



European Securities and
Markets Authority

Risk Assessment

**On the temporary exclusion of exchange traded derivatives from Articles
35 and 36 of MiFIR**



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Executive Summary

Reasons for publication

Article 52(12) of Regulation (EU) No 600/2014 (MiFIR) requires the Commission to present by 3 July 2016 a report to the European Parliament and the Council assessing the need to temporarily exclude exchange-traded derivatives (ETDs) from the scope of the non-discriminatory access provisions to CCPs and trading venues in Articles 35 and 36 of MiFIR. Subject to the conclusions of this report, the Commission may adopt a delegated act to this effect. According to Article 52(12) of MiFIR the report shall be based on a risk assessment by ESMA in consultation with the ESRB and shall take into account risks resulting from open-access provisions regarding ETDs to the overall stability and orderly functioning of financial markets in the Union.

Contents

Section 1 introduces the issue and sets out the mandate. Section 2 presents the regulatory framework of MiFIR on access to CCPs and trading venues regarding ETDs. Section 3 discusses the scope of the risk assessment. Section 4 provides a brief overview of the market for ETDs, and in particular on the trading and clearing of ETDs. Section 5 provides an overview of existing access arrangements in the EEA. Section 6 assesses potential benefits and risks stemming from open access provisions for ETDs and section 7 concludes. More detailed data on the clearing of commodity and financial ETDs is presented in the Annex.

Next Steps

This risk assessment feeds into the analysis of the Commission on the need to temporarily exclude ETDs from the scope of Articles 35 and 36 of MiFIR.

1. Introduction and Mandate

1. Article 52(12) of Regulation (EU) No 600/2014 (MiFIR) requires the Commission to present by 3 July 2016 a report to the European Parliament and the Council assessing the need to temporarily exclude exchange-traded derivatives (ETDs) from the scope of Articles 35 and 36 of MiFIR. Subject to the conclusions of this report, the Commission may adopt a delegated act to this effect. According to Article 52(12) of MiFIR the report shall be based on a risk assessment carried out by ESMA in consultation with the ESRB and shall take into account risks resulting from open-access provisions regarding ETDs to the overall stability and orderly functioning of financial markets in the Union.
2. On 14 July 2015 the Commission requested ESMA to carry out the risk assessment by 31 January 2016. The mandate received by the Commission highlighted in particular the following elements:
 - The risk assessment should focus on the identification of potential risk factors, their likelihood and magnitude of damaging effects if they materialise;
 - The assessment should focus on risks stemming from access arrangements in MiFIR and not on broader risk factors related to other pieces of legislation (e.g. EMIR);
 - The analysis supporting the conclusions drawn should be qualitative and quantitative.
3. When carrying out the risk assessment, ESMA closely collaborated with the ESRB. Given the complexity of the topic and conflicting priorities and limited resources, both ESMA and the ESRB did not consider it feasible to submit the risk assessment within the requested timeline. ESMA informed the Commission about this delay and the Commission agreed to an extension of the deadline to 31 March 2016. ESMA received the ESRB opinion on 9 February 2016¹.
4. The risk assessment is structured as follows. Section 2 presents the regulatory framework of MiFIR on access to CCPs and trading venues regarding ETDs. Section 3 discusses the scope of the risk assessment. Section 4 provides a brief overview of the market for ETDs, and in particular on the trading and clearing of ETDs. Section 5 presents existing access arrangements and/or links in the EEA. Section 6 assesses potential benefits and risks stemming from open access provisions for ETDs and section 7 concludes.

¹ See the ESRB opinion published under http://www.esrb.europa.eu/pub/pdf/other/160210_ESRB_response.pdf?d9ce7ccd0d551995b4cdf2d242237c03.

2. The regulatory framework for open and non-discriminatory access in MiFIR

5. MiFID II / MiFIR establishes a harmonised EU regime for non-discriminatory access to central counterparties (CCPs) and trading venues aiming at strengthening competition, price transparency and the integration of EU market infrastructures. The access provisions in MiFIR cover transferable securities and money market instruments as well as ETDs. OTC Derivatives are, in turn, covered under the access provisions in Regulation (EU) No 648/2012 (EMIR).
6. Article 35 of MiFIR requires CCPs to provide access to trading venues on a non-discriminatory basis to clear transactions executed on different trading venues. Article 36 of MiFIR requires trading venues to provide access on a non-discriminatory basis, including trade feeds, to CCPs that wish to clear transactions executed on these trading venues. Articles 35 and 36 of MiFIR establish that competent authorities (CAs) may only grant access to a particular CCP or trading venue where granting access would not: 1) require an interoperability agreement for ETDs, or 2) threaten the smooth and orderly functioning of the market, in particular due to liquidity fragmentation, or would not adversely affect systemic risk.
7. The conditions under which access will threaten the smooth and orderly functioning of the market are further specified in Article 8 of the draft RTS² on access to CCPs and trading venues ('draft RTS')³. The draft RTS also cover the conditions under which access may be denied by CCPs and trading venues. Access may be denied where it creates significant undue risk that cannot be managed based on the anticipated volume of transactions (only for access to CCPs), operational risk and complexity as well as other factors creating significant undue risks (access to CCPs and trading venues).
8. The draft RTS furthermore cover conditions under which access must be permitted to ensure that potential risks stemming from access can be mitigated. Those conditions aim to ensure that both parties to the access agreement obtain all information necessary for the access agreement to function and for maintaining sound risk management processes⁴.
9. When developing the draft RTS, ESMA extensively consulted stakeholders in order to identify all significant risks that can emerge from access and tried to address those risks.

² ESMA submitted the draft RTS to the Commission on 28 September and it is expected that the Commission will adopt those in early 2016. This report assumes that the draft RTS will be adopted in their current form.

³ "In addition to liquidity fragmentation, as defined in Article 2(1)(45) of Regulation (EU) No 600/2014, for the purposes of Articles 35(4)(b) and 36(4)(b) of that Regulation, granting access will threaten the smooth and orderly functioning of the markets, or adversely affect systemic risk, where the competent authority can provide full reasons for the denial, including evidence that the risk management procedures of one or both of the parties to the access request are insufficient to prevent granting access creating significant undue risks to third parties, and there is no remedial action that would sufficiently mitigate those inadequacies."

⁴ E.g. access agreements shall require the parties of the agreement to ensure the reception by the trading venue of all necessary information to fulfil its obligations regarding the monitoring of open interest (Article 9(2)(g) of RTS 15). See Article 9 of draft RTS 15 for further requirements.

10. While the access provisions in MiFIR are largely identical for ETDs and cash instruments, they differ in a few elements to take the higher complexity of ETDs into account:
11. Firstly, MiFIR provides for a longer timeframe for the assessment of access requests for ETDs by CCPs and trading venues vs. access requests for transferable securities and money market instruments, six months vs. three months.
12. Secondly, MiFIR requires CAs to deny an access request for ETDs should it require an interoperability arrangement pursuant to Article 2(7) of EMIR.
13. Thirdly, MiFIR provides for various transitory arrangements with respect to ETDs.
 - Article 36(5) of MiFIR specifies that trading venues offering trading in ETDs may opt out of the access provisions provided that their annual notional amount traded in ETDs falls below EUR 1,000,000 million.
 - Article 52(12) of MiFIR requires the Commission to assess by 3 July 2016 whether ETDs should be excluded from the scope of Articles 35 and 36 of MiFIR for a maximum period of 30 months on the basis of a risk assessment carried out by ESMA in consultation with the ESRB. This is the subject of this report.
 - Article 54(2) of MiFIR allows CCPs and trading venues in the case that the Commission decided not to temporarily exclude ETDs from the scope of Articles 35 and 36 of MiFIR in accordance with Article 52(12) MiFIR to apply to its CA for permission to avail itself of transitional arrangements. A CA may, after having regard to the risks resulting from the application of the access rights as regards ETDs to the orderly functioning of the relevant CCP or trading venue, decide that the relevant CCP or trading venue be exempted from the access obligations for a transitional period of 30 months.

3. Defining the scope of the risk assessment

14. The subject of this report is to assess whether the application of open and non-discriminatory access in the context of ETDs creates risks to the overall stability and orderly functioning of the financial markets in the Union. Should this report conclude that the access provisions for ETDs create risks to the overall stability and orderly functioning of financial markets, and should the Commission agree with this assessment, the Commission may adopt a delegated act to temporarily exclude ETDs from the provisions in Articles 35 and 36 of MiFIR for a period of 30 months.

