EUROPEAN COMMISSION

DG Competition

CASE M.7995 DEUTSCHE BÖRSE / LONDON STOCK EXCHANGE GROUP

(Only the English text is authentic)

MERGER PROCEDURE
REGULATION (EC) 139/2004

Article 8(3) Regulation (EC) 139/2004

Date: 29/3/2017

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EUROPEAN
COMMISSION

Brussels, 29.3.2017
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Public version

COMMISSION DECISION

of 29.3.2017

declaring a concentration to be incompatible with the internal market and the functioning of the EEA Agreement (Case M.7995– Deutsche Börse / London Stock Exchange)

(Only the English text is authentic)

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COMMISSION DECISION

of 29.3.2017

declaring a concentration to be incompatible with the internal market and the functioning of the EEA Agreement (Case M.7995– Deutsche Börse / London Stock Exchange)

(Only the English text is authentic)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to the Agreement on the European Economic Area, and in particular Article 57 thereof,

Having regard to Council Regulation (EC) No 139/2004 of 20 January.2004 on the control of concentrations between undertakings[1], and in particular Article 8(3) thereof,

Having regard to the Commission's decision of 28 September 2016 to initiate proceedings in this case,

Having given the undertakings concerned the opportunity to make known their views on the objections raised by the Commission,

Having regard to the opinion of the Advisory Committee on Concentrations[2],

Having regard to the final report of the Hearing Officer in this case [3],

Whereas:

(1) On 24 August 2016, the Commission received a notification of a proposed concentration pursuant to Article 4 of Regulation (EC) No 139/2004 (the "Merger Regulation") by which the two previously independent undertakings Deutsche Börse AG (Germany, "DBAG") and London Stock Exchange Group plc (United Kingdom, "LSEG") would merge within the meaning of Article 3(1)(a) of the Merger Regulation (the "Transaction"). LSEG and DBAG are hereinafter referred to as the "Notifying Parties".

1. THE NOTIFYING PARTIES AND THE TRANSACTION

(2) DBAG is a diversified financial market infrastructure organisation, best known for operating the Frankfurt Stock Exchange (Frankfurter Wertpapierbörse or "FWB"), a regulated marketplace for trading stocks, bonds and various other financial instruments. It also operates other regulated exchanges, most notably Eurex and the European Energy Exchange ("EEX") trading various types of derivative products.

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1 OJ L 24, 29.1.2004, p. 1 ("the Merger Regulation"). With effect from 1 December 2009, the Treaty on the Functioning of the European Union ("TFEU") has introduced certain changes, such as the replacement of "Community" by "Union" and "common market" by "internal market". The terminology of the TFEU will be used throughout this decision ("Decision").

2 OJ C ...,...200. , p....

3 OJ C ...,...200. , p....

Apart from trading, its activities include the supply of post-trade infrastructure services such as clearing, settlement and custody services, as well as market data, indices and other information products.

(3) LSEG is also one of Europe's pre-eminent financial infrastructure companies, best known for operating the London Stock Exchange. It also owns Borsa Italiana, the Italian stock exchange and operates a number of other trading platforms trading in stocks, other equity-like exchange traded products, bonds, and derivatives. LSEG is also active in the post-trading space, most notably in clearing through the London Clearing House ("LCH.Clearnet") and Cassa di Compensazione e Garanzia ("CC&G"), the Italian clearing house. LCH.Clearnet also operates the clearing service SwapClear for clearing of over-the-counter ("OTC") traded derivatives. LSEG also offers indices, data and other information products, and is also active in settlement and custody services.

(4) The Transaction would be implemented via the establishment of a newly incorporated holding company, which would acquire both LSEG and DBAG with the two operations taking place at the same time and being conditional upon each other. It follows that the Transaction constitutes a concentration within the meaning of Article 3(1)(a) of the Merger Regulation.

