the clearing obligation in EMIR and would cease to benefit from the beneficial capital requirements provided for in Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012). Additionally, the possibility to apply sanctions to EU clearing members conducting business with such CCPs might also be considered.

This option addresses the concerns of stakeholders with regard to potential situations of un-level playing field detrimental to CCPs established in the EU in the way that supervision is enforced, as pointed by ESMA in its contribution to the EMIR review. In addition this option would also accommodate concerns related to the alignment of supervisory and economic responsibilities [137]. Finally, it addresses systemic risks concerns by being scalable and introducing the possibility to apply additional requirements to high-impact CPs. In particular this option addresses upcoming concerns relative to the withdrawal of the UK from the EU.

This option would have a limited impact on existing equivalence and recognition determinations as any potential changes would be restricted to third-country CCPs of systemic relevance to the EU. Furthermore this option does not impede on the Commission's ability to take equivalence decisions.

Comparison of policy options against effectiveness and efficiency criteria

[137] See also Jan-Pieter Krahnen, Sustainable Architecture for Finance in Europe (SAFE), available at: http://safe-frankfurt.de/policy-blog/details/euro-clearing-in-london-is-unacceptable.html. For further information, see SAFE Policy papers, "Predatory' Margins and the Regulation and Supervision of Central Counterparty Clearing Houses', Jan Pieter Krahnen and Loriana Pelizzon, September 2016: http://safe-frankfurt.de/fileadmin/user_upload/editor_common/Policy_Center/Krahnen_Pelizzon_CCP.pdf

Objectives / Policy option	EFFECTIVENESS			EFFICIENCY (cost-effectiveness)
	Objective 1 Enhance mechanisms for EU supervisors and CBIs to address third-country CCP risks	**Objective 2 Ensure a level-playing field between CCPs established in the EU and third-country CCPs**	**Objective 3 Provide for better ongoing enforcement and compliance of third-country CCPs**	
Option 1 No policy change	0	0	0	0
Option 2 Location policy	++	++	++	-
Option 3 Supervision based on criteria or thresholds	++	++	++	+

Magnitude of impact as compared with the baseline scenario (the baseline is indicated as 0): ++ strongly positive; + positive; – – strongly negative; – negative; ≈ marginal/neutral; ? uncertain; n.a. not applicable

The preferred option is Option 3. The preferred option corresponds to the operational objectives of enhancing the mechanisms for EU supervisors and CBIs to address third-country CCP risks while ensuring a level-playing field between CCPs established in the EU and third-country CCPs and providing for better ongoing enforcement and compliance of third-country CCPs. While Option 3 relies on an inevitable trade-off between supervisory burden and financial stability, the marginal cost would stay proportionate to the risk posed by the CCP to the financial stability of the EU. In addition, Option 3, by making a location in the EU a last resort requirement only for the most systemic CCPs would reduce costs to a minimum.

6. OVERALL IMPACT OF THE PACKAGE

The package of proposed options aims to establish clear and coherent supervisory arrangements for CCPs established in the EU and in third countries.

The preferred options will strengthen supervisory arrangements for CCPs established in the EU (responding to their growing size, integration, concentration and interconnectedness) and enable EU authorities to better monitor and mitigate risk related to the EU's exposure to third-country CCPs. The two preferred options are coherent, as the option retained for the supervision of EU-based CCPs, where ESMA and the relevant CBI would be granted extended supervisory powers through the 'Executive Session', works hand-in-hand with the option retained for the supervision of third-country CCPs, where ESMA and the relevant CBI can apply, also through the 'Executive Session', additional supervisory requirements proportional to the risks posed by the third-country CCP to the EU. This will help to lower even further the already low probability (but extremely high-impact) risk of a CCP failure and reinforce the overall stability of the EU financial system as a whole. The enhanced supervisory framework will improve legal and economic certainty as a whole. While there may be upfront economic costs associated with the framework, the 2007-8 financial crisis provides extensive empirical evidence of the benefit of crisis prevention via the most effective possible arrangements for supervision.

Estimating costs related to the preferred options presents limitations as both problems deal with the supervision of CCPs. While the additional costs or the restructuration of costs for EU and national authorities (e.g. additional resources and tasks) can be quantified, the impact for market participants is less straightforward and would be based on hypotheses rending them questionable. Furthermore, since the preferred option for third-country CCPs is based on a sliding scale of supervisory requirements, the costs related would be CCP-specific and depend on the impact on the EU of the activities of the CCPs supervised or recognised. However it is possible to identify the source of potential costs or efficiencies for market participants.

Potential for regulatory simplification and cost reduction

The aim of this initiative is to streamline the supervision framework for CCPs established in the EU and to strengthen the supervision of third-country CCPs. By centralising at EU level the supervisory work inside the 'Executive Session', this initiative removes the duplication of tasks between national authorities. This should create economies of scale at EU level and diminish the need for dedicated resources at national level.

As far as market participants are concerned, CCPs should mainly benefit from a reduction in the administrative burden with a single point of entry for cross-border supervision at EU level.

Impact on market participants (including SMEs)

Concerning the supervision of CCPs established in the EU, under the preferred option, the changes proposed are not expected to have a significant impact on the cost of clearing, whether it is for clearing members or their clients and indirect clients. In order to fund the European mechanism, CCPs may be required to pay supervisory fees. These would however be proportionate to their activity and would only represent a negligible fraction of their turnover. While these costs may be passed on to the market these would represent minimal adjustment costs.

Concerning the supervision of third-country CCPs, under the preferred option, the costs would mostly materialise in case the location policy tool is triggered as part of the sliding scale of supervisory requirements. With the exception of the location requirement, for Tier 1 CCPs and Tier 2 CCPs, the situation would be close to that of CCPs established in the EU, with limited supervisory fees to fund the European mechanism. This would trigger only limited additional costs to market participants.

A core number of staff will be required in order to set up and operationalise the Executive Session to conduct the daily business of supervision of the 17 CCPs currently established in the EU. Assuming all third country CCPs requesting recognition are recognised eventually, that would mean around 40 third-country CCPs under the Executive Session's competence – either indirectly through monitoring and information exchange (i.e. Tier 1 CCPs) or through more direct supervision of Tier 2 CCPs that present potentially more significant risks.

Thus, taking account of the number of third-country CCPs to be supervised either indirectly or directly, type and complexity of tasks to be fulfilled for Tier 1 and Tier 2 CCPs respectively, the number of full time equivalents needed is estimated at approximately 49. Overall the additional costs related to the preferred options for CCP supervision should amount in the next few years to approximately €7 million per year.

Beyond supervision-related costs, most of the costs clearing counterparties (clearing members and their clients) would face would relate to the introduction of a location policy for Tier 2 CCPs, in any form envisaged under Section 5.3. These costs would be driven by legal and operational considerations as well as, if not properly calibrated, by market fragmentation and the related consequences for market liquidity and execution prices. Positive or negative adjustments in margin efficiencies would largely depend on the ability of market participants to substitute third-country CCPs with CCPs established in the EU. The drivers of these costs are detailed under Section 5.3.

In addition, a location policy that would not be tailored to the systemic risk of the third-country CCP, defined according to objective criteria, could have an impact on the costs of clearing, the access to indirect clearing for clients of clearing members (including NFCs and Small Financial Counterparties) and therefore generally in the ability to hedge risks for EU counterparties.

Impact on the EU budget

Overall, the changes envisaged for the supervision of EU CCPs would have no impact on the budget of the EU, as any additional costs such as extra resources for the European mechanism would be covered by supervisory fees collected from CCPs. Such changes should, however, eventually benefit all market participants and member states as they should result in a safer clearing market within the EU. Further consideration on the financial impact of strengthening supervision for CCPs established inside the EU are discussed in the sections below.

Similarly, the changes envisaged to mitigate the risks posed by third-country CCPs would also have no impact on the budget of the EU, as any additional resources for the European mechanism would also be funded through the collection of supervisory fees from third-country CCPs. This would however be beneficial to the EU as it would reduce the probability of importing financial stability risks inside the EU and ensure that EU counterparties transacting with third-country CCPs operate in a safe environment, thereby promoting strong and stable global markets.

6.1. Small and medium-sized enterprises

The aim of the proposal is to maintain EU's financial stability as a whole. Like other businesses, SMEs will benefit from the increased stability of CCPs and the continuity of their key critical functions should a financial crisis occur in the future which would lead to their distress or failure.

The probability of such as crisis occurring should be further reduced through the enhanced ability of the relevant public authorities in the EU to prevent the build-up of systemic risk within EU CCPs and to mitigate the transmission of harmful financial distress through third-country CCPs. As a result, the potential for negative knock-on effects of a crisis affecting the financial sector – e.g. reduced readiness and/or capacity of the banking sector to provide financing to the real economy, recessions etc. – that tend to heavily impact SMEs and their ability to secure funding would also be reduced.

In addition, by clarifying supervisory arrangements both for EU and third-country CCPs, and in combination with the Commission's recent EMIR REFIT initiative on the reduction of excessive costs for smaller counterparties, the proposal should help promote further the use of central clearing and facilitate the ability of SMEs to access financial instruments, either to hedge their transactions or to invest. The proposal will therefore

facilitate further cross-border transactions within the EU, thereby contributing to the objectives of the Capital Markets Union.

However, the costs associated with enhanced supervision of EU and third-country CCPs may be passed on to the ultimate clients of CCPs who might be SMEs, and the wider economy. Still, this has to be weighed against the benefits associated with better crisis prevention, facilitating an efficient and competitive EU CCP market, and further developing the ability of SME's to access funding via the Capital Markets Union.

6.2. Administrative burden

Administrative burden is related to the obligations for CCPs to provide information to public authorities as part of the supervisory arrangements.

For EU CCPs, the costs related to administrative burden are likely to decrease, as the proposal will aim to clarify and streamline supervisory arrangements throughout the EU. This will bring further consistency in the way supervision is carried out throughout the EU, thereby reducing the level of interactions of CCPs with various NCAs across the EU. As such, the expected is greater legal certainty and a reduction of unnecessary administrative burdens.