15. Should this report not identify risks to the overall stability and overall functioning of the financial markets in the Union, and should the Commission concur with this assessment, the Commission will not adopt the delegated act mentioned above and the access provisions in Articles 35 and 36 will apply as from the date of application of MiFIR also to ETDs.
16. It is, in this context, important to bear in mind the definition of an ETD derivative, as relevant for the access regime in MiFIR and of an OTC-derivative, as relevant for in the access provisions of EMIR.
17. Article 2(32) of MiFIR defines an ETD as: “a derivative that is traded on a regulated market or on a third-country market considered to be equivalent to a regulated market in accordance with Article 28 of this Regulation, and as such does not fall into the definition of an OTC derivative as defined in Article 2(7) of Regulation (EU) No 648/2012 (EMIR)”.
18. EMIR defines an OTC derivative or OTC derivative contract as “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 2a of the Regulation [*EMIR*]”.
19. ESMA notes the consistency between the definitions in the two regulations: the access provisions in MiFIR for ETDs apply only to derivatives traded at least on regulated markets. Derivatives traded only on multilateral trading facilities (MTFs) or other trading facilities (OTFs) as well as executed bilaterally are covered by the access provisions in EMIR. Derivatives that are traded on regulated markets and at the same time on MTFs and/or OTFs and/or outside these trading venues do not fall under the definition of OTC derivatives in EMIR and are covered by the MiFIR access provisions. This report only considers the access provisions set out in MiFIR.
20. Furthermore, as requested by the Commission this report focusses on possible risks stemming from the access provisions (in MiFIR), and does not include a broader assessment of risks stemming from other pieces of legislation.
21. The access regime in MiFIR aims at striking the right balance between strengthening competition between EU market infrastructures and ensuring at the same time that financial stability and the smooth and orderly functioning of markets is not hampered as a consequence of granting access. The safeguards set out in Articles 35 and 36 of MiFIR and in the draft RTS provide CCPs, trading venues, and CAs with the possibility to deny access on grounds of undue significant risks that cannot be managed (CCPs and trading venues) or systemic risk considerations⁵ (CAs).

⁵ CAs may either deny access temporarily as set out in Article 54(2) of MiFIR if the Commission does not adopt a delegated act or when assessing individual access requests (Article 35(4) and 36(4) of MiFIR).

22. ESMA considers that only in case these safeguards prove to be insufficient to appropriately address risks to the stability and ensure the orderly functioning of financial markets in the Union should ETDs be temporarily exempt from the scope of the access provisions. Since the exemption would only apply for a period of 30 months, and after the end of this period the access provisions would apply to ETDs, it should also be assessed to what extent possible risks identified could be remedied within this limited period.
23. The risk assessment takes – to the extent already possible – the effect of the trading obligation for derivatives (Article 28 of MiFIR) into consideration. Derivatives to which the trading obligation applies will be required to be traded on regulated markets, MTFs, OTFs or third-country trading venues, where the third-country complies with legally binding requirements that are equivalent to the requirements for trading venues under Directive 2014/65/EU (MiFID II) and MiFIR. As an effect of the trading obligation some derivatives that are currently considered OTC may become ETDs (see paragraph 19) and therefore the access provisions set out in MiFIR may apply.
24. Since the clearing obligation is one of the preconditions for the trading obligation, this risk assessment considers the derivatives classes which will/may be subject to the clearing obligation, i.e. interest rate swaps and index credit default swaps (CDS).

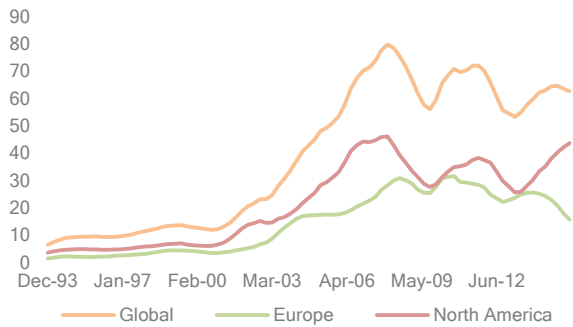
4. The market for ETDs

4.1. ETD Market Overview

25. According to BIS statistics, the size of the global ETD market in 2014 is USD 57.6tn based on notional outstanding, about one-tenth of the total global derivatives market which amounted to USD 687.2tn in 2014.
26. As Figure 1 shows, the ETD market size doubled from 1993 through 2000. From 2000 to 2007 this market grew six fold. Since then, the market has shown an overall declining trend in a more volatile environment. The market share of Europe has declined from 42% (2008-2013) to 25% in June 2015.⁶ [See Figure 2]

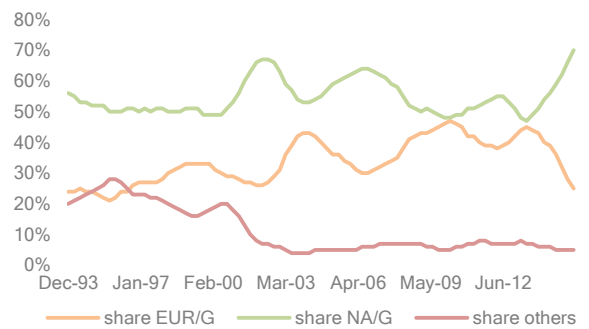
⁶ The North American market size is growing since 2012 whereas the European one has been shrinking.

FIGURE 1 GLOBAL ETD MARKET SIZE IN NOTIONAL AMOUNT OUTSTANDING (USD TN)



Note: Outstanding notionals of exchange-traded derivatives in USD tn by region; 4QMA.
Source: BIS

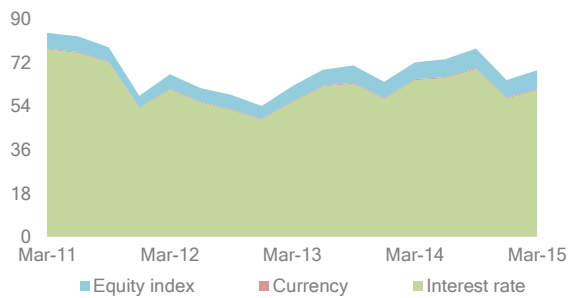
FIGURE 2 REGIONAL SHARES OF GLOBAL ETD MARKET IN NOTIONAL AMOUNT OUTSTANDING (%)



Note: Regional per cent share in terms of notionals of exchange-traded derivatives in USD tn by region; 4QMA.
Source: BIS

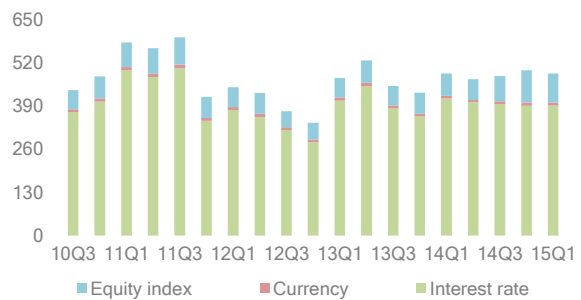
27. An important feature of the derivatives market in general, and the ETD market in particular, is the importance of interest rate-related contracts, which constitute the bulk of notional amount outstanding and turnover. [see Figure 3 and Figure 4]

FIGURE 3 ETD NOTIONAL AMOUNT OUTSTANDING (USD TN)



Note: Gross notional amounts of outstanding derivatives traded in organised exchanges by category, USD tn.
Sources: Bank for International Settlements, ESMA.

FIGURE 4 ETD TURNOVER (USD TN)

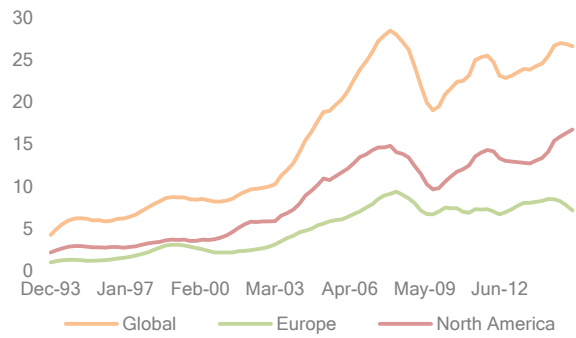


Note: Quarterly turnover in notional amounts for derivatives traded in organised exchanges by category, USD tn.
Sources: Bank for International Settlements, ESMA.

28. In terms of notional outstanding, options represent 60% of the ETD market and futures the remaining 40%, a ratio broadly mirrored across Europe and North America⁷. [See Figure 5 and Figure 6]. In recent years there has been a divergence between European and North American markets, with the former declining and the latter increasing.

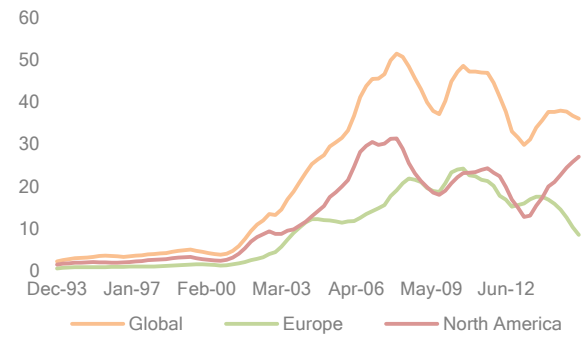
⁷ In the 90s the share of futures was larger than that for options. Over the past two decades the relative importance of both asset classes has effectively inverted.