2. UNION DIMENSION

(5) The undertakings concerned have a combined aggregate world-wide turnover of more than EUR 5 000 million (DBAG: [BUSINESS SECRETS]; LSEG: [BUSINESS SECRETS]). Each of them has an EU-wide turnover in excess of EUR 250 million (DBAG: [BUSINESS SECRETS]; LSEG: [BUSINESS SECRETS]), but neither achieves more than two-thirds of its aggregate Union-wide turnover within one and the same Member State.

(6) The Transaction has therefore a Union dimension pursuant to Article 1(2) of the Merger Regulation.

3. PROCEDURE

(7) After a preliminary examination of the notification and following the first phase market investigation (the "Phase I market investigation"), the Commission concluded that the Transaction raised serious doubts as to the compatibility with the internal market and adopted a decision to initiate proceedings pursuant to Article 6(1)(c) of the Merger Regulation on 28 September 2016 (the "Decision opening the proceedings"). The Notifying Parties submitted written comments on the Decision opening the proceedings (the "Notifying Parties' response to the Decision opening the proceedings"), which culminated in the submission of a consolidated version of the Notifying Parties' response to the Decision opening the proceedings on 9 November 2016. Additional submissions were received on 20 November 2016.

(8) Following the in-depth market investigation (the "Phase II market investigation") which supplemented the findings of the Phase I Market Investigation (jointly referred to as the "market investigation"), the Commission addressed a Statement of Objections (the "Statement of Objections") to the Notifying Parties on 14 December 2016. The Notifying Parties responded to the Statement of Objections (the "Response to the Statement of Objections") in a preliminary response on 6 January 2017 and a full response on 13 January 2017. On 24 January 2017, the Notifying Parties

submitted a supplementary response. A formal State of Play meeting took place on the same day.

(9) On 9 January 2017, the Notifying Parties informed the Commission that they did not wish to develop their arguments in an Oral Hearing.

(10) On 19 October 2016, the Notifying Parties requested an extension of 15 working days under the second subparagraph of Article 10(3) of the Merger Regulation. The time limits of the Commission's review were extended accordingly. On 14 December 2016, the Notifying Parties requested a further extension of five working days pursuant to the third sentence of the second subparagraph of Article 10(3) of the Merger Regulation. By decision of 16 December 2016, the Commission granted the requested additional extension.

(11) On 26 January 2017, the Commission issued a letter of facts (the "Letter of Facts"). The Notifying Parties submitted their comments on the Letter of Facts on 30 January 2017 (the "Notifying Parties' reply to the Letter of Facts").

(12) On 6 February 2017, the Notifying Parties submitted commitments (the "Commitments") pursuant to the second subparagraph of Article 8(2) of the Merger Regulation. Consequently, the period for the adoption of a final decision was extended by 15 working days pursuant to the first subparagraph of Article 10(3) of the Merger Regulation.

(13) The Commission launched the market test (the "Market Test") of the Commitments on 9 February 2017.

(14) On 27 February 2017 the Notifying Parties submitted modified Commitments.

(15) The meeting of the Advisory Committee took place on 13 March 2017. The Advisory Committee issued a positive opinion on the draft decision.

(16) The Hearing Officer issued his final report on 15 March 2017.

4. MARKET INVESTIGATION

(17) The Commission conducted far-reaching Phase I and Phase II market investigations, which included sending questionnaires to a variety of market participants, conducting teleconference interviews and meetings with market participants, and analysing a substantial amount of information received from the Notifying Parties including internal documents.

(18) Specifically, the Phase I market investigation, besides the analysis of information submitted by the Notifying Parties in the Form CO and in various additional submissions, included evidence collected through telephone interviews and meetings with close to 30 key market participants, including customers and competitors of the Notifying Parties, regulatory bodies and industry associations. In addition, 10 different questionnaires were sent to different groups of market participants (770 in total, of which 354 were answered).

(19) In addition, during the Phase II market investigation, besides collecting and analysing the information received from the Notifying Parties including internal documents, the Commission sent seven different questionnaires to different groups of market participants (651 in total). Moreover, the Commission sent tailor-made requests for information ("RFIs") to a number of third parties, including Bats Europe, Chicago Mercantile Exchange ("CME"), Euroclear, Euronext, Intercontinental

Exchange ("ICE"), Nasdaq and Singapore Exchange ("SGX"). A number of these tailor-made RFIs included requests for internal documents. The Phase II market investigation also included additional telephone interviews and meetings with close to 15 key market participants, including customers and competitors of the Notifying Parties and industry associations.