For third-country CCPs, adjustment costs are likely to occur resulting from direct supervision by EU authorities. Those costs would however depend on their degree of systemic relevance for the EU.

Since the proposed changes would be introduced in the EMIR Regulation, there would be no additional work to be undertaken by Member States caused by the transposition of directives.

6.3. EU budget

The above policy options would have no implication for the budget of the EU.

Possible additional tasks arising for ESMA, such as the processing of the registration of third-country CCPs and their ongoing supervision, could lead to a need for an increase of ESMA’s planned resources. However, any additional costs for the EU budget would be alleviated by mechanisms to increase the financing of the European mechanism, such as the collection of fees from the EU-based and third-country CCPs that it would directly supervise.

6.4. Social impacts

The preferred options are expected to have a positive social impact, consisting of the following aspects

- improved level of financial stability – enhanced EU supervision and more effective mitigation of third-country CCP risks helps ensure economic growth and jobs will be less at risk;

- increased protection for individuals and SMEs customers – lower probability of CCP failure helps maintain continuity of financial services in both wholesale and retail markets.

As far as the clearing sector, or more generally the financial sector, is concerned, the preferred options are not expected to have a significant impact on job creation as CCPs

are not relying on extended human resources and already benefits from large economies of scale.

6.5. Impact on third countries

International commitments taken by the EU at the G20 will have to be considered to ensure that the implementation of the proposed policies is fully compatible with the EU's obligations. Since financial services operate within a global market, it will be important to monitor continually the implementation of cross-border arrangements with other G20 members, to ensure that the EU is consistent with international standards, but is not, at the same time, placed at a competitive disadvantage (as market participants may simply move their business to a jurisdiction that has either weaker rules or none at all).

Therefore, any potential loss of competitiveness or opportunities for regulatory arbitrage will have to be taken into account when deciding on the best way to implement the desired policy initiatives. Particular attention will also need to be given to countries that are not part of the G20, as they are not bound by the Group's commitments.

6.6. Environmental impacts

No significant environmental impact is expected.

7. MONITORING AND EVALUATION

The envisaged options aim at establishing clear and coherent supervisory arrangements both for EU and third-country CCP. To this end, a number of amendments to EMIR are considered.

The proposed legislative amendment to EMIR should include a provision stating that an evaluation of EMIR in its entirety should be carried out, with a particular focus on the effectiveness and efficiency of the proposed supervisory arrangements in meeting EMIR's original objective to increase financial stability.

The operational objectives for the preferred option relating to the supervision of EU CCPs are to:

1. Streamline CCP supervision in the EU;
2. Reflect adequately the mandate of ESMA, CBIs and national supervisors.

The operational objectives for the preferred option relating to the supervision of third-country CCPs are to:

1. Enhance mechanisms for EU supervisors and CBIs to address third-country CCP risks;
2. Ensure a level-playing field between CCPs established in the EU and third-country CCPs;
3. Provide for better ongoing enforcement and compliance of third-country CCPs.

The evaluation should thus consider all aspects of EMIR, but in particular the following elements:

Indicator	Target	Data for monitoring provided by:
Estimated costs to EU counterparties.	Minimal adjustment costs	Questionnaire to be sent to clearing members and CCPs.
Number of CCPs that have entered into recovery or resolution.	0	National authorities and CBIs
Number of on-site inspections of third-country CCPs	5 per year	Executive Session
Number of recognised third country CCPs	10	Executive Session
Number of infringements of equivalence and/or recognition conditions by third country CCPs	5	Executive Session

In principle, this evaluation should take place at least 5 years after the application of these amendments.

The evaluation should seek to collect input from all relevant stakeholders, but in particular CCPs, clearing members, non-financial counterparties, small financial counterparties and in general clients and indirect clients of clearing members. Input would also be required from ESMA as well as national authorities and central banks. Statistical data for the analysis should be sought from ESMA.

ANNEX 1: OVERVIEW OF CHANGES ADDRESSING THE RECOMMENDATIONS OF REGULATORY SCRUTINY BOARD (RSB)

The main changes addressing the recommendations of the Regulatory Scrutiny Board relate to the following issues:

1. Specific systemic risks linked to the UK's withdrawal from the EU: Further description of the changes relating to the withdrawal of the UK from the EU in the section on the baseline scenario as part of the chapter on policy options.

2. Preferred policy option for mitigation of third-country CCP risks: More detailed description of how option 3 relating to supervision based on criteria or thresholds would work in practice for third-country CCPs, depending on the risks that they would pose to the EU.

3. Impact of the preferred policy options on systemic risks: More detailed description of the role of CBIs regarding EU and non-EU CCPs. Clarification that the trade-off between supervisory burden and financial stability would be proportionate to the EU's exposure to third-country CCP risks. Explanation that a targeted location policy would reduce costs to a minimum.

4. Other issues: (i) clarification of how the decision-making process in the Executive Session would work compared to that of the current colleges; (ii) definition of operational objectives in the chapter on monitoring and evaluation; and (iii) further explanation of why there is no formal evaluation of EU CCPs as an Annex to the impact assessment report.

ANNEX 2: OVERVIEW OF THE DERIVATIVES MARKET AND OF THE CCP LANDSCAPE

1. The derivatives market

1.1. What are derivatives?

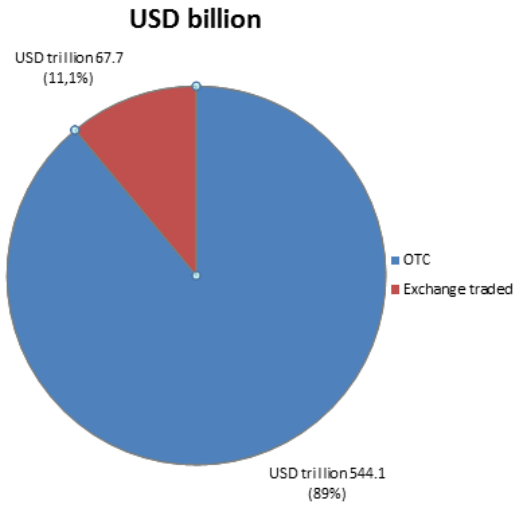
Derivatives are financial contracts used for redistributing risk and constitute an essential building block of a modern financial system. They owe their name to the fact that their value is derived from an underlying (e.g. the price of a share of a publicly traded company). Since they redistribute risk, they can be used either to insure (hedge) oneself against a particular risk or, conversely, to take on risk (invest or speculate). They can also be used to arbitrage between different markets.

Derivatives range from those with fully standardised parameters, such as notional value or maturity, to those that are tailored to the specific needs of a particular user. The type of derivative usually also determines how a derivative is traded: fully standardised derivatives are typically traded on organised trading venues, i.e. derivatives exchanges, while customised (or bespoke) derivatives are traded bilaterally, i.e. off-exchange or over the counter (OTC).

The definition of OTC derivatives in EMIR refers to all derivatives contracts which are not "executed on a regulated market". As a result, all derivative contracts executed on a venue of execution which is not a regulated market (e.g. a Multilateral trading facility) are considered as OTC derivative contracts under EMIR.

As shown in Chart A-2/1 below, the outstanding notional of over the counter (OTC) derivatives amounted to USD 544.1 trillion, corresponding to 89% of the overall derivatives market, at end-June 2016.

Chart A-2/1: Exchange-traded and OTC derivatives as of end-June 2016



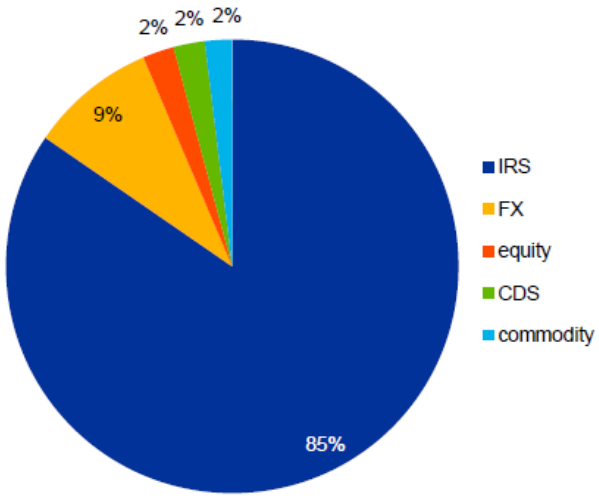
Source: Bank for international settlements[138]

The most common types of derivatives traded on an exchange are futures and options, while the most common types of OTC derivatives are swaps, forwards and (exotic) options. OTC derivatives are generally divided into five broad segments based on the

[138] See Bank for International Settlements, Triennial Central Bank Survey - OTC derivatives positions at end-June 2016, Table 1, Monetary and Economic Department, 11 December 2016, http://www.bis.org/publ/otc_hy1612/triensurvstatannex.pdf

relevant underlying: foreign-exchange derivatives, interest-rate derivatives, equity derivatives, commodity derivatives and credit derivatives. Interest rate derivatives (IRS) are by far the largest segment, followed by foreign exchange derivatives (FX) and credit derivatives (CDS).

Chart A-2/2: European OTC derivatives market by asset class (percentage of notional amount outstanding on 1 July 2016)



Source: EMIR public data, published on TRs' websites[139]

1.2. Recent trends in the derivatives market

Following the commitment of G20 leaders in September 2009 that all standardised OTC derivatives should be cleared through central counterparties, the percentage of centrally cleared transactions has increased significantly. While end of 2009 about 36% of interest rate OTC derivatives had been centrally cleared, at the end of 2015 this percentage had gone up to 60%. For credit OTC derivatives the percentage of centrally cleared transactions went up from about 12% to 45% in the same period.