FIGURE 5 ETD FUTURES MARKET IN NOTIONAL AMOUNT OUTSTANDING (USD TN)



Note: Outstanding notionals of exchange-traded futures in USD tn by region; 4QMA.
Source: BIS

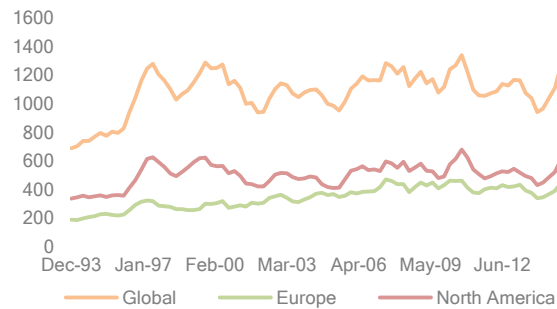
FIGURE 6 ETD OPTIONS MARKET IN NOTIONAL AMOUNT OUTSTANDING (USD TN)



Note: Outstanding notionals of exchange-traded options in USD tn by region; 4QMA.
Source: BIS

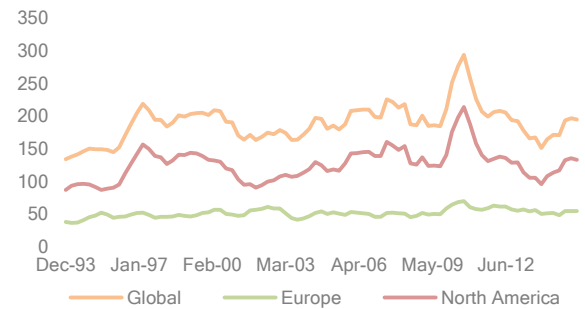
29. Compared to notional outstanding, the daily turnover in ETD futures and options shows a flatter pattern with an upward trend and higher volatility in the North American market. [See Figure 7 and Figure 8]

FIGURE 7 FUTURES - AVERAGE DAILY TURNOVER OF NOTIONAL (USD TN)



Note: Average turnover of notionals of exchange-traded futures in USD tn by region; 4QMA.
Source: BIS

FIGURE 8 OPTIONS - AVERAGE DAILY TURNOVER IN NOTIONAL (USD TN)

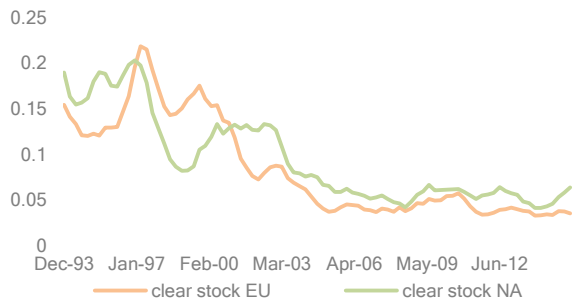


Note: Average turnover of notionals of exchange-traded options in USD tn by region; 4QMA.
Source: BIS

30. The gradual growth in daily turnover is accompanied by a significant drop in the percentage of daily cleared outstanding notional for both options and futures and in Europe and North America [see Figure 9 and Figure 10]⁸. This feature is consistent with the trend towards longer-maturity instruments for ETDs.

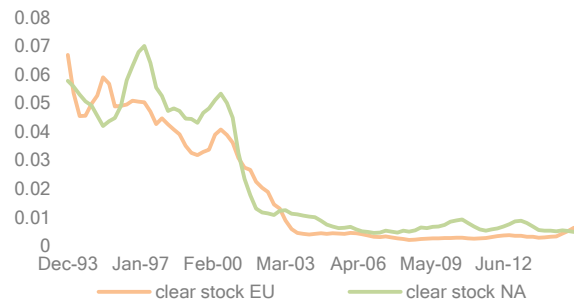
⁸ In the futures market daily turnover stood at around twenty per cent of outstanding notional being cleared daily in the late nineties and then hovered around five per cent in the 2000s. In the options market this share dropped from closer to five per cent in the late 90's to less than one per cent in the 2000s.

FIGURE 9 FUTURES: DAILY RATE OF STOCK CLEARED (% OF OUTSTANDING)



Note: Ratio of average daily turnover to outstanding for exchange-traded futures for Europe (EU) and North America (NA); per cent, 4QMA.
Sources: BIS

FIGURE 10 OPTIONS: DAILY RATE OF STOCK CLEARED (% OF OUTSTANDING)

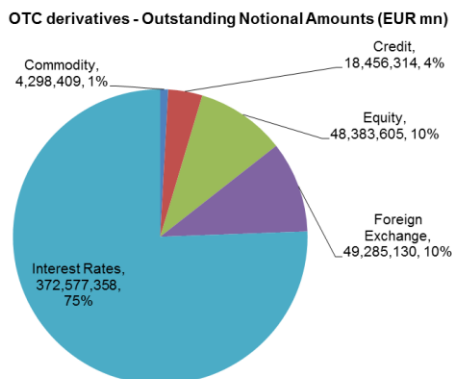


Note: Ratio of average daily turnover to outstanding for exchange-traded options for Europe (EU) and North America (NA); 4QMA.
Sources: BIS

4.2. The size of the OTC market and the clearing obligation

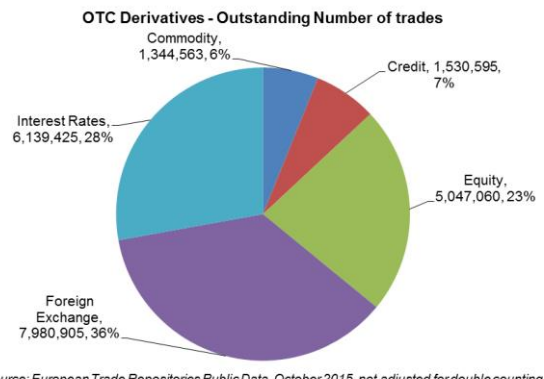
31. The European derivatives market is mainly OTC. The OTC market is dominated by interest rate derivatives (IRD) when measured by outstanding notional amounts (75% of the volumes) [see Figure 11]. When measured by outstanding number of trades, the most important asset classes of OTC derivatives are foreign-exchange (36%), interest rates (28%), and equity (23%) [see Figure 12].

FIGURE 11: OTC DERIVATIVES – OUTSTANDING NOTIONAL AMOUNT PER ASSET CLASS



Source: European Trade Repositories Public Data, October 2015, not adjusted for double counting

FIGURE 12: OTC DERIVATIVES – OUTSTANDING NUMBER OF TRADES PER ASSET CLASS



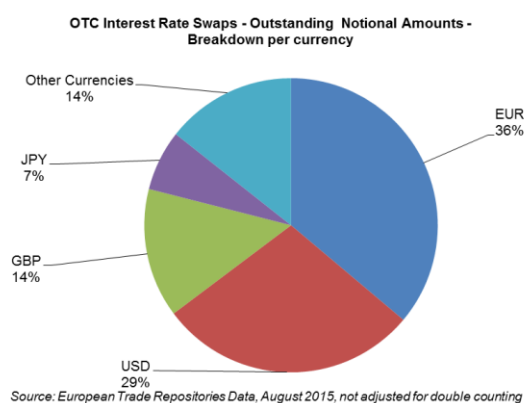
Source: European Trade Repositories Public Data, October 2015, not adjusted for double counting

32. A significant share of the OTC derivative market will eventually be brought to central clearing as a result of the clearing obligation gradually entering into force in Europe.

A first set of rules will require counterparties to clear interest rate swaps (IRS) denominated in EUR, GBP, JPY and USD (the “G4 currencies”)⁹. The second set of rules under EMIR will require mandatory clearing of certain Index Credit Default Swaps (CDS)¹⁰.

33. Given that the G4 currencies represent the bulk of the OTC IRS volumes [see **Error! Reference source not found.**] and that IRD and credit derivatives represent about 80% of outstanding notional it can be estimated that approximately 70% of the OTC derivatives market will fall under the clearing obligation as a result of those two sets of rules.

FIGURE 13: OTC INTEREST RATE SWAPS VOLUMES PER CURRENCY



34. In fact, a significant proportion of the OTC IRD market and the OTC Index CDS derivatives market is already cleared on a voluntary basis.
35. The importance of the OTC IRD market is also reflected by the number of CCPs that clear them [see Table 1 below]. There are currently six European CCPs which offer IRS clearing. Although some of those CCPs have specialised on certain sets of currencies, the most liquid contracts can be cleared by up to five different CCPs¹¹. This is the case, for example, for OTC fixed-to-float swaps on Euribor.
36. The situation is different in the case of commodity derivatives: Although there are five CCPs clearing this asset class, they have a higher degree of specialisation and little overlap in their product offering (hence there are few identical commodity derivatives contracts which are cleared by different CCPs).

⁹ The RTS on the clearing obligation for certain IRS classes denominated in the G4 currencies have been endorsed by the European Commission on 6 August 2015. Furthermore, ESMA submitted to the Commission on 10 November 2015 draft RTS for certain IRS classes denominated in NOK, PLN and SEK.

¹⁰ ESMA delivered the draft RTS on the clearing obligation for certain classes of Index CDS to the European Commission on 1 October 2015.

¹¹ The Public Register for the clearing obligation lists the CCPs authorised to clear OTC derivatives and the OTC derivative classes that they are authorised to clear. It is available under:

https://www.esma.europa.eu/sites/default/files/library/public_register_for_the_clearing_obligation_under_emir.pdf

37. For the other asset classes, FX, Equity and Credit, contracts can be cleared with two or three European CCPs, with little overlap between the sets of contracts offered for clearing.

TABLE 1: EUROPEAN CCPs CLEARING OTC DERIVATIVES

	CCP Name	Country	OTC Interest Rate	OTC Credit	OTC Commodity	OTC Equity	OTC FX
1	Nasdaq OMX	Sweden	✓	-	-	✓	✓
2	KDPW_CCP	Poland	✓	-	-	-	-
3	Eurex Clearing AG	Germany	✓	-	-	-	-
4	LCH.Clearnet SA	France	-	✓	-	-	-
5	European Commodity Clearing (ECC)	Germany	-	-	✓	-	-
6	LCH.Clearnet Limited	UK	✓	-	✓	✓	✓
7	CME Clearing Europe Limited	UK	✓	-	✓	-	-
8	LME Clear Limited	UK	-	-	✓	-	-
9	ICE Clear Europe Limited ¹²	UK	-	✓	-	-	✓
10	OMI Clear	Portugal	-	-	✓	-	-
11	ICE Clear Netherlands	Netherlands	-	-	-	✓	-
12	BME Clearing	Spain	✓	-	-	-	-
	Number of CCPs per asset class		6	2	5	3	3

38. The product clearing offer of CCPs is constantly evolving with CCPs gradually proposing new contracts for clearing. For example, BME Clearing was initially authorised to clear securities and ETDs only, and was authorised to start clearing OTC interest rate swaps only recently.