(20) Throughout the procedure, the Commission also received substantiated submissions from a number of market participants, specifically EuroCCP, Euroclear, Euronext, ICE, BME, Nasdaq as well as a number of financial associations (including Paris Europlace, the European Investors' Association and the Investment Association). Some of these submissions also included analyses prepared by economic consultants.

(21) The Commission also notes that, throughout the procedure, a number of market participants declined to answer to a significant number of the Commission's questions due to their direct or indirect involvement in the preparation of the Transaction.[4]

5. BACKGROUND TO THE ASSESSMENT OF MERGERS IN THE FINANCIAL INFRASTRUCTURE MARKETS

(22) The assessment of mergers between operators of financial markets infrastructures needs to be performed against a background of the specific features of these markets. First, these markets are characterised by a two-sided "matrix" structure (Section 5.1. below). Second, specific features in this market, in particular the existence of strong network effects and economies of scale and scope, have implications on the ease of market entry and the regulatory framework (Section 5.2. below).

5.1. The two dimensions of the financial infrastructure markets matrix

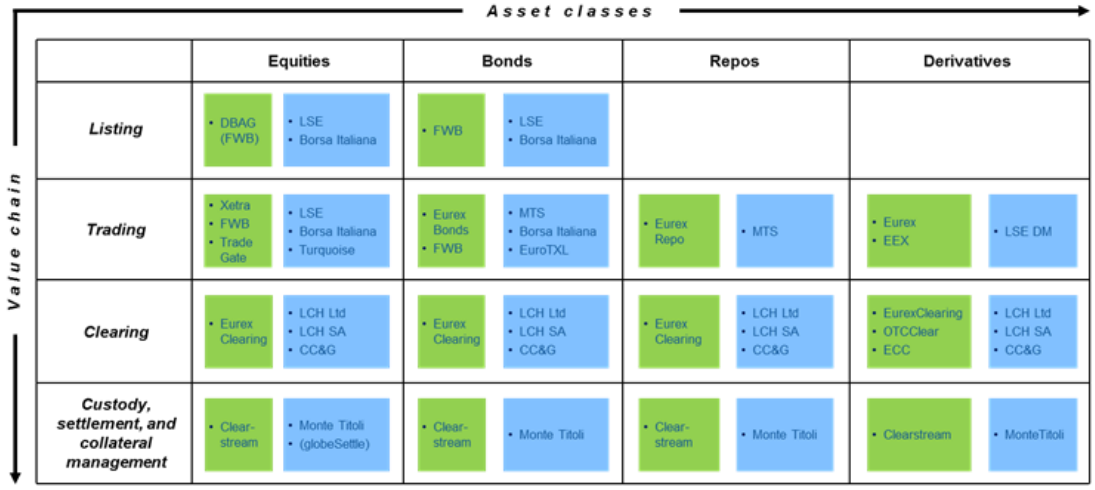
(23) The Commission's competitive assessment of the Transaction is based on the matrix structure of the financial infrastructure markets, but focuses on one of two principal dimensions: the different types of financial instruments or asset classes.

(24) While for each financial instrument a number of specific services (or the bundles thereof) of the financial instruments value chain (namely listing, trading, clearing and settlement) may be required, and there are commonalities along the value chain from a supply-side perspective, demand is heavily focused on specific types of financial instruments (for example the trading and clearing of an interest rate derivative).

(25) Figure 1 below illustrates the two dimensions of the matrix structure setting out the legal entities through which DBAG and LSEG are active in the relevant services and product markets.

[4] These companies include, among others, Goldman Sachs, UBS, Barclays, JP Morgan, Deutsche Bank, HSBC.

Figure 1: Notifying Parties' activities in various product classes along the value chain.



Source: Commission's computation based on information from the Notifying Parties.