Trading statistics are based on the location of the primary intermediaries that have registered the derivatives contracts with their counterparties and do not necessarily coincide with the clearing location. As far as trading is concerned, according to the 2016 triennial BIS derivatives survey, the US market is the most important OTC interest rate derivatives market with a daily average turnover of around USD 1.24 trillion (41%). The UK comes second with USD 1.18 trillion (39%). Other leading European markets are France (USD 141 billion or 5%) and Germany (USD 31 billion or 1%)[140]. As regards the OTC FX derivatives market, the UK market is the world's largest market with a daily average turnover of around USD 2.4 trillion (37%), followed by the US with USD 1.3 trillion (19%). Other leading EU markets are France (USD 181 billion or 3%) and Germany (USD 116 billion or 2%)[141]. The UK is a clear global market leader in trading

[139] "Looking back at OTC derivative reforms – objectives, progress and gaps", ECB Economic Bulletin Issue 8, 2016, 20.12.2016, available at https://www.ecb.europa.eu/pub/pdf/other/eb201608_article02.en.pdf

[140] See Bank for International Settlements, Triennial Central Bank Survey of foreign exchange and OTC derivatives markets in 2016, table D.12.2, http://www.bis.org/statistics/d12_2.pdf

[141] See Bank for International Settlements, Triennial OTC derivatives statistics 2016, table D.11.2, http://www.bis.org/statistics/derstats3y.htm

of euro-denominated interest rate derivatives with a daily turnover of USD 574 billion[142]; before France, Netherlands, Germany, Belgium, Italy and the US respectively[143].

The EU has adopted three central clearing determinations, on the basis of proposals by ESMA. The determinations cover two different asset classes: OTC interest rate derivatives and OTC credit derivatives.

The central clearing determination covering OTC interest rate swaps (IRS) related to the Euro, the USD, the Yen, and the British Pound has started to apply to clearing members (as of 21 June 2016) and financial counterparties above the EUR 8 billion threshold (as of 21 December 2016). For other IRS in European currencies (Norwegian Krone, Polish Zloty, and Swedish Krona) and Credit Default Swaps (CDS), the application has started phasing-in as of February 2017 for clearing members. The compliance deadlines for the central clearing determination applying to various asset classes and to different types of counterparties are summarised in the tables below.

Table A-2A/1 - First Commission Delegated Regulation covering interest rate derivatives in the G4 currencies

Category of counterparty	Short description of the category	Date of taking effect for new contracts	Minimum remaining maturity
Category 1	Clearing Members in the classes subject to the clearing obligation The CCPs listed below have published the lists of their clearing members in Category 1[8]: BME – Spain – Clearing Members in Category 1 - BME Clearing CME CE – UK – Clearing Members in Category 1 - CME Clearing Europe Eurex – Germany – Clearing Member in Category 1 - Eurex Clearing AG LCH Ltd – UK – Clearing Members in Category 1 - LCH Ltd Nasdaq – Sweden – Clearing Members in Category 1 - Nasdaq OMX Clearing JSCC – Japan – Clearing Members in Category 1 - JSCC OTC HK – Hon-Kong – Clearing Members in Category 1 - OTC Clearing HK	21 June 2016	6 months (as of 21 June 2016) for contracts entered into or novated on or after 21 February 2016
Category 2	— Financial counterparties above the EUR 8bn threshold — Alternative investment funds that are non-financial counterparties and above the EUR 8bn threshold	21 December 2016	6 months (as of 21 December 2016) for contracts entered into or novated on or after 21 May 2016
Category 3	— Financial counterparties below the 8bn threshold — Alternative investment funds that are non-financial counterparties and below the 8bn threshold	21 June 2017	Not applicable
Category 4	Non-financial counterparties not included in Categories 1, 2 or 3	21 December 2018	Not applicable

Source: European Securities and Markets Authority

Table A-2/2– Second Commission Delegated Regulation covering European index CDS

Category of counterparty	Short description of the category	Date of taking effect for new contracts	Minimum remaining maturity
Category 1	Clearing Members in the classes subject to the clearing obligation The CCP listed below has published the list of its clearing members in Category 1[9]: LCH SA – France – Clearing Members in Cat 1 - LCH SA	9 February 2017	6 months (as of 9 February 2017) for contracts entered into or novated on or after 9 October 2016
Category 2	— Financial counterparties above the EUR 8bn threshold — Alternative investment funds that are non-financial counterparties and above the EUR 8bn threshold	9 August 2017	6 months (as of 9 August 2017) for contracts entered into or novated on or after 9 October 2016
Category 3	— Financial counterparties below the 8bn threshold — Alternative investment funds that are non-financial counterparties and below the 8bn threshold	9 February 2018	Not applicable
Category 4	Non-financial counterparties not included in Categories 1, 2 or 3	9 May 2019	Not applicable

Source: European Securities and Markets Authority

142 Forward rate agreements, swaps, options and other products. Adjusted for local inter-dealer double-counting (i.e. "net-gross" basis).

143 See: Bank for International Settlements, Triennial Central Bank Survey, Interest rate derivatives market turnover in 2016, Table 3.2, Monetary and Economic Department, September 2016

Table A-2/3 - Third Commission Delegated Regulation covering interest rate derivatives in NOK, PLN and SEK

Category of counterparty	Short description of the category	Date of taking effect for new contracts	Minimum remaining maturity
Category 1	Clearing Members in the classes subject to the clearing obligation The CCPs listed below have published the list of their clearing members in Category 1[10]: CME Clearing Europe – UK – Clearing Members in Cat 1 – CME CE KDPW_CCP – Poland – Clearing Members in Cat 1 - KDPW_CCP LCH Ltd – UK – Clearing Members in Cat 1 – LCH Ltd Nasdaq OMX – Sweden Chicago Mercantile Exchange Inc – US	9 February 2017	6 months (as of 9 February 2017) for contracts entered into or novated on or after 9 October 2016
Category 2	— Financial counterparties above the EUR 8bn threshold — Alternative investment funds that are non-financial counterparties and above the EUR 8bn threshold	9 August 2017	6 months (as of 9 August 2017) for contracts entered into or novated on or after 9 October 2016
Category 3	— Financial counterparties below the 8bn threshold — Alternative investment funds that are non-financial counterparties and below the 8bn threshold	9 February 2018	Not applicable
Category 4	Non-financial counterparties not included in Categories 1, 2 or 3	9 August 2019	Not applicable

Source: European Securities and Markets Authority

2. Overview of the CCP landscape in Europe

The European Market Infrastructure Regulation (EMIR) implemented the commitment of the G20 leaders in September 2009 that all standardised OTC derivatives should be cleared through central counterparties (CCPs).

2.1 CCPs established in the EU

Table A-2/1 offers an overview of the 17 CCPs that are currently active in the EU[144] and are authorised under EMIR, with the respective number of clearing participants (major banks) for each of them at the end of 2015. They are located across 12 Member States[145]. One more CCP not yet authorised under EMIR is active in Croatia.

These CCPs vary in size, instruments admitted to clearing and geographical importance in terms of clearing members (i.e. national versus foreign) and markets served.

Table A-2/1: CCPs active in Europe and number of participants as of December 2016
Source: ECB, ESMA, CCPs' websites

Denomination	Country	Number of participants	EMIR authorisation[146]
Eurex Clearing AG	DE	186	YES
European Commodity Clearing	DE	23	YES
Hellenic Exchanges SA (Athexclear)	EL	25	YES
BME Clearing	ES	60	YES
OMIClear	PT	32	YES
LCH Clearnet SA	FR	110	YES
CC&G	IT	82	YES

144 As per the register provided by ESMA in relation to Article 13 (2) of the MiFID implementing Regulation (No 1287/2006 of 10 August 2016).

145 As per the list maintained by ESMA for the purposes of Articles 88(1)(c) and (e) of Regulation (EU) No 648/2012 (EMIR).

146 Insofar the clearing activities of the related CCP concern a product for which a clearing obligation is applicable.

European Central Counterparty NV	NL	45	YES
ICE Clear Netherlands	NL	3	YES
CCP	AT	70	YES
Keler Zrt.	HU	25	YES
KDPW CCP SA	PL	43	YES
Nasdaq OMX DM	SE	92	YES
LCH Clearnet Ltd	UK	154	YES
ICE Clear Europe	UK	79	YES
CME CE	UK	19	YES
LME Clear Ltd	UK	42	YES
SKDD CCP Smart Clear d.d.	HR		NO

As can be seen, Germany, France and the UK are the home countries of major CCPs in Europe as well as internationally. The UK is home to LCH Clearnet Ltd, ICE Clear, CME and LME. Germany's largest CCP is Eurex, while France is home to LCH Clearnet SA.

Table A-2/5 below highlights that EU CCPs clear a variety of product classes, from listed and OTC financial and commodity derivatives to cash equities, bonds and repos.

Table A-2/5: Product types cleared by a selection of EU CCPs

Table 3 below for more information on the definition of			Nasdaq OMX Clearing AB	European Central Counterparty N.V.	KDPW_CCP	Eurex Clearing AG	CCG	LCH SA
Securities (financial instruments referred to in points 1, 2 and 3 of Section C of Annex I of MiFID)	Equity	OTC[i]		1 April 2014	8 April 2014	10 April 2014	20 May 2014	22 May 2014
		RM[iii]		1 April 2014	8 April 2014 and *9 August 2016*	10 April 2014	20 May 2014	22 May 2014
	Debt	OTC			8 April 2014 and *9 August 2016*	10 April 2014	20 May 2014	22 May 2014
		RM			8 April 2014 and *9 August 2016*	10 April 2014	20 May 2014	22 May 2014
Derivatives (financial instruments referred to in points 4 to 10 of Section C of Annex I of MiFID)	Equity	OTC	18 March 2014					
		RM	18 March 2014		8 April 2014	10 April 2014	20 May 2014	22 May 2014
	Debt	OTC	18 March 2014			10 April 2014		
		RM	18 March 2014		8 April 2014	10 April 2014		
	Interest Rate	OTC	18 March 2014		8 April 2014 and *9 August 2016*	10 April 2014		
		RM	18 March 2014		8 April 2014	10 April 2014		
	Inflation Rate	OTC				*3 July 2015*		
		RM						
	Credit	OTC						22 May 2014
		RM						
	Currencies	OTC	~~*25 February 2015*~~[iii]					
		RM	~~*25 February 2015*~~[iii]		8 April 2014	10 April 2014		22 May 2014
	Commodities	OTC	18 March 2014					
		RM	18 March 2014			10 April 2014	20 May 2014	22 May 2014
	Emission/Climatic	OTC	18 March 2014					
		RM	18 March 2014			10 April 2014[iv]		
	Freight	OTC						
		RM	7 April 2014[v]					

r to Table 3 below for more information on the definition of			Nasdaq OMX Clearing AB	European Central Counterparty N.V.	KDPW_CCP	Eurex Clearing AG	CCG	LCH SA
Repo	Equity Debt	OTC	18 March 2014		8 April 2014	10 April 2014	20 May 2014	22 May 2014
		RM					20 May 2014	
Securities Lending	Equity Debt	OTC				10 April 2014		
Collateralised € Deposits	N.A.	OTC					20 May 2014	
Derivatives that are not MiFID financial instruments	Commodities, Emission/ Climatic, Freight							
Assets that are not MiFID financial instruments	Commodities, Emission/ Climatic, Freight		18 March 2014					

Source: ESMA[147]

2.2 Third-country CCPs recognised by ESMA to operate in the EU

In addition to the 17 CCPs established in the EU, 28 third-country CCPs have been recognised by ESMA to date to provide clearing CCPs to EU counterparties.