39. It can be concluded that IRD is the most relevant asset class for the open access provisions for ETDs because (1) it is the biggest ETD market; (2) some OTC IRD contracts will soon be subject to the clearing obligation, and potentially to the upcoming trading obligation, which might transform some of them into ETD contracts; and (3) even though the clearing market in this asset class is highly

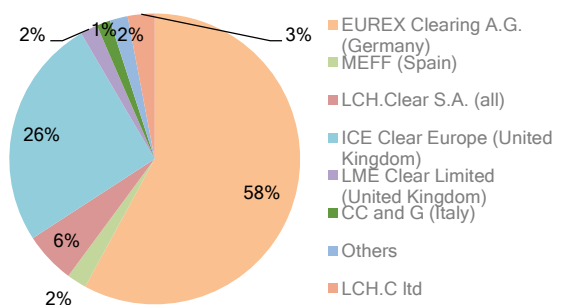
¹² EMIR license is still pending.

concentrated there is a situation of competition with several CCPs that are clearing the same contracts.

4.3. Overview of CCPs' and trading venues' activities in the ETD market

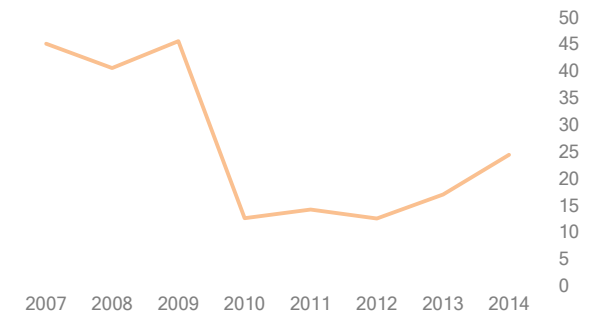
40. It is difficult to get hold of comprehensive data on trading and clearing of ETDs which cover all trading venues and CCPs active in the ETD market in the EEA. However, based on the data ESMA has access to, there is a high degree of concentration in trading on regulated markets and in central clearing for ETDs in Europe. In any one derivative class, a couple of major players typically dominate. Furthermore, many of these dominant trading and clearing structures are part of a vertically integrated group.
41. In terms of clearing, there is a small number of CCPs operating in Europe and the industry is highly concentrated. A few large players dominate (a couple of CCPs account for the bulk of activity in terms of value traded or number of trades) and there are several smaller players. There are also some important players in niche markets [see Figure 14].
42. The average trade size for ETDs cleared fell significantly after 2009 and has been recovering somewhat over the last two years. [See Figure 15] There is a big dispersion, with the larger CCPs' average trade size cleared being a multiple of the average size cleared by smaller CCPs.
43. A more detailed breakdown of the relative market shares in 2014 of European CCPs for commodity derivatives and financials for both options and futures markets is presented in Annex I Breakdown of CCPs' market shares for commodity ETDs and financial ETDs.

FIGURE 14 SHARE OF EUROPEAN CCPs OF ETD TRADES CLEARED (INCL. LCH.C LTD) (2014)



Note: Share of number of transactions exchange-traded derivatives by CCPs in 2014
Sources: ECB, ESMA.

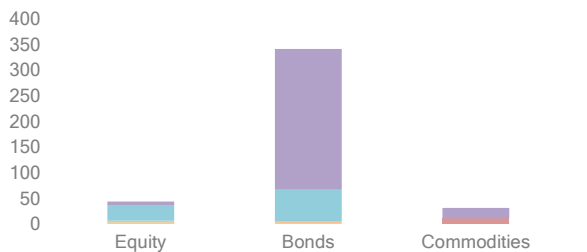
FIGURE 15 AVERAGE TRADE SIZE FOR ETDs CLEARED IN EUROPE (EUR '000)



Note: Average trade size for exchange traded derivatives cleared by European CCPs; annual data.
Sources: ECB, ESMA.

44. In terms of trading, similar as for central clearing of ETDs, there is no comprehensive data on trading of ETDs. Information published on the FESE website combined with information provided by LSEG, reveals a strong concentration of trading activities on very few regulated markets [see **Error! eference source not found.**]. Turnover in terms of value traded in ETDs in 2014 reached EUR 400tn. The market is dominated by derivatives with bonds as underlying [IRD] which constitute nearly 80% of activity in 2014. The remainder of the market is divided fairly evenly between equities and commodities as underlying.

FIGURE 16 MARKET SHARE OF REGULATED MARKETS IN ETDs IN EUROPE IN 2014 IN TERMS OF VALUE TRADED [EUR '000]



Note: Derivative turnover by exchange and ETD type, in EUR tn. Exchanges include: ICE Futures Europe (ICE), Deutsche Boerse Group DBG, London Letals Exchange (LME), Euronext, and Others (other EU exchanges that are members of FESE and LSEG).
Sources: FESE, LSEG

45. Trading of ETDs in Europe is concentrated on very few regulated markets:

- Trading in equity derivatives is concentrated on Eurex Exchange, both in terms of value traded as well as contracts traded. In terms of value traded over 70 per cent of trading takes place on Eurex, with ICE and Euronext holding another 15% and 7% respectively. Borsa Italiana (3%) and BME (2%) held small but significant stakes when compared with the remaining regulated markets.

- Trading in bond derivatives (bond futures and options) in terms of value traded is concentrated on ICE Futures (about 80%) followed by Eurex Exchange (18%). In terms of contracts traded, the market is dominated by ICE Futures and Eurex Exchange.
- Trading in Commodity derivatives is dominated by ICE Futures and LME, with about 2/3 of trading taking place on ICE Futures, and about 1/3 on LME.

5. Existing links and access arrangements for ETDs and OTC-Derivatives

46. The concept of open access is not new and currently there are several links / access arrangements ('arrangements') in place, covering both ETDs and OTC-Derivatives, in the EEA and globally. Table 2 presents some examples of existing arrangements, but is not a comprehensive overview. The arrangements listed have been successfully operated, with regulatory approval, by infrastructures that are part of vertically integrated structures (e.g. ICE, Eurex) as well as horizontal infrastructures (e.g. LCH.Clearnet, TOM MTF).
47. Most arrangements cover only small volumes. No arrangement is currently meeting the requirements of the MiFIR access provisions. However, the examples serve to illustrate that similar arrangements are operable. Some access arrangements are between CCPs and trading systems currently outside the scope of MiFID II (e.g. for OTC-Derivatives). Those arrangements are nevertheless included since it is expected that a number of the trading systems that are party to these arrangements will be covered by the MiFID II definitions of trading venues.
48. While the fact that a number of arrangements already exist does not preclude that these are not creating risks to the smooth and orderly functioning of markets, it demonstrates that the possible risks stemming from such arrangements can be dealt with effectively by the market.
49. Following the introduction of the trading obligation for OTC-Derivatives in the US, different swap execution facilities (SEFs) were established. While SEFs are not required to connect to every CCP, there are rules on open access in the Dodd-Frank Act¹³ addressed to derivatives clearing organizations (DCO). Section 723(a)(3) of the Dodd-Frank-Act prescribes that all swaps with the same terms and conditions are economically equivalent and may be netted within the DCO. However, it should be noted that the definition of economic equivalence in the Dodd-Frank Acts relies on a narrower concept than the EU approach and that the US regime has been only in place for a few years.

¹³ Dodd-Frank Wall Street Reform and Consumer Protection Act (H.R. 4173); 5 January 2010; http://www.cftc.gov/idc/groups/public/@swaps/documents/file/hr4173_enrolledbill.pdf

50. Furthermore, DCO are required to provide non-discriminatory clearing of swaps executed bilaterally, through the rules of an unaffiliated designated contract market or a SEF. The access rules under Dodd-Frank therefore are comparable to the access regime in MiFIR. 18 SEFs have been registered by the CFTC, and 5 SEFs have been temporarily registered, many of them clearing through various CCPs.
51. When looking at the situation in the EU and the US, two cases can be observed. On the one hand, the case where only one CCP serves several trading venues such as the options and clearing cooperation (OCC) in the US¹⁴, and on the other hand the case of competition among CCPs, for instance in the EU equities market or in the US where several CCPs serve one SEF. It has to be noted that the case of OCC in the US is a monopoly imposed by Regulation since the SEC granted the OCC the exclusive right to clear equity options.

¹⁴ See paragraphs 72 and 73.