Table A-2/6: List of CCPs established in a third country and recognised by ESMA

Name of the CCP	Country of Establishment	Date of recognition
ASX Clear (Futures) Pty Limited	Australia	27 April 2015
ASX Clear Pty Limited	Australia	27 April 2015
Hong Kong Securities Clearing Company Limited	Hong Kong	27 April 2015
HKFE Clearing Corporation Limited	Hong Kong	27 April 2015
OTC Clearing Hong Kong Limited	Hong Kong	27 April 2015
The SEHK Options Clearing House Limited	Hong Kong	27 April 2015
Japan Securities Clearing Corporation	Japan	27 April 2015
Tokyo Financial Exchange	Japan	27 April 2015
Central Depository (Pte) Limited	Singapore	27 April 2015
Singapore Exchange Derivatives Clearing	Singapore	27 April 2015
ICE Clear Singapore	Singapore	24 September 2015

[147] ESMA, List of Central Counterparties authorised to offer services and activities in the Union, September 2016.

JSE Clear	South Africa	27 January 2016
ICE Clear Canada	Canada	27 January 2016
Natural Gas Exchange Inc.	Canada	27 January 2016
Canadian Derivatives Clearing Corporation	Canada	27 January 2016
Asigna Compensacion y Liquidacion	Mexico	27 January 2016
SIX x-clear AG	Switzerland	23 March 2016
Korea Exchange, Inc	South Korea	22 April 2016
Chicago Mercantile Exchange, Inc.	United States of America	13 June 2016
ICE Clear Credit LLC	United States of America	28 September 2016
Minneapolis Grain Exchange, Inc.	United States of America	28 September 2016
ICE Clear US, Inc.	United States of America	14 December 2016
Dubai Commodities Clearing Corporation	United Arab Emirates	29 March 2017
The Clearing Corporation of India Ltd	India	29 March 2017
Nasdaq Dubai Ltd	Dubai International Financial Centre	29 March 2017
Japan Commodity Clearing House Co., Ltd.	Japan	29 March 2017
BM&FBovespa S.A.	Brazil	29 March 2017
Nodal Clear, LLC	United States of America	29 March 2017

Source: Commission staff, based on ESMA[148]

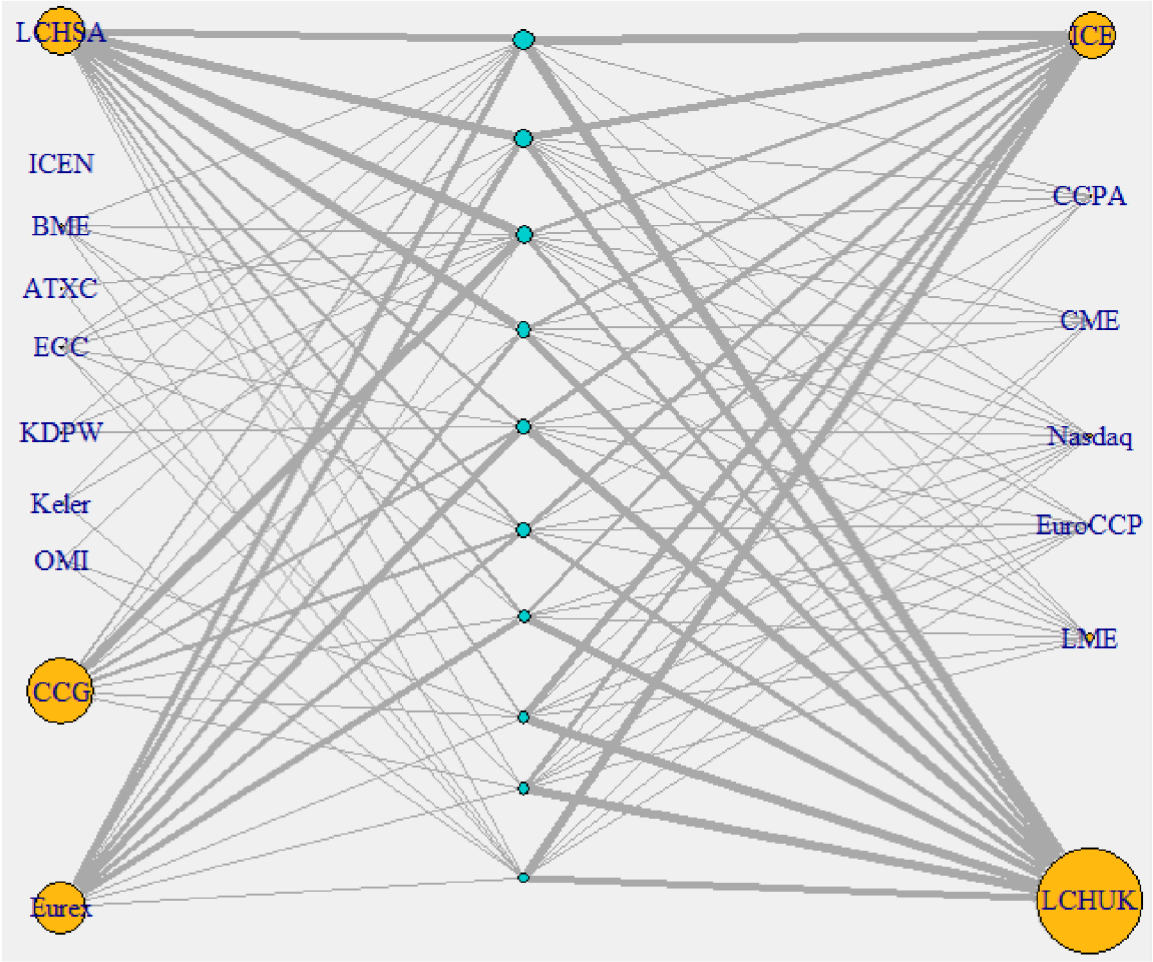
Despite having 45 operating CCPs, the sheer volume of transactions now being centrally cleared means that central clearing markets are generally concentrated in the EU and are highly concentrated in respect of some asset classes.

[148] ESMA, List of third-country central counterparties recognised to offer services and activities in the Union, March 2017.

2.3 A highly interconnected market

CCPs operating within the EU are highly interconnected. Many of the largest global banks are members of multiple CCPs operating in the EU, illustrating the intrinsic cross-border nature of central clearing. For example, 24 globally systemically important banks (G-SIBs) are members of the Frankfurt-based CCP Eurex Clearing AG, while many individual G-SIBs have multiple CCP membership.

Figure A-2/3: Interconnectedness of CCPs via their clearing members



Source: ESMA, Report EU-wide CCP Stress test 2015, 29 April 2016, 2016/658, page 32

ANNEX 3: PROCEDURAL INFORMATION

This Annex outlines the procedural information concerning the process to prepare the impact assessment report and the related initiative:

- Lead Directorate-General: Directorate-General for Financial Stability, Financial Services and Capital Markets Union.

- The initiative is listed in the Commission's Agenda planning under the reference PLAN/2017/1166 - Further amendments to the European Market Infrastructure Regulation (EMIR).

- Organisation and timing of Inter Service Steering Group's meetings: three meetings on 20 April, 4 May, and 16 May 2017. The Inter Service Steering Group included representatives of the Directorates General Competition (COMP), Economic and Financial Affairs (ECFIN), Trade (TRADE), the Task Force for the Preparation and Conduct of the Negotiations with the United Kingdom under Article 50 TEU (TF50), the Legal Service (LS), and the Secretariat General (SG).

- Evidence used in the impact assessment:

  - Replies by stakeholders to the following public consultations:
    - ✓ From 21 May 2015 to 13 August 2015: a public consultation in the framework of the EMIR Review to obtain feedback from stakeholders on their experiences in the implementation of EMIR, http://ec.europa.eu/finance/consultations/2015/emir-revision/index_en.htm
    - ✓ From 20 January 2017 to 17 March 2017: a public consultation on the capital markets union (CMU) mid-term review to seek feedback on how the current CMU programme can be updated and completed so that it represents a strong policy framework for the development of capital markets, https://ec.europa.eu/info/finance-consultations-2017-cmu-mid-term-review_en
    - ✓ From 21 March 2017 to 17 May 2017: a public consultation on the operations of the European Supervisory Authorities (ESAs) to seek views from stakeholders on areas where the effectiveness and efficiency of the ESAs can be strengthened and improved, https://ec.europa.eu/info/finance-consultations-2017-esas-operations_en
  - Reports from European Securities and Markets Authority (ESMA): https://www.esma.europa.eu
  - Publications by the European Systemic Risk Board (ESRB): https://www.esrb.europa.eu/pub/pdf/occasional/20160922_occasional_paper_11.en.pdf?c067e1f68ae0fe23925b88c613c546a8; https://www.esrb.europa.eu/pub/pdf/commentaries/ESRB_commentary_1311.pdf?c7bdc8da2a559dc321fd51018bfc9502; https://www.esrb.europa.eu/pub/pdf/other/2016-01-14_Interoperability_report.pdf
  - Articles published in the European Central Bank (ECB) Economic Bulletin: https://www.ecb.europa.eu/pub/pdf/other/eb201608_article02.en.pdf https://www.ecb.europa.eu/press/key/date/2017/html/ecb.sp170420_tBdF-FSR21.en.pdf

- The EMIR review report: http://ec.europa.eu/finance/financial-markets/docs/derivatives/161123-report_en.pdf
- Targeted discussions with experts from EU and Member States' authorities
- Statistics and reports published by the Financial Stability Board (FSB) and the Bank of International Settlements (BIS).
- Research by the International Derivatives Association (ISDA): http://www2.isda.org/attachment/Nzk2NA==/Market%20fragmentation%20Oct15%20FINAL.pdf
- Desk research by Commission services.

ANNEX 4: STAKEHOLDER CONSULTATION

This annex outlines the consultation strategy followed to inform key elements of the impact assessment. It provides an overview of the input received from stakeholders via the public consultations on the EMIR review, on the operations of the European Supervisory Authorities (ESAs) and on the capital markets union (CMU) mid-term review. It also refers to the feedback received following the publication of the Commission's Communication on responding to challenges for critical financial market infrastructures and further developing the CMU and the Staff Working Document (SWD) on EU equivalence decisions in financial services policy.

1. Overview of the consultation strategy

Both public and targeted consultations have informed the key areas of this impact assessment.

First, the impact assessment takes into account views from stakeholders and public authorities in response to the publication of the Commission's Communication on responding to challenges for critical financial market infrastructures and further developing the CMU of 4 May 2017[149]. The Communication considers that, in view of the challenges in the area of derivatives clearing, further changes are necessary to ensure financial stability and the safety and soundness of CCPs that are of systemic relevance for financial markets across the EU and to support the further development of the CMU. The Communication invited stakeholders to provide their views on this approach and generated significant attention and targeted input from both public authorities (e.g. national, EU and third-country authorities and institutions) and the industry (e.g. CCPs and clearing members).

Second, the impact assessment relies on comments specific to EMIR and CCP supervision as part of the consultation on the operations of the ESAs that was open from 21 March to 17 May 2017[150]. The consultation sought to build a clearer overview of areas where the effectiveness and efficiency of the ESAs could be strengthened and improved. In particular, the supervision of CCPs was one of the three examples given in the consultation document to illustrate some of the reasons that may justify, in certain market segments, a reflection on a possible extension of ESMA's current mandate to accompany the building up of the CMU[151].

Third, the impact assessment takes into account comments focused on supervisory convergence as part of the consultation on the CMU mid-term review, which was open from 20 January 2017 to 17 March 2017[152]. The consultation sought the views of stakeholders on how the current CMU programme can be updated and completed so that it represents a strong policy framework for the development of capital markets. The consultation generated 178 responses.

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149 Communication from the Commission to the European Parliament, the Council, and the European Central Bank on Responding to challenges for critical financial market infrastructures and further developing the Capital Markets Union, Brussels, 4.5.2017, COM(2017) 225 final.

150 The consultation and the related feedback statement can be found at: https://ec.europa.eu/info/finance-consultations-2017-esas-operations_en

151 See Section C on 'Direct supervisory powers in certain segments of capital markets' in the consultation document:https://ec.europa.eu/info/sites/info/files/2017-esas-operations-consultation-document_en.pdf

152 The consultation can be found at: https://ec.europa.eu/info/finance-consultations-2017-cmu-mid-term-review_en

Fourth, the impact assessment builds on contributions specific to EMIR's supervisory arrangements as part of the EMIR review consultation that was open between May and August 2015. The consultation generated more than 170 contributions from a broad range of stakeholders and public authorities[153].

Fifth, the impact assessment takes into account comments related to CCP equivalence as part of the informal reactions to the publication of the Staff Working Document (SWD) on EU equivalence decisions in financial services policy: an assessment, published on 27 February 2017[154]. The SWD provided a factual overview of third-country provisions in EU financial services legislation and took stock of the Commission's experience with the equivalence framework. The SWD generated a number of reactions from third-country authorities and market participants as part of a general debate on the EU's equivalence regime.

No public consultation was carried out specifically for the purpose of this impact assessment. This can be explained by the fact that the ESA consultation, which offered an opportunity to provide views on the supervision of CCPs, was already open when the initiative was announced (i.e. ESA consultation). In addition, relevant consultations seeking views on the EMIR supervisory architecture and on supervision in the context of the CMU had been carried out recently (i.e. CMU consultation, which closed in March 2017 or the EMIR consultation, which led to the adoption of a report on the EMIR review in November 2016).

As a result, substantial input from a broad range of stakeholders has been available to the services of the Commission and helpful to inform the impact assessment. including from industry representatives (e.g. financial market infrastructures, dealers, clearing members, clients and indirect clients such as financial and non-financial companies), Member State and EU authorities (e.g. ESMA, finance ministries, central banks, and national supervisory authorities), as well as third-country authorities and market participants.

2. Stakeholder consultation in the framework of the EMIR Review

2.1 Relevant comments from the consultation on the EMIR Review

The Commission carried out a public consultation as part of the EMIR review between May and August 2015. The consultation generated more than 170 contributions from a broad range of stakeholders and public authorities.

Overall, respondents highlighted that most of the requirements of EMIR have started to apply only recently, and that it would therefore be premature to consider a complete overhaul of the existing supervisory architecture.

1) On the supervision of CCPs established in the EU and the functioning of the colleges

Respondents supported the objective of the supervisory colleges introduced by EMIR as it aims to ensure a level playing field amongst the European CCPs as well as homogeneity in the application of regulation across the European Union. They pointed out that colleges allow experience-sharing and improve cooperation among relevant

[153] The consultation and the summary of the responses can be found at http://ec.europa.eu/finance/consultations/2015/emir-revision/index_en.htm

[154] Commission Staff Working Document, EU equivalence decisions in financial services policy: an assessment, SWD(2017) 102 final, 27.2.2017, available at https://ec.europa.eu/info/sites/info/files/eu-equivalence-decisions-assessment-27022017_en.pdf

authorities, and are thus of importance for financial stability in the relevant Member States, striking the adequate balance in ensuring an appropriate role for the home national competent authorities. No respondents expressed objections to the establishment of supervisory colleges.

Respondents pointed out, however, that while colleges work well in general, there was still some room for improvement, in particular when it comes to the validation of models and parameters and the extension of services. Moreover, a majority of respondents pointed out the length of the approval processes, with some respondents underlining that in some cases the timeline for approval could be postponed indefinitely by the national competent authority, giving rise to legal uncertainty. Additionally some respondents, mostly market infrastructures and authorities, pointed out the unclear position of ESMA in particular with regard to the processes related to the extension of activities and services of a CCP and the review of a CCP's risk models.

Some industry associations and one market infrastructure operator pointed out the need for more transparency in the functioning of colleges, not only towards CCPs for the authorisation and extension of services processes but also towards CCPs' users in order to allow them to get more visibility of the authorisation process and its consequences (i.e. entry into force of EMIR requirements, potential clearing obligations, etc.). In particular, they suggested that EMIR should require the competent authority to publicly disclose when a CCP's authorisation application has been deemed complete.

A number of authorities, industry participants, and market infrastructure operators suggested that EMIR should clarify the modalities for the college process, in particular the roles and responsibilities of different college members. Several authorities and industry participants, and market infrastructure operators also asked for more clarity in the process and timeframe for the authorisation and extension of services provided by CCPs.

In addition, two investment managers expressed the view that the number of national competent authorities (NCAs) within the college should be large, as many countries are concerned with the cross-border activities of CCPs.

2) On the recognition of third-country CCPs and relations with third countries

The questions in the consultation on the EMIR Review were not specific to CCPs and some responses overlaps with responses on risk-mitigations techniques for OTC derivatives not cleared by a CCP. However, the majority of respondents to this question, including companies, industry associations, and public authorities considered that there were provisions or definitions within EMIR that pose challenges for EU entities when transacting on a cross-border basis.

Specifically, industry associations considered that the European Commission was taking too long to complete its equivalence assessments under EMIR. The same industry associations, as well as companies, indicated that further harmonisation of EMIR with regulations in third countries was needed, noting the possibility of liquidity fragmentation as a result of differing rules.

Most respondents, mainly companies from the financial sector and industry associations, considered that some provisions within EMIR created a disadvantage for EU counterparties over non-EU entities. They principally indicated that the stringency of some EU requirements compared to requirements in other jurisdictions could lead to regulatory arbitrage. Furthermore respondents pointed out the fact that the equivalence

regime for CCPs as developed in EMIR de facto created a situation where the requirements for EU CCPs are heavier than third-country CCPs, leading to an un-level playing field detrimental to EU CCPs.

2.2 Input from ESMA on the third-country recognition process under EMIR

ESMA issued four separate reports as part of the EMIR review, focused on various aspects of the regulation. In particular, one of the reports raised concerns over the recognition process for third-country CCPs under EMIR[155].

Article 25 of EMIR provides that ESMA may recognise a CCP where the four conditions listed in Article 25(2) are met and that ESMA may withdraw recognition where those conditions are no longer met.

Based on ESMA's experience, it raised a series of concerns about the process of recognition of third-country CCPs.

First, ESMA argued that the process is rigid and burdensome, as demonstrated by the limited number of recognition decisions taken in 2015. Three years after the entry into force of EMIR, ESMA noted that the majority of the third-country CCPs were still operating under a transitional regime. ESMA argued that this put at risk European clearing members and their subsidiaries clearing with these third-country CCPs and creates the potential for regulatory arbitrage between European and third-country CCPs.

Second, ESMA highlighted that the European approach toward third-country CCPs is extremely open, with full reliance on third country rules and supervisory arrangements. The cooperation arrangements that ESMA concluded and will continue to conclude give ESMA limited powers to intervene should an emergency situation arise in a third-country CCP.