TABLE 2: EXAMPLES OF LINKS / ACCESS ARRANGEMENTS FOR ETDs AND OTC-DERIVATIVES

Derivative product	OTC /ETD	Jurisdiction	Description
Equity derivatives	ETD	Intra-EEA	Linked order book between LSEDM and Oslo Børs for index and single Norwegian stock futures and options. Clearing offered through LCH. Clearnet (LCH) or SIX x-clear.
	ETD	Intra-EEA	ICE Clear Netherlands clears European equity derivatives for TOM MTF. ICE Clear does not net contracts traded on TOM MTF with contracts traded on ICE Futures Europe.
	ETD	EEA-Korea	Eurex /KRX link gives Eurex members direct access to trading of KOSPI 200 options after Korean trading hours. Eurex facilitates the transfer of positions and open interest to KRX the next day in time for day trading in Korea. ¹⁵
	ETD	EEA-Taiwan	Eurex/TAIFEX link gives Eurex members direct access to TAIFEX options and futures after Taiwanese trading hours. Eurex facilitates the transfer of positions and open interest to TAIFEX the next day in time for day trading in Taiwan. ¹⁶
Commodity derivatives	OTC	Intra-EEA; EEA-Singapore	LCH.Clearnet clears freight derivatives for ClearTrade and the Baltic Exchange. Cleartrade connects to three clearing houses: LCH.Clearnet, SGX of Singapore and Nos Clearing (owned by NASDAQ OMX).
	ETD	Intra-EEA	LCH.C.SA provides clearing services for Euronext Derivatives markets for a broad range of futures and option contracts covering soft and agricultural products.
	ETD and OTC	Intra-EEA	ECC AG provides clearing services for several partner exchanges (CEGH, EEX, EPEX Spot, Norexeco, Power Exchange Central Europe, Powernext).
Repo	OTC	Intra-EEA, globally	LCH RepoClear clears for ICAP, brokertec, MTS and OTC markets

¹⁵ Eurex Exchange lists daily futures on the KOSPI 200 Options to provide market participants trading and hedging opportunities during core European and North American trading hours. At the end of the Eurex trading session, variation margin is paid or received in Korean Won. Positions are netted on a financial beneficiary and transferred from Eurex clearing to KRX. KRX then transfers this information to the relevant KRX member for entry of the corresponding KOSPI 200 options into the KRX system via the OTC block trading functionality prior to its market opening. Therefore, all open interest in KOSPI 200 Options is consolidated at KRX.

See for more details: http://www.eurexchange.com/blob/115674/0a0349ef9f7059c9288f72f84bf56fb4/data/factsheet_24h_trading_clearing_kospi_200_options_2013_en.pdf.pdf

¹⁶ Eurex Exchange lists daily futures on TAIEX futures and options to provide market participants trading and hedging opportunities during core European and North American trading hours. At the end of the Eurex trading session variation margin is paid or received in New Taiwan Dollars. Positions are netted on a financial beneficiary basis and transferred from Eurex clearing to TAIFEX. Prior to its market opening, TAIFEX transfers this information to the respective TAIFEX member for entry of the corresponding TAIFEX Futures or Options positions into the TAIFEX system via the TAIFEX trading facility. See for more details : http://www.eurexchange.com/blob/880400/2da4747eb7de2a0026900093ae38cdb8/data/factsheet_eurex_taifex.pdf

	OTC	Intra-EEA	Eurex Clearing offers clearing services for the securities lending market supporting bilaterally negotiated transactions and transactions excluded on electronic trading platforms.
OTC-Derivatives	OTC	Intra-EEA, globally	SwapClear and ForexClear operate a link with multiple approved trading systems including MarkitSERV, SwapEx, Traiana, TradeWeb, TruEx, Javelin, etc.

6. Risk assessment of open access regarding ETDs

52. The access provisions in MiFIR aim at strengthening competition and choice between trading venues and CCPs while recognising that market infrastructures are important pillars of the financial system and crucial for its stability. MiFIR/MiFID II and EMIR therefore provide for a stringent regulatory framework governing the activities of trading venues and CCPs and ensuring sound risk management practices.
53. This approach is reflected in the access provisions of Articles 35 and 36 of MiFIR (and Articles 7 and 8 of EMIR). Article 35 of MiFIR focuses on strengthening competition between trading venues by giving them the choice to decide which CCP(s) they want to use for clearing trades executed on their systems. Article 36 of MiFIR aims at ensuring choice and competition between CCPs by allowing those a right of non-discriminatory access to trading venues.
54. The assessment presented in the following is qualitative in nature and builds on the experience that ESMA acquired when developing the draft RTS on access to CCPs and trading venues and feedback received from selected stakeholders representing both trading venues and CCPs. It focusses on a description of the risks and their likelihood and magnitude should they materialise. Since the risk factors to be assessed and their implications may differ between access to CCPs and access to trading venues, they are covered in different sections. Section 6.1 assesses the risks stemming from non-discriminatory access to CCPs (Article 35 of MiFIR) and section 6.2 the risks stemming from non-discriminatory access to trading venues (Article 36 of MiFIR),
55. ESMA had envisaged supplementing the qualitative assessment with quantitative evidence. However, since there are to date no access agreements under MiFIR in place, there exists no data that could be used for a quantitative assessment.

6.1. Risks from open and non-discriminatory access to CCPs

56. Article 35 of MiFIR grants trading venues the right to have their trades cleared at the CCP of their choice. This provision aims at levelling the playing field on which trading venues compete, and in particular their capability to offer comparable trading and clearing costs.
57. Trading and clearing costs are inextricably interlinked since the customer's choice of a trading venue is, among others, based on total costs, i.e. trading and clearing costs. If a trading venue can offer only competitive trading costs, but – due to the lack of access to a CCP providing competitive clearing costs and delivering margin netting benefits – no attractive clearing conditions, it may lose some of its business or exit the market. The draft RTS require therefore CCPs to apply objective criteria

when setting clearing fees and to not discriminate across trading venues, thereby trying to ensure that competition is not distorted by discriminatory clearing fees.

58. It is expected that with the introduction of organised trading facilities (OTFs) as a new category of trading venue for non-equity instruments, many new trading venue providers that currently operate outside a regulated environment (e.g. dark pools, crossing networks, voice brokerage systems) will emerge. The application of Article 35 (and 36) of MiFIR will be crucial to allow these new trading venues, and in particular those that are not part of a vertically integrated structure, to access the CCP of their choice in order to compete with incumbent trading venues on a level playing field.
59. This is of particular relevance with the introduction of the trading obligation for certain derivatives which reflects the G20 agreement to trade standardised and sufficiently liquid OTC-derivatives on trading venues.¹⁷ It is expected that the trading obligation will transfer the trading of a significant number of OTC-derivatives to trading venues (regulated markets, MTFs and OTFs). If some of those derivatives are also traded on regulated markets they will be covered by the definition of ETDs.
60. The trading obligation and the potentially bigger size of the ETD market will create incentives for the market entry of new trading venues. To avoid a 'first mover advantage' - outcome, where the first trading venue offering trading in instruments covered by the trading obligation concentrates all trading of those instruments, non-discriminatory access to CCPs is important. Without these provisions it is possible that this market will become more concentrated, limiting variety and choice to market participants and the consequent negative impact on price, choice and variety for end users.¹⁸
61. Granting open access can increase risks for the CCPs subject to the access request. Risks can stem from various sources such as clearing a larger number and/or a broader range of instruments, increased operational risks and complexity, and any other risks that could cause a threat to the economic viability of the CCP. If those risks materialise at the CCP level, they could potentially impact third parties, including clearing members that are also part of other CCPs, and potentially increase systemic risk.
62. EMIR and MiFIR provide for safeguards to deal with these types of risks. First of all, CCPs are regulated by EMIR which establishes organisational conduct of business and prudential standards for CCPs. EMIR also caters for some macroprudential considerations, e.g. regarding the setting of margin requirements.

¹⁷ See leaders' statement - the Pittsburgh summit, September 24-25, 2009. https://g20.org/wp-content/uploads/2014/12/Pittsburgh_Declaration_0.pdf

¹⁸ While it may be argued that the denial of access to a CCP could be circumvented by the establishment of a new CCP, it has to be taken into account that the costs and regulatory requirements for establishing and running a CCP are – on average - significantly higher than the cost for establishing and running a trading venue. For instance, given the nature and risks of a CCP's business capital requirements are higher for CCPs, risk management standards are more complex. It can be concluded therefore that the denial of access to a CCP may not be circumvented by the establishment of a new CCP in the short run.

63. Second, MiFIR and the draft RTS allow CCPs to deny access if this creates undue risks that cannot be managed. Grounds for denial can be in particular: the anticipated volume of transactions to be cleared, operational risk and complexity as well as other factors creating significant undue risks such as legal risks.
64. More specifically, the draft RTS clarify that a CCP might deny an access request in case it covers instruments currently not cleared by the CCP and for which it is not possible to launch with reasonable effort a clearing service consistent with EMIR. It thereby tackles the risk that the risk profile of CCPs may be inappropriately altered by the introduction of the non-discriminatory access provisions. The draft RTS also specify that CCPs may exclude contracts from the netting process where the legal and basis risk related to that netting process applied to an economically equivalent contract traded on different trading venues is not sufficiently mitigated, thereby addressing a further source of increased risk to the CCP stemming from access.
65. Furthermore, MiFIR allows CAs to deny access should this threaten the smooth and orderly functioning of markets or adversely affect systemic risk or require an interoperability agreement. To ensure that CAs have access to all the data needed for such an assessment, close cooperation throughout the process, including the exchange of information, between CAs will be key.
66. Access provisions to CCPs may under certain circumstances lead to a more concentrated clearing market in the EU. Such a situation could arise if market participants consider some CCPs as more attractive than others and trading venues therefore opt for clearing their trades via these CCPs. In an extreme, but unlikely, scenario this could result in the emergence of only one CCP clearing a particular ETD. This outcome would have the benefit of maximising netting efficiency and the use of collateral, but there is a risk that the CCP might abuse its dominant position, for instance by increasing clearing fees, and it would expose the financial system to a single point of failure. While the single provider issue could be dealt with from a competition perspective, given the lack of a recovery and resolution regime for CCPs in the EU, this could potentially - depending on the size and systemic importance of that CCP - have significant consequences for financial stability. However, it should be stressed that such an outcome may also occur in the absence of open access.
67. It appears very unlikely that the scenario of a single CCP emerges given the current market structure and market dynamics. First, the degree to which a CCP may abuse its dominant position is limited by market discipline and the potential entry of new market participants clearing that product. The access provisions, and in particular Article 36 of MiFIR, which grants CCPs non-discriminatory access to trading venues and complements Article 35 of MiFIR, reduce existing barriers to entry for CCPs. Article 36 of MiFIR thereby aims at increasing competition between CCPs. Second, when assessing an access request a competent authority will have to deny access in case the requested access increases 'single point of failure' risks and thereby jeopardises financial stability. Hence, ESMA believes MiFIR in combination with the RTS drafted by ESMA provides for the necessary tools already to ensure a more

competitive market structure and to address potential 'single point of failure' concerns should they emerge.