Third, ESMA raised concerns about the absence of a provision in EMIR that would allow it to deny recognition on the basis of a material risk emerging from its review of a CCP application under Article 22, even though the 4 conditions from Article 25(2) are met. While it cannot be ruled out that it may spot a significant risk through the processing of the applications for a specific the third-country CCP, or that the consulted authorities may flag significant concerns, ESMA indicated that it has no option other than to recognise the applicant CCP as long as the four conditions are met.

Fourth, ESMA raised significant differences between the EU's approach to equivalence and recognition, and that of other countries. ESMA highlighted that the majority of third-country jurisdictions consider third-country CCPs as systemically relevant infrastructures and apply to them closer scrutiny. In general, the process envisages a full registration in the relevant jurisdiction and that while, as part of such authorisation process, the third country authority may decide to rely on certain rules of the home jurisdiction of the CCP and of certain cooperation arrangements with the home authority of the CCPs, the CCP would become subject to the rules and the authority of the jurisdiction registering it. Therefore, ESMA argued that, although the current EU approach should be a model in terms of mutual reliance, if the EU remains the only jurisdiction relying extensively on

[155] See EMIR Review Report no.4 of 13 August 2015, as part of the Commission consultation on the EMIR Review, pp. 19-21, available at: https://www.esma.europa.eu/sites/default/files/library/2015/11/esma-2015-1254_-_emir_review_report_no.4_on_other_issues.pdf

third country rules and authorities, this might put it at risk and does not benefit CCPs established in the EU.

On this basis, ESMA indicated that the review of EMIR provides an opportunity to rethink the approach toward third-country CCPs. Considerations should be given to the following:

- Whether to keep a system of full reliance on third country rules and supervisory arrangements, or whether a system like the one applicable in the majority of the third countries should be envisaged;

- If the system of equivalence is maintained, whether such equivalence determinations should be rather adopted via Regulatory Technical Standards. This would provide for technical considerations to be fully reflected and it would ensure a more defined calendar. Whichever legislative process is decided upon, ESMA argued that it would be important to ensure the equivalence assessment, while being outcome-based, is sufficiently granular and, where necessary, is able to contain conditions to mitigate possible risks for European market participants.

Should the process for the recognition be maintained as under the current EMIR, ESMA argued that it should as a minimum be complemented with a defined legal basis for not recognising a CCP. In particular, the Commission could consider revising Article 25 in order to:

- Identify the circumstances under which ESMA may decide not to recognise a third-country CCP (even though the four conditions set out in Article 25 are met).

- Foresee that the review of recognition under Article 25(5) with respect to the extension of activities and services in the Union should be performed ex-ante and not ex-post. For instance, it could be foreseen that information on extension of activity should be provided prior to the actual extension rather than afterwards, to allow ESMA to react efficiently.

- Establish that the conditions (a) and (d) in Article 25(2) shall be met before a third-country CCP can submit an application for recognition.

- Reconsider whether for the assessment of the four conditions currently envisaged under EMIR, the wider consultation of many European and national authorities is valuable.

ESMA also pointed out that the recognition of third country CCPs implies a significant administrative burden. Therefore, in line with other direct responsibilities ESMA performs, fees for recognition of third-country CCPs should be envisaged to cover ESMA's costs.

3. CCP-related responses to the consultation on the operations of the ESAs

The Commission conducted a consultation on the operations of the ESAs from 21 March to 17 May 2017[156]. The consultation sought to build a clearer overview of areas where the effectiveness and efficiency of the ESAs could be strengthened and improved. In this context, the Commission received comments specific to EMIR and CCP supervision,

[156] The consultation and the related feedback statement can be found at: https://ec.europa.eu/info/finance-consultations-2017-esas-operations_en

notably as part of a section seeking views on whether ESMA should have additional direct supervisory powers in certain segments of capital markets, in addition to those that ESMA currently enjoys for credit rating agencies and trade repositories. In particular, the consultation cited the supervision of CCPs as one of the three examples that may justify, in certain market segments, a reflection on a possible extension of ESMA's current mandate to accompany the building up of the CMU[157].

The Commission had not published a summary of responses to this consultation at the time of finalisation of this impact assessment. However, this section provides an overview of CCP-relevant comments.

Overall, about 40 respondents provided views on the questions related to the extension of ESMA's supervisory powers with a specific focus on CCPs. They include a range of stakeholders, the majority of which are organisations and companies, industry associations and SMEs, operating mainly in the area of market infrastructure and banking. About a dozen public authorities and international organisations also shared their views.

3.1. CCP-related responses regarding ESMA's supervisory powers

A vast majority of the stakeholders representing an organisation or a company suggested that the supervision of CCPs should be further centralised at the level of ESMA, in order to improve the current regime which they see as fragmented and inefficient. Many respondents argued that, since the operations of CCPs go beyond national levels, supervision should not be conducted only by national competent authorities (NCAs). Increased cross-border activity, the systemic importance of CCPs, and access to liquidity in the euro area were cited as factors justifying the need for ESMA's supervisory powers to be further extended.

Respondents generally outlined the following advantages in favour of the extension of the direct supervisory powers of ESMA over CCPs: (i) uniform application of EMIR throughout the EU; (ii) avoidance of regulatory arbitrage; and (iii) avoiding complexities in the event of a CCP resolution when several NCAs with conflicting priorities might be involved. Moreover, respondents underlined that the extension of ESMA's supervisory powers could enhance supervisory cooperation with third-country authorities and facilitate the exchange of information on risks and exposures across jurisdictions.

Certain respondents argued that the powers of ESMA could be extended so that it becomes the main single direct supervisor in the area of the registration, supervision and resolution of CCPs. Other respondents noted that, considering the current situation where market activity is focused in particular countries (like the United Kingdom), a common supervisor especially after the United Kingdom exits the EU would be needed to ensure higher standards for investor protection and market integrity.

Nevertheless, when considering the extension of ESMA's direct supervisory powers, many respondents highlighted the need to respect the principles of subsidiarity and proportionality.

First, a few of the respondents that generally approved the extension of ESMA's supervisory powers argued that the current regime of colleges of supervisors is working

[157] See Section C on 'Direct supervisory powers in certain segments of capital markets' in the consultation document: https://ec.europa.eu/info/sites/info/files/2017-esas-operations-consultation-document_en.pdf

well and should be maintained as one mechanism to supervise CCPs. In particular, respondents highlighted that NCAs should still be actively involved in the supervision of CCPs, notably given the various types of CCPs that currently operate in the EU (local vs. cross-border). One respondent also highlighted the need for NCAs to be sufficiently involved in the supervision of CCPs active in their territories, mainly for the reasons of protection of retail clients, financial stability and insufficient funding of ESMA. On this basis, a few respondents suggested enhancing ESMA's powers within the colleges as an alternative (or parallel) option to extending ESMA's direct supervisory powers, for instance by granting ESMA the right to vote in the college, to exercise binding mediation in case no consensus is reached, or to have the final say in decision-making. A number of respondents also suggested that ESMA should be granted chairmanship of the colleges to ensure the preservation of EU interests in all circumstances and facilitate supervisory convergence.

Second, several respondents underlined the risk of overlapping supervision between ESMA and NCAs, as the latter would remain involved in supervision to a certain extent, which could lead to inefficiencies. Respondents outlined the need that more effective collaboration between NCAs and ESMA should be envisaged to avoid overlapping supervision.

Third, certain respondents suggested that only entities with a pan-European dimension should be cover in case the supervisory powers of ESMA were to be extended. For instance, a respondent called for an assessment of how ESMA's direct supervision of systemic CCPs would work in practice, taking into account the following factors in deciding whether there should be a further transfer of supervisory responsibilities to the pan-European level:

- the value of supervision conducted at national level by authorities that are closest to the market where the CCP is located and where there is already strong coordination between regulators through supervisory colleges;
- the role of resolution authorities in the context of the Commission's proposal on a framework for CCP recovery and resolution;
- the need for coordination between supervisors (i.e. financial markets regulators) and prudential/resolution authorities for systemic market infrastructures.

A smaller number of respondents, including mainly public authorities but also private individuals and industry associations, were not in favour of extending the supervisory powers of ESMA over CCPs. The main arguments put forward included the fact that ESMA would lack financial resources to cater for a failing CCP, no matter how limited the risk of such an event is, and the fact that CCPs pose a systemic risk within their Member State of establishment, which is why supervision should be kept at a national level.

3.2. CCP-related responses regarding relations with third countries

A number of respondents indicated that a cautious approach should be maintained regarding direct supervision by ESMA of third-country CCPs that are recognised in the EU or of location requirements, arguing that such an approach would run contrary to the global trend of a system of equivalence through recognition of comparable rules. Direct ESMA supervision of third-country CCPs might lead to an escalation of extra-territorial regulatory standards by jurisdictions around the world, contradicting the principle of mutual recognition and limiting liquidity and risk management tools for EU-based market participants wishing to access global liquidity pools.

By contrast, another respondent indicated that the centralisation of relationships with third countries at the regional level through the ESAs is appropriate and the most efficient way to gain uniformity in the implementation of equivalence decisions.

4. Stakeholder consultation in the framework of the CMU mid-term review

The Commission carried out a public consultation as part the CMU mid-term review, which was open from 20 January 2017 to 17 March 2017[158]. The consultation sought the views of stakeholders on how the current CMU programme can be updated and completed so that it represents a strong policy framework for the development of capital markets. The consultation generated 178 responses.

The Commission had not published a summary of responses to this consultation at the time of finalisation of this impact assessment. However, this section provides a general overview of relevant comments related to supervisory convergence.

Many respondents commented on the need for greater regulatory harmonisation and convergence to overcome real and perceived cross-border barriers, although only a few respondents provided specific input on supervisory practices and convergence. Those respondents that provided input emphasised the importance of strengthening and improving **supervisory convergence** for the development of the CMU, in particular for stimulating the provision of cross-border services, increasing cross-border investment, securing a level-playing field and ensuring investor protection and confidence.

Respondents from a wide range of stakeholder groups favoured strengthening the **mandates of the ESAs** to increase supervisory convergence. In this context, particular focus was put on ESMA, with industry in particular supporting more centralisation of supervisory powers within ESMA leading to the eventual creation of a single supervisor for capital markets.