68. Some stakeholders expressed concerns about the impact of the access provisions on competition dynamics for CCPs, and raised concerns that either clearing may be a natural monopoly or that the access provisions may accelerate and reinforce the creation of natural monopolies. Even though it is not within the scope of this report to assess this question which goes beyond the access provisions, a short overview on the debate on natural monopolies in the context of CCPs is presented in Box 1.

BOX 1 MARKET FAILURES, NATURAL MONOPOLIES AND CCPs

According to economic theory natural monopolies result from the presence of market failures: externalities, public goods, asymmetric information and increasing returns to scale or decreasing average costs. The concept of natural monopoly generally covers activities requiring a high level of fixed investment to develop the infrastructure, where barriers to entry (economies of scale) or economies of scope are so high that it is worth making the investment only once, and where one producer will operate more efficiently than two or more (based on average costs). In these cases, if there is only one company in the market, prices for consumers may actually be lower than if there is competition, because of the way average costs drop with additional users. In a market with two companies producing the same item, it is cheaper to produce the same output with only company 1, with the same level of production being more expensive when company 2 joins the market.

Therefore, a natural monopoly gives rise to a potential conflict between cost efficiency and competition, with an increased number of competitors leading to some loss of scale efficiencies.

The typically quoted examples of natural monopolies are utilities (electricity, telecommunication, water, gas, and oil) and transport (railways), with natural monopoly elements being centred on networks (Yarrow 1994). As Yarrow points out, whether or not an industry is a natural monopoly depends upon technology/costs and demand. Natural monopolies can disappear or emerge as demand expands or contracts, even if production conditions do not change, or just by changes in technology. The policy approach towards network industries has changed over the time. Until the 1980s, there seemed to be general agreement that most segments of the network industries were natural monopolies. However, during the 1990s, a shift in the regulation paradigm of the network industries occurred and competition was introduced in many segments. As a result, many network industries lost their status as public institutions and were transformed into corporations and eventually privatised.

In the case of clearing, the debate on whether this represents a natural monopoly has been going on for some time and is still alive. It is a question of how substantial fixed vs. marginal costs are. Some argue that in clearing the marginal cost is close to zero; however, some CCPs indicated that not all costs were fixed, that personnel costs could change, and expenditures directed at innovation were significant and "lumpy" as CCP activity increases.

Some academics do agree with the natural monopoly concept, while some others refute it, however most of the assessment is done for CSDs/ICSDs rather than CCPs. (see Rochet (2005), Bliss, Papathanassiou (2006), Pirrong (2007)). Opposing views are expressed by Van Cayseele/Voor de Mededinging (2005), Serifsoy/WeiB (2005). The debate has been on for a long time. In fact, the Chicago FED and the ECB (European Central Bank – The role of central counterparties, 2007) disagreed with the view on natural monopolies.

69. OTC-Derivatives and ETDs are, due to their long maturities and high leverage effects, more complex than transferable securities and money-market instruments that are mostly settled in the course of some days. This higher complexity of ETDs concerning access is already reflected in Article 35 (and 36). The access regime for ETDs is mirrored by a similar access regime for OTC-Derivatives in EMIR, with the main difference that CCPs under EMIR are not subject to the non-discriminatory treatment of contracts in terms of collateral requirements and netting of economically equivalent contracts under certain conditions and cross-margining.
70. It is generally accepted that OTC-derivatives are more complex and less standardised than ETDs. While comparing the access provisions in MiFIR and EMIR is not the subject of this report it should nevertheless be noted that the EMIR access provisions for OTC-Derivatives have been applied for several years already and no systemic risks stemming from access agreement concerning OTC-Derivatives could be observed so far.
71. Some stakeholders raised concerns that the trading and clearing obligation for OTC-derivatives require a different treatment concerning access for ETDs. ESMA does not consider that this is the case. The different nature of OTC-derivatives is already catered for in the procedure for determining classes of derivatives subject to the trading and clearing obligation. Both the trading and clearing obligation aim at reducing systemic risk and increasing the transparency of the financial system, and acknowledge that in order to deliver this outcome it is important to properly identify the derivatives to which those obligations shall apply:
 - For the clearing obligation, Article 5(4) of EMIR and Article 7 of the Commission Delegated Regulation (EU) No 149/2013 specify the criteria to be taken into account when evaluating which derivative classes are appropriate for the clearing obligation. In particular, the degree of standardisation and of operational process of the relevant class of OTC derivatives, their volume and liquidity and the availability of fair, reliable and generally accepted pricing information on these classes needs to be assessed.
 - For the trading obligation, the process for identifying derivatives that should be subject to the trading obligation is set out in Article 32 of MiFIR and further

specified in ESMA's draft RTS 4¹⁹. Key characteristics to be taken into consideration are whether: (i) the class of derivatives is subject to the clearing obligation, (ii) it is admitted to trading or traded on at least one trading venue and (iii) there is sufficient third-party buying and selling interest in that class of derivatives.

72. It might be possible to draw some insight from looking at market infrastructures in other jurisdictions. For instance, in the US, the Options Clearing Corporation (OCC) is the sole clearing organisation for all securities options exchanges in the US. One single clearing pot allows the 13 option exchanges to offset their open interest in that pot against all correlated positions of the other member exchanges allowing for competition at the level of the exchanges.²⁰ This example provides some insight on the effects of a CCP serving multiple trading venues, and demonstrates that a market environment with a CCP serving several trading venues can function efficiently and does not result in unmanageable systemic risks.
73. It is important to stress three factors in that context: 1) clearing through the OCC is mandated by the SEC, no other CCP may be used; 2) this is reflected in the ownership structure of OCC which is owned equally by the options exchanges for which it provides clearing. OCC operates hence as a utility whereas CCPs in the EEA are either exchange-owned or a combination of user- and exchange owned²¹; 3) equity options are issued by OCC, which creates the contract terms and specifications, and not by the trading venues on which the contract is traded. This approach ensures that all contracts are fully fungible.
74. In summary, in ESMA's opinion, the EU regulatory framework already establishes strong safeguards to avoid that the access provisions bring undue risks to CCPs or increase systemic risk. While it cannot be ruled out that new risks may emerge, based on the examples of links already in existence and the assessment provided in this report, it appears that the available tools are sufficient to tackle those risks. Furthermore, the trading obligation calls for maintaining open and non-discriminatory access to CCPs to allow for a competitive market environment at the trading level and prevent the emergence of dominant market positions and market inefficiencies that might potentially also reach a systemic dimension.

6.2. Risks from open and non-discriminatory access to trading venues

75. Article 36 of MiFIR grants CCPs the right to trade feeds from trading venues on a non-discriminatory basis. This provision aims at enabling CCPs to clear trades

¹⁹ ESMA/2015/1464, submitted to the Commission on 28 September 2015.

²⁰ Case No COMP/6166-DEUTSCHE BOERSE /NYSE EURONEXT, Regulation (EC) No 139/2004 merger procedure

²¹ It should be noted that in 2012 OCC has been designated as a Systemically Important Financial Market Utility (SIFMU) by the Financial Stability Oversight Council (FSOC) as part of the Dodd-Frank financial overhaul law. SIFMUs are entities whose failure or disruption could threaten the stability of the [United States financial system](#) and are subject to heightened oversight by the US financial regulator, such as expanded recovery and resolution plan requirements, and broader risk management requirements.

executed on a particular trading venue, thereby enabling customers to clear with the CCP of their choice. Article 36 of MiFIR complements Article 35 of MiFIR and is essential for fostering competition, increasing innovation and lowering costs at the clearing level.