A few respondents highlighted specific areas where a strengthening of the mandate of the ESAs would be desirable. These include strengthened powers to: (i) monitor supervisory regimes and make public any gaps encountered; (ii) enforce non-binding regulation; (iii) adjust the implementation of a rule through mechanisms such as no-action letters; and (iv) evaluate the interplay of the ESAs with national supervisors to eliminate redundancies in reporting and help align national standards.

[158] The consultation can be found at: https://ec.europa.eu/info/finance-consultations-2017-cmu-mid-term-review_en

ANNEX 5: WHO IS AFFECTED BY THE INITIATIVE AND HOW?

CCPs will benefit from a streamlined supervision mechanism providing legal certainty and efficient, rapid, decision-making capacities. In particular when reviewing their risk models and expanding the scope of their business activities, CCPs will get a better view as to what is expected from authorities responsible for their supervision as well as more clarity on the timeline for authorisation. CCPs will additionally benefit from the impact on financial stability this initiative could have. Stronger and streamlined supervision make the probability of failure of a CCP even more remote than it already is and the contagion of such a failure to other CCPs highly unlikely. CCPs might have to face supervisory fees which could either impact their annual turnover or be passed on to clearing members.

Clearing members and their clients (clearing counterparties) will benefit from safer CCPs supervised under a proportionate approach. The impact of this initiative with regard to the business conducted by clearing counterparties with CCPs established in the EU is expected to be minimal and certainly seamless from an operational standpoint. As mentioned above, as supervisory fees might be required from CCPs, some of these fees could be passed on by CCPs to their clearing counterparties. This financial effect is, however, expected to be very limited compared to volume of financial instruments cleared and to be cleared.

Depending on the intensity of supervision applied to third-country CCPs and should a location policy be required for certain third-country CCPs, there could be higher financial costs and operational impacts on clearing counterparties. The introduction of a location policy could lead to heavy repapering of existing contracts (both between third-country CCPs and clearing members and between clearing members and their clients), potential higher costs of trading due to market fragmentation and impacts on the liquidity of the instruments cleared and potential higher costs of clearing due to losses in margin efficiencies. In order to keep these costs to a minimum, the location policy would have to be introduced in a proportionate and progressive manner so as to protect the interests of clearing counterparties.

EU institutions, ESMA and National Competent Authorities will be the most impacted by the initiative as their tasks and responsibilities will evolve. This is true in particular for ESMA, the ECB and Central Banks of Issue in the EU for which more supervisory powers are envisaged and therefore for which more human resources will be needed. While there could be some rebalancing between institutions, the initiative creates additional supervisory tasks, specifically with regard to third-country CCPs for which a net need of additional resources will be required.

The general public and taxpayers will benefit from a safer financial system where the probability of the failure of a CCP and the contagion of such an event to the broader financial system is reduced to an even lower figure than today.

ANNEX 6: ANALYSIS OF THE CURRENT FUNCTIONING OF SUPERVISORY COLLEGES

This Annex provides an analysis of the current functioning of the supervisory colleges established under Article 18 of EMIR[159], with a focus on the role of the European Securities and Markets Authority (ESMA), of the National Competent Authorities (NCAs) and of the other college members in the decision-making procedures for the authorisation and the ongoing supervision of Central Counterparties (CCPs) established in the EU. This Annex also considers the possible further development of European cooperation with regard to the authorisation and the ongoing supervision of CCPs established in the EU. It is based on ESMA's 2015[160] and 2016[161] peer review reports and ESMA's EMIR Review Report no.4[162].

> "However, ESMA also sees a risk that following authorisation CCP colleges may become simply a mechanism for the exchange of information, rather than an effective supervisory tool. In addition to continuing to identify and challenge issues of attention or of concern in order to strengthen the *CCP's* level of compliance with the EMIR framework, ESMA considers that more active involvement in the supervisory process would be desirable."
> ESMA, 2015

1. EMIR requirements and national supervision of CCPs supported by ESMA and a supervisory college

While EMIR provides for uniform requirements for the performance of activities of CCPs[163], the primary responsibility for the authorisation and supervision of these financial market infrastructures remains at national level. Each Member State designates one or more competent authority/authorities responsible for the authorisation and supervision of CCPs established in its territory[164]. These NCAs are responsible for the authorisation (including its extension and withdrawal) as well as for the ongoing supervision of the CCPs. They establish, manage and chair the supervisory colleges[165]. The college consists of: (a) ESMA; (b) the CCP's competent authority; (c) the competent authorities responsible for the supervision of the clearing members of the CCP that are established in the three Member States with the largest contributions to the default fund of the CCP referred to in Article 42 of EMIR on an aggregate basis over a one-year period; (d) the competent authorities responsible for the supervision of trading venues served by the CCP; (e) the competent authorities supervising CCPs with which

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159 Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories, OJ L 201 27.7.2012, p. 1). A consolidated version is available at: http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:02012R0648-20170401&rid=1

160 ESMA review of CCP colleges under EMIR, January 2015 https://www.esma.europa.eu/sites/default/files/library/2015/11/2015-20-_report_on_esma_review_of_ccp_colleges.pdf

161 ESMA, Peer Review under EMIR Art. 21 Supervisory activities on CCPs' Margin and Collateral requirements, 22 December 2016, ESMA/2016/1683 (ESMA peer review 2016) https://www.esma.europa.eu/sites/default/files/library/2016-1683_ccp_peer_review_report.pdf

162 ESMA, EMIR review report no. 4, ESMA input as part of the Commission consultation on the EMIR Review, 13 August 2015, ESMA/2015/1254 https://www.esma.europa.eu/sites/default/files/library/2015/11/esma-2015-1254_-_emir_review_report_no.4_on_other_issues.pdf

163 Article 1, paragraph 1of EMIR.

164 Article 22, paragraph 1 of EMIR.

165 Article 18, paragraph 1 of EMIR.

interoperability arrangements have been established; (f) the competent authorities supervising central securities depositories to which the CCP is linked; (g) the relevant members of the European System of Central Banks (ESCB) responsible for the oversight of the CCP and the relevant members of the ESCB responsible for the oversight of the CCPs with which interoperability arrangements have been established; and (h) the central banks of issue of the most relevant Union currencies of the financial instruments cleared.[166] While ESMA has no voting right[167], all other authorities represented in the college are - in principle - voting members. Nevertheless, only up to three authorities per Member State are entitled to vote in colleges with more than 12 members.[168] Therefore, all college members including the NCA and the central banks of issue referred to in point (h) of Article 18(2) of EMIR are (only) college members that can be outvoted when the college takes a majority decision.

Other than for CCPs established in the EU, EMIR does not require the establishment of a supervisory college for CCPs established in third countries, which are recognised by ESMA to provide clearing services to clearing members or trading venues established in the EU.

2. Co-decision competences of the college and of ESMA for special decisions

EMIR grants the supervisory colleges and ESMA with certain co-decision competences. The college's co-decision competences are strong with regard to the authorisation of a CCP[169], the extension of that authorisation[170] and the approval of interoperability arrangements[171]. In these cases, the decision-making procedure under Article 17 of EMIR applies. Under that procedure, the NCA cannot grant the authorisation or the approval where all the members of the college, excluding the authorities of the Member State where the CCP is established, reach a joint opinion by mutual agreement that the CCP shall not be authorised or the interoperability arrangement shall not be approved.[172] Where a majority of two-thirds of the college have expressed a negative opinion, any NCA that is part of that majority can refer the matter to ESMA for binding mediation under Article 19 of the ESMA Regulation.[173] The same is possible for the NCA all members of the college, excluding the authorities of the Member State where the CCP is established, reach a joint opinion not to authorise the CCP or not to approve the interoperability arrangement.[174]

In cases of the validation of a significant change to the models and parameters adopted to calculate a CCP's margin requirements, default fund contributions, collateral requirements and other risk control mechanisms[175], the role of the college is weaker. While Article 49 of EMIR requires an opinion of the college, it refers only to the voting rights set out in Article 19 of EMIR and not to the decision making procedure of its Article 17 of EMIR[176]. By contrast, the role of ESMA is stronger: Article 49 of EMIR does not only require a NCA validation of the proposed significant change of models or

166 Article 18, paragraph 2 of EMIR.
167 Article 19, paragraph 3, sentence 3 of EMIR.
168 Article 19, paragraph 3, sentence 2 of EMIR.
169 Article 14 of EMIR.
170 Article 15 of EMIR.
171 Article 54 of EMIR.
172 Article 17, paragraph 4, subparagraph 3 of EMIR.
173 Article 17, paragraph 4, subparagraph 4 of EMIR.
174 Article 17, paragraph 4, subparagraph 6 of EMIR.
175 Article 49 of EMIR.
176 Article 49, paragraph 1, subparagraph 2 of EMIR.

parameters, but in addition a validation of ESMA, which is independent of that of the NCA. Thus, ESMA and the NCA are equally ranking with regard to model and parameter validations under Article 49 of EMIR.

The college as a mechanism for the exchange of information

In other cases, the college is not asked for an opinion. Its members are consulted[177], can request the NCA to take action[178] or are just informed about the NCA's decisions and actions[179]. In practice, the NCAs inform the members of the college more or less extensively about their supervisory activities and all developments relevant for a CCP. The NCAs ask the other relevant authorities for information they need to perform their supervisory tasks. The written agreements under Article 18(5) of EMIR[180] together with EMIR itself provide the legal basis for this exchange of information.