76. Open access to trading venues may lead to a situation where multiple CCPs clear for one trading venue. A multiple CCP environment will allow customers to choose the CCP that serves their interest best or to consolidate their trade flow into the CCP of their choice. Furthermore, a multiple CCP environment could contribute to reducing systemic risk due to the substitutability of CCPs and avoidance of a single point of failure. In case of the failure of one CCP, other CCPs can continue clearing trades executed on that trading venue and the trading venue is not forced to halt trading in case of a failure of a CCP.
77. Access to trading venues may create risks. First, risks may arise at the level of the trading venues that are subject to an access request. MiFIR and the draft RTS provide for the possibility for trading venues to deny access if it creates significant undue risk that cannot be managed. Grounds for denying access by trading venues are in particular operational risk and complexity, the incompatibility of trading venues' rules and CCPs' rules as well as the threat to the economic viability of the trading venue.
78. Second, access to trading venues may trigger systemic risks. In this context, two scenarios need to be distinguished: 1) a scenario where no links, such as interoperability arrangements, are in place between the competing CCPs, and 2) a scenario with links between the CCPs.
79. Scenario 1 Multiple CCP environment with no links: Several academic studies consider that a multiple CCP environment with no links leads to reduced netting efficiency, an increase of the counterparty exposures of CCPs and higher collateral needs (Duffie and Zhu (2011)). Basically, without links clearing members (CM) would need to maintain their positions in different CCPs, thus leading to netting inefficiencies. In case CMs maintain their positions in one single CCP to exploit the collateral efficiency, they will not be able to trade with CMs of other CCPs, thus leading to a situation of liquidity fragmentation²². Finally, clearing by multiple CCPs with no links may reinforce negative feedback loops and procyclicality in case of a decrease in prices of financial instruments (Zigrand (2010))²³.

²² Article 2(1)(45) of MiFIR defines liquidity fragmentation as "a situation in which: (a) participants in a trading venue are unable to conclude transactions with one or more other participants in that venue because of the absence of clearing arrangements to which all participants have access to; or (b) a clearing member or its clients would be forced to hold their position in a financial instrument in more than one CCP which would limit the potential for the netting of financial exposures;"

²³ Zigrand (2010) explores CCP effects on systemic stability, and raises the question whether the number of CCP matters. CCPs will affect price dynamics in the financial markets (endogenous risk). The effects of margining, mark-to-market, feedback loops and procyclicality are different in the case of a single CCP environment and a multiple CCP environment. In the case of a financial institution trading with another with exposures that net out, if both are cleared by the same CCP, a deterioration in the markets leads to no margin calls, and the endogenous risk channel will not be materially magnified by those two exposures. But if both are cleared on two CCPs with no links, an increase in volatility will lead, regardless of the direction of the markets, to margin calls and a selling of risk, with consequent risk aversion, price decrease and increase in correlations.

80. It should be stressed that liquidity fragmentation per se does not necessarily undermine the smooth and orderly functioning of financial markets and that the risks of liquidity fragmentation needs to be balanced against the benefits of a multiple CCP environment both from a systemic risk and a customer perspective.
81. Given the high collateral needs and netting inefficiencies, access to trading venues without links appears only of limited commercial interest, in particular for smaller CCPs. However, it may be attractive for CCPs of a significant size already serving many clients to increase the attractiveness of its services and to attract more business.
82. In order to protect small trading venues (and CCPs that are connected by close links to this trading venue), Article 36(5) provides for the possibility to temporarily exempt smaller trading venues offering trading in ETDs for a period of 30 months from the access provisions. This transitional exemption may be extended as long as the annual notional amount traded remains below a threshold of EUR 1,000,000 million.²⁴
83. Furthermore, should CAs consider that a multiple CCP environment without links threatens the smooth and orderly functioning of financial markets or would adversely affect systemic risk, they will always be in the position to deny access. It therefore can be reasonably assumed that it is unlikely that the first scenario will lead to systemic risks.
84. Scenario 2 Multiple CCP environment with links: In this scenario many of the risks that may arise in an environment with no links (Scenario 1), such as the duplication of margin requirements or liquidity fragmentation, can be addressed by establishing linking arrangements between CCPs, in particular interoperability. Links could allow two market participants that are members of different CCPs to transact with each other, leaving the clearing aspect to the operation of the link between CCPs and therefore maintaining their exposures at the relevant CCP. Interoperability may contribute to the resolution of inefficiencies associated with fragmentation of collateral.
85. However, interoperability introduces a significant element of complexity in the overall risk management of interoperable CCPs and legal and operational risks to the clearing system, especially as the number of links between CCPs increase. The current absence of a recovery and resolution regime for CCPs may lead to significant implications in case of the default of an interoperable CCP.
86. It is therefore crucial that in an environment of linked CCPs, CCPs put in place arrangements to manage the extra risk created by interoperability. EMIR details specific requirements for interoperability arrangements and ESMA guidelines on

²⁴Trading venues (and CCPs that are connected by close links to this trading venue) may not benefit from the access provisions during the duration of the opt-out.

interoperability further specify the conditions that interoperability arrangements need to meet to be authorised.²⁵

87. In the case of ETDs, Scenario 2 would only materialise because of commercial interest and not due to the MiFIR access requirements, given that the latter limit the non-discriminatory access to trading venues (and CCPs) for ETDs to requests which do not require an interoperability agreement. Should access requests including voluntary interoperability arrangements materialise due to commercial interests, CAs will nevertheless have to deny access should they consider that the voluntary interoperability arrangement would threaten the smooth and orderly functioning of financial markets or adversely affect systemic risk.
88. While there are multiple cases of CCPs clearing EU equities for various trading venues, in particular for MTFs, there is currently only one case of a CCP clearing ETDs listed on more than one trading venue: LCH.Clearnet Ltd clears index and single Norwegian stock futures and options listed on Oslo Bors and LSEDM. This agreement includes an interoperability scheme with SIX-x Clear and is operational since March 2014. While it is unclear whether this agreement would be covered by the MiFIR access provisions (this would only be the case where it concerns a voluntary interoperability requirement), it can be noted that to date no macro-prudential concerns stemming from this agreement have been expressed.
89. To summarise, given that access can be denied for ETDs if it requires interoperability and the existing provisions in MiFIR that allow to deny access, it is in the current environment unlikely that access to trading venues would threaten the smooth and orderly functioning of financial markets or adversely affect systemic risk.

7. Conclusion

90. This report analysed the risks of the open and non-discriminatory access regime to CCPs and trading venues of MiFIR regarding ETDs for the overall stability and the smooth and orderly functioning of financial markets in the Union. In particular, it assessed whether in light of those risks, and their likelihood and magnitude if they materialise, it should be recommended to the Commission to adopt a delegated act temporarily excluding ETDs from the scope of the access provisions in MiFIR.
91. The analysis of the market revealed a high degree of concentration in trading on regulated markets and in central clearing for ETDs in Europe. Most of the market infrastructures with a significant market share are part of a vertically integrated group.

²⁵ While the provisions of Title V in EMIR apply only to transferable securities and money market instruments, interoperability in respect of derivative instruments (including OTC derivative instruments) is permitted under EMIR. CAs and ESMA agreed at the time of the adoption of the Guidelines that should interoperability arrangements on (OTC) derivatives arise, the Guidelines and Recommendations should apply as a basis for CAs' risk assessment. However, the guidelines do not specifically cater for interoperability arrangements for ETDs.

92. Given the lack of operating access arrangements for ETDs that are MiFIR-compliant, this report only covers a qualitative assessment. ESMA was not in a position to carry out a detailed quantitative assessment as requested by the Commission
93. The analysis of the possible risks stemming from access regarding ETDs did not identify risks that could not be addressed within the existing framework. Overall, the risks stemming from access related to ETDs are already appropriately covered in Article 35 and 36 of MiFIR and the draft RTS. It therefore cannot be concluded that ETDs should be temporarily exempted from the access provisions.
94. Concerning access to CCPs (Article 35 of MiFIR), it appears that risks that could emerge from access to CCPs are sufficiently addressed in MiFIR and ESMA's draft RTS. Furthermore, to the extent that the trading obligation will transfer the trading of OTC-derivatives on regulated markets and those derivatives will therefore be covered by the definition of ETDs, it is considered important to apply Article 35 also for ETDs to allow for a competitive market environment and prevent the emergence of dominant market positions and market inefficiencies.
95. Concerning access to trading venues (Article 36 of MiFIR), given the already strong restrictions embedded in MiFIR and having in mind that access in the context of ETDs may be denied in case interoperability arrangements are needed, it is considered unlikely to create systemic risks. In case a multiple CCP environment would threaten the smooth and orderly functioning of the market, in particular due to liquidity fragmentation, CAs are required to deny access
96. While one has to bear in mind that changes in behaviour are possible and may entail new risks. ESMA expects that the legislative framework in MiFIR and EMIR provides for sufficient safeguards to tackle such risks in the context of open access. Nevertheless, it will be important to closely monitor market developments. The MiFIR/MiFID II review provides for the Commission, after consulting ESMA, to assess the application of Articles 35 and 36 of MiFIR. ESMA intends to assess in this context also the effects of open access for ETDs on financial stability.

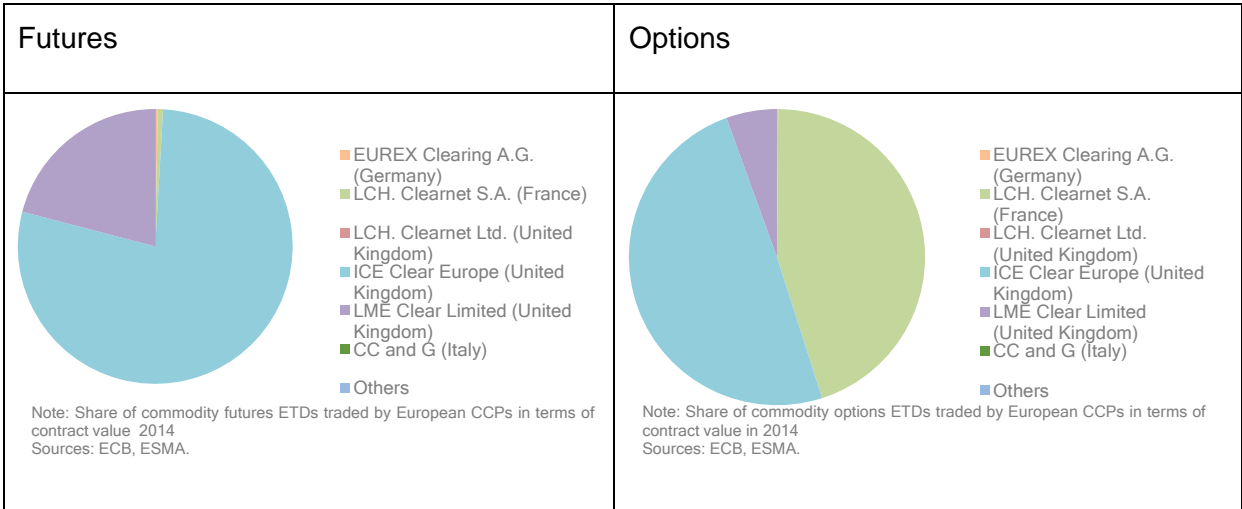
Annexes

Annex I Breakdown of CCPs' market shares for commodity ETDs and financial ETDs

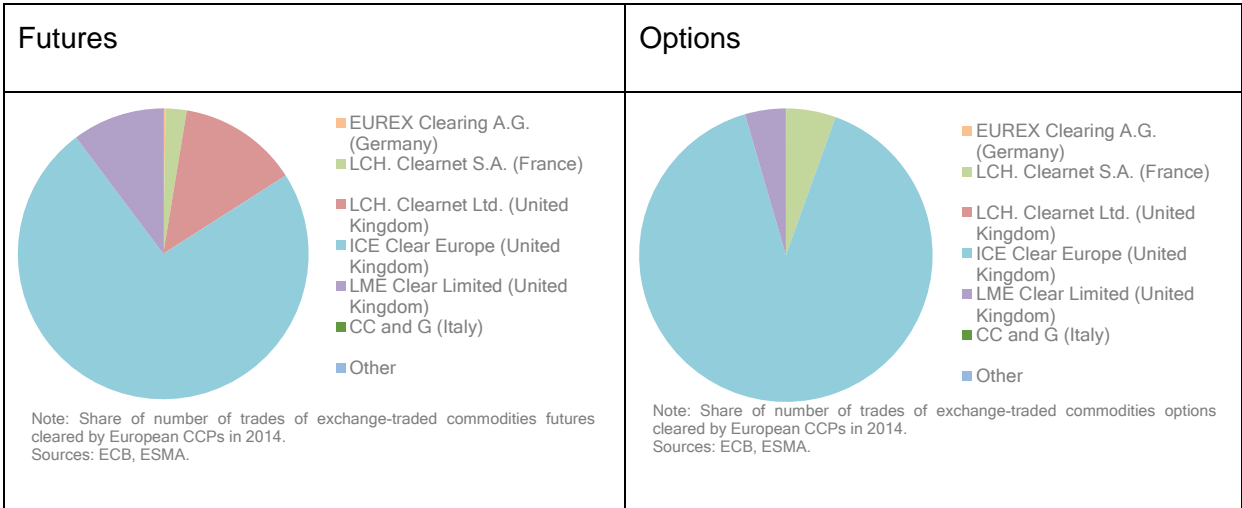
Based on ECB-published data, the following graphs show relative market shares in 2014 of European CCPs for commodity derivatives and financials for both options and futures markets.

Commodities

CCP market share by value of contracts cleared in Commodity ETDs

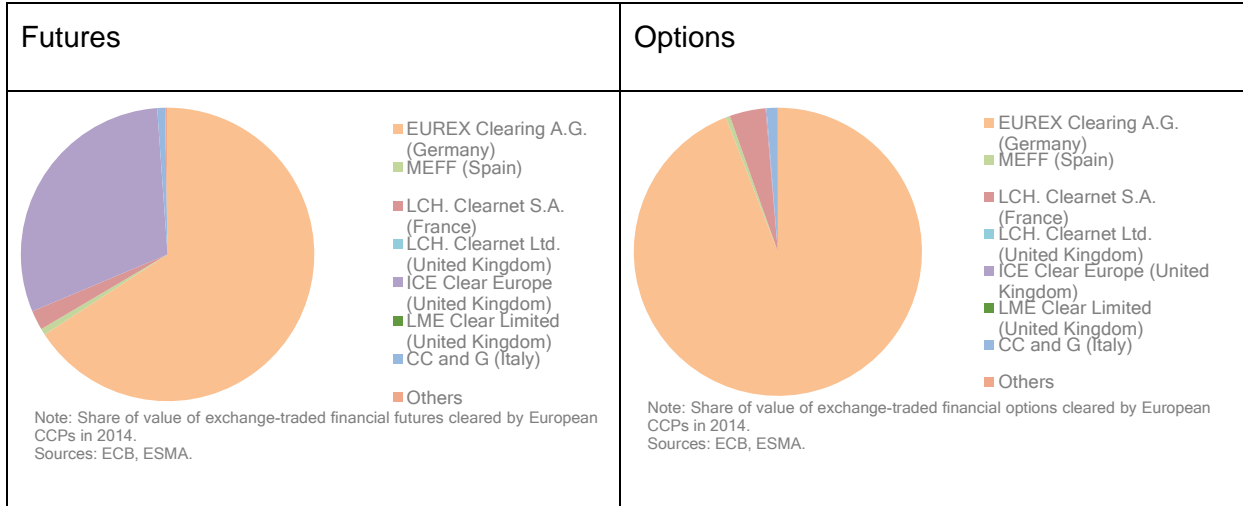


CCP market share by number of transactions in Commodity ETDs

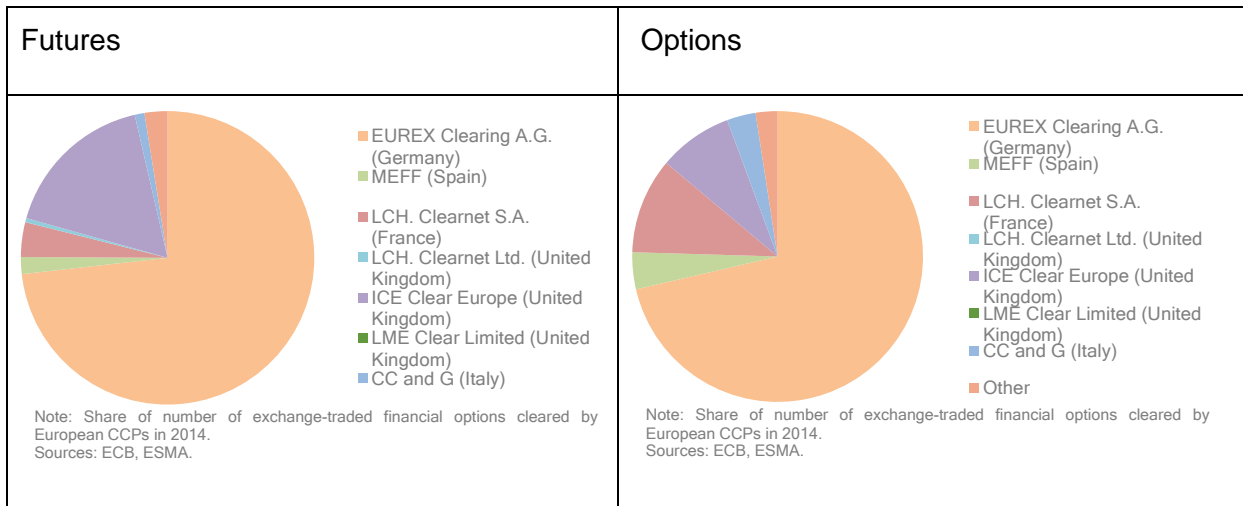


Financials

CCP market share by value of financial ETDs contracts cleared



CCP market share by number of transactions cleared in financial ETDs



Annex II: REFERENCES

Bliss, Robert R., and Chryssa Papathanassiou (2006), "Derivatives clearing, central counterparties and novation: The economic implications", March 2006.

Duffie, D. and Zhu, H. (2011) "Does a central clearing counterparty reduce counterparty risk?" Review of Asset Pricing Studies.

ECB/Chicago FED (2007), European Central Bank – "The role of central counterparties", July 2007,
<https://www.ecb.europa.eu/pub/pdf/other/rolecentralcounterparties200707en.pdf?734973e95c26ba824f205887f53c819c>

Pirrong C., "The Industrial Organization of Execution, Clearing and Settlement in Financial Markets", January 2007.

Yarrow, G. (1994), The Economics of Regulation, in: V.V. Ramanadham (ed.), Privatization and After: Monitoring and Regulation , Routledge: London and New York, 1994.

Rochet, J.C. (2005), "The Welfare Effects of Vertical Integration in the Securities Clearing and Settlement Industry", September 2005.

Serifsoy, B., WeiB, M. (2005), "Settling for Efficiency - A Framework for the European Securities Transaction Industry", April 2005.

Van Cayseele, P., Voor de Mededinging, R. (2005) "Competition and Organization of the Clearing and Settlement Industry", Working Paper, Leuven/Amsterdam 2005.

Zigrand, J.-P. (2010). "What Do Network Theory and Endogenous Risk Theory Have to Say about the Effects of Central Counterparties on Systemic Stability?" Banque de France Financial Stability Review (July).