ESMA's activities to enhance supervisory convergence

Pursuant to point (a) of Article 18(2) of EMIR, ESMA is the only member of all CCP supervisory colleges under EMIR.[181] Although it is non-voting, ESMA plays an active role in facilitating the work of the colleges in line with the various tasks mandated under EMIR. To foster supervisory convergence, it:

- issues guidelines and recommendations e.g. for establishing consistent, efficient and effective assessments of interoperability arrangements under Article 54 of EMIR or on standard written agreement for the establishment and functioning of CCP colleges;
- issues opinion e.g. on voting procedures for CCP colleges or portfolio margining within CCPs;
- issues and updates Questions & Answers on the implementation of EMIR;
- provides standard templates e.g. for the college members' questions on the CCP's application for authorisation and the NCA's answers to these questions or for the NCA's risk assessment within the authorisation process;
- initiates and coordinates (on an annual basis) a Union-wide assessment of the resilience of CCPs to adverse markets developments ("stress test"); and
- validates significant changes to CCPs' risk models and parameters under Article 49 of EMIR independently from, and in addition to, the NCA's own validation[182].

With the exception of the validation of significant changes to the CCPs' risk models and parameters, ESMA does not itself perform supervisory tasks, but adds to the supervisory

177 Article 20, paragraph 2 of EMIR with regard to the withdrawal of authorisation.

178 Article 20, paragraph 2 of EMIR with regard to the determination if the authorisation requirements are (still) fulfilled or the withdrawal of authorisation is necessary.

179 Article 21, paragraph 4 of EMIR with regard to the review and evaluation outcomes; Article 24 of EMIR with regard to emergency situations; Article 31, paragraph 5 of EMIR, where the competent authority opposes a proposed acquisition of a CCP.

180 ESMA published Guidelines and Recommendations regarding written agreements between members of CCP colleges, Report, 4 June 2013, ESMA/2013/661, https://www.esma.europa.eu/sites/default/files/library/2015/11/2013-661_report_gr_on_college_written_agreement_-_final_for_publication_20130604.pdf, which are used by all colleges.

181 ESMA peer review 2015, p. 9, para. 9.

182 ESMA peer review 2015, p. 9, para 10 and pp. 10/11, paras 13- 18.

framework within which the NCAs and the other members of the college supervise the CCP and take decisions where ESMA has no voting rights.

This may help ESMA to fulfill its coordination tasks such as facilitating the adoption of the joint opinion under Article 19(2) of EMIR and fulfilling a coordination role between NCAs and across colleges with a view to building a common supervisory culture and consistent supervisory practices, ensuring uniform procedures and consistent approaches, and strengthening consistency in supervisory outcomes, pursuant to Article 21(6) of EMIR as well as its mediation role. But it leaves ESMA out of the day-to-day supervision of CCPs.

3. Practical experiences

In practice, the supervisory colleges meet in person mostly once, in rare cases twice a year and are informed by the NCA about both its supervisory activities since the last meeting and the planned supervisory activities that it plans to perform. In addition, the members of the college are informed regularly (in most cases monthly or quarterly) about any developments regarding the CCP. At least once a year, the composition of the college is reviewed by the NCA. The college membership under point (c) of Article 18(2) of EMIR[183] tends to change often in colleges of CCPs where clearing members of more than three Member States are responsible for almost the same contributions to the default fund of the CCP referred to in Article 42 of EMIR. In such cases, the authorities that become college members and those that do not depends on the one-year-period chosen to determine the college membership. This may challenge the continuity of the college work. Therefore, some NCAs have - with the prior consent of all college members under the written agreement - invited such former and potential future college members to participate in college meetings as observers.

Most colleges worked most intensively on matters in which the college has co-decision competences. Therefore, the authorisation of the CCP and, where these took place, the extension of that authorisation and model validations required the most intensive work within the colleges.[184] Especially during the authorisation process, "ESMA observed that in general the CCP colleges facilitated two-way cooperation: on the one hand, the chairing NCAs received good and constructive input from the college members which fed into their risk assessments; while on the other hand, college members received the information they required in order to vote on the adoption of the joint opinion."[185] Where there is no need of such an opinion, a smaller level of cooperation is needed. Thus, other matters such as the annual review of the activities of the CCP and its NCA did not spark an equally intense cooperation. Therefore, ESMA sees a "risk that following authorisation CCP colleges may become simply a mechanism for the exchange of information, rather than an effective supervisory tool."[186] Where no opinion of the college is required, the college members do not have to take and justify their own decision. Thus, the colleges could evolve in the direction of information exchange tools rather than take active part into the supervision of the CCP itself. This could lead to a

[183] "the competent authorities responsible for the supervision of the clearing members of the CCP that are established in the three Member States with the largest contributions to the default fund of the CCP referred to in Article 42 of EMIR on an aggregate basis over a one-year period".

[184] No CCP entered into new interoperability arrangements after its re-authorisation under EMIR. The approval of such an interoperability arrangement would probably require the same amount of college involvement as the same procedure applies as for the authorisation of the CCP.

[185] ESMA peer review 2015, p. 16, para. 30.

[186] ESMA peer review 2015, p. 19, para. 38.

decrease of the influence of ESMA and the other college on the supervision of CCPs established in the EU.

ESMA observed some heterogeneity in the degree to which different college members participated in college discussions, which might reflect the different basis for college member participation in the college under Article 18 of EMIR with different parts of the college work in which they have a special interest. Indeed, supervisors of trading platforms served by the CCP have a different focus than supervisors of central securities depositories (CSDs) to which the CCP is linked, supervisors of the CCP's clearing members, or supervisors of interoperating CCPs. Another reason might be that the resources the college members can allocate to the college work differ from authority to authority.[187] However, ESMA did observe that some college members relied heavily on other members to review the substantive parts of the CCP's application while themselves focusing on a narrow set of issues. Overall, ESMA sees the cooperation in the colleges as sufficient,[188] while certain improvement is required especially with regard to the question where an extension of the authorisation or a model validation is required.[189]

In this regard, the approaches of the different NCA vary to a significant extent even in cases involving comparable CCPs although these decisions require - because of their great importance for the CCP, its clearing members and the authorities involved in the CCP's supervision - the highest degree of involvement and the strongest co-decision competences of ESMA and the supervisory college. This weakness of the current supervisory structure is observed in each ESMA report on this matter. Even common templates provided by ESMA to support the NCAs in their determination whether a risk model or parameter change is significant or a new product requires an extension of the CCP's authorisation did not solve that problem, because the NCAs exercise their discretion differently in this cases.

This shows the main weakness of the current supervisory framework for CCPs established in the EU: ESMA can only influence CCP supervision through its regulatory, coordination and supervisory convergence role. Within that role, "ESMA has aimed at promoting a common supervisory approach in the implementation of EMIR, by proposing common practices for colleges, developing a common practical application of EMIR provisions, and ensuring a consistent application of EMIR requirements for CCPs across colleges. In doing so, ESMA cooperated with NCAs, leveraging on its internal governance structures, namely the Post Trading Standing Committee (PTSC) and ultimately the Board of Supervisors, to develop and agree common policy views, the legal instruments (RTS, Guidelines and Recommendations, Opinion) and other tools (Q&As and best practices) aiming at promoting a common supervisory approach, as further presented below."[190]

In other words, ESMA has sought to convince the NCAs and other members of the college to adopt a common supervisory approach using the means of a standard-setting body and its participation in the colleges, but did not take part in the day-to-day

[187] ESMA peer review 2015, p. 16, para. 32.
[188] ESMA peer review 2015, p. 20, para. 41.
[189] ESMA peer review 2015, p. 20, para. 42; ESMA, EMIR Review Report no. 4, p. 22, para. 133; ESMA peer review 2016, p. 7, paras. 21 - 23, with regard to the possible necessity of an extension of authorisation under Article 15 of EMIR, and p. 8, paras. 24 - 27, with regard to the possible necessity of a model validation.
[190] ESMA peer review 2015, p. 10, para. 11.

supervision of CCPs itself. Because ESMA promotes supervisory convergence almost only with means of standard setting, it is insufficiently involved in CCP supervision.

The exceptional case of the validation of risk models and parameters under Article 49 of EMIR shows how ESMA's supervisory convergence role and CCP supervision as such could be strengthened. In that case, ESMA has its own supervisory competences independent of those of the NCA and the college. This equips ESMA with a much bigger power to promote supervisory convergence. In addition, ESMA can bring something which only it can provide, namely its horizontal view. ESMA, being member of all CCP supervisory colleges, knows not only every CCP but also how every single model or parameter validation has been dealt with. Thus, ESMA can provide supervisory convergence not only by providing standards, but also by providing a convergent supervisory practice itself. The only remaining challenge is that the approaches of NCAs continue to differ regarding how to determine which model or parameter change is significant.

4. Conclusion

ESMA's supervisory role should be strengthened taking Article 49 of EMIR as an example. ESMA should have a voting right in the colleges and further co-decision competences. This would lead to a "more active involvement in the supervisory process"[191] as a whole. ESMA could be involved in the whole supervisory process in the same way that it is already involved in the validation of significant model changes under Article 49 of EMIR. This would allow a more horizontal approach to CCP supervision throughout the EU, taking into account developments in every CCP. This can only be done by an EU institution that takes part in the day-to-day supervisory process itself rather than trying to reach a more common supervisory approach via the colleges.

This leads to the question whether the colleges would still be needed if ESMA's role in the supervisory process and therefore its European component would be strengthened in this way. The colleges in their current structure have the advantage that views of supervisors of different actors involved in central clearing are represented. A stronger supervisory role of ESMA would not change the need for the involvement of these authorities in the colleges. Whoever supervises a CCP needs the input of college members and those members need the information that their college participation provides them with for their own supervisory tasks.

The role of the college could be strengthened by referring to its co-decision competences as defined in Article 17 of EMIR in additional cases and clarifying the legal consequences and effects of its opinion referred to in the second subparagraph of Article 49(1) of EMIR. But it may be too early to do so as the re-authorisation under EMIR is still outstanding for one CCP[192]. Another CCP[193] has just been re-authorised lately.[194] Therefore, further experience with regard to the functioning of the colleges after the re-authorisation of the CCPs is necessary to determine in which decisions the college should be more involved.

[191] ESMA peer review 2015, p. 19, para. 38.
[192] SKDD-CCP Smart Clear d.d. established in Croatia.
[193] ICE Clear Europe Limited in the United Kingdom.
[194] See the list of CCPs authorised in the European Union at: https://www.esma.europa.eu/sites/default/files/library/ccps_authorised_under_emir.pdf.