(26) The complementary services offered by financial markets infrastructure providers can either be obtained as an integrated service from one provider or can be combined from different providers. Historically, DBAG has been active throughout the value chain and operates a fully integrated "closed vertical silo" model meaning that, in most instances, it does not allow customers to mix-and-match services it provides with services from competing providers.[5] LSEG, by contrast, covers the value chain for executing a financial transaction more selectively (for example in derivatives it is predominantly strong in clearing and more generally it is not vertically integrated into settlement, except for its Italian business through Monte Titoli). As a result, LSEG has historically operated a model that can generally be considered as an "open model" whereby its commercial strategy allows the creation of products that combine services from different providers. In practice, this involves, on the one hand, combining its trading services with services from third parties (for example, settlement services provided by Euroclear for trades executed on LSE), and on the other hand, it involves providing its own services to customers of third parties (for example, clearing services provided by LCH.Clearnet for trades executed on Euronext).[6]

(27) In view of the foregoing, the Decision is structured principally according to groups of different financial instruments. The second dimension of the matrix is to be borne in mind however, as customers often purchase "composite" products or services when trading a specific financial instrument. The Commission will take this into account in its assessment of the Transaction and the different sets of commitments submitted by the Notifying Parties.

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5 As will be discussed in the respective sections on product markets, there are rare exceptions where DBAG does permit customers to use services from third parties. For example, DBAG's subsidiary Clearstream is not entirely closed to external providers, but offers a bridge to Euroclear. [BUSINESS SECRETS].

6 See Sections 8.4.4. and 9.3.3.3. below.

5.1.1. Introduction to the categories of financial instruments in the matrix

(28) The financial instruments relevant for the assessment of the Transaction can be grouped into three broad categories, namely cash instruments, repurchasing agreements ("repos") and derivatives.

(29) Cash instruments are transferable securities that are sold and delivered against a payment in cash. Cash instruments fall into two broad categories, equities and fixed income instruments. Equities are securities that provide the holder with ownership in a company, either directly (for example a share of company stock) or indirectly, through the ownership of a share in an investment vehicle that holds the stocks. Fixed income cash instruments are securities that give the right to a predefined stream of cash-flows. The most common fixed income instrument is a bond, i.e. a securitised and tradable loan issued by corporations or governments.

(30) Repurchasing agreements or "repos" are contracts between two counterparties that stipulate the selling and re-purchasing of a specific asset (usually bonds) at a future date. They function either as short term cash loans in which securities are used as collateral or short term borrowings of securities in which cash is used as collateral. A large part of repos have maturities of less than a month and overnight repos are also common.

(31) Derivatives are financial products designed to transfer various types of economic risk between trading parties. The risk transferred can be the change in the price of an asset, a basket of assets, the value of a financial indicator, the level of interest rates or any other variable. The price of a derivative depends on the changes in the value of the underlying variable, for example the price of certain assets specified in the product. Such products therefore derive their value (hence the word "derivative") from the underlying variable. Derivatives typically take the form of a contract, although certain derivatives are structured as a security.

5.1.2. Introduction to the services along the value chain in the matrix

(32) With respect to the financial instruments value chain, listing in the narrow sense refers to the practice of admitting a particular security to trading on exchanges or similar trading venues such as a Multilateral Trading Facility ("MTF") at the request of the issuer in the context of raising capital and thus enabling the security to be publicly traded. Listing in this sense is connected to the raising of capital by the issuer of the security and as such is only applicable to cash instruments. Listing in the wider sense refers to making a product available for trading on an exchange or similar venue and in this sense a derivative product can also be listed. Since listing in this wider sense is not relevant for issuers and just a technicality of a trading venue, this meaning is less relevant for the purposes of the competitive assessment. Accordingly, for the purposes of the Decision, the term listing will be used in the narrower meaning and consequently is only applicable to cash instruments.

(33) Trading is the expression of a mutual commitment by two parties to enter into a transaction involving financial instruments, i.e. entering into an agreement to buy or sell cash securities, entering into a repo or a derivatives contract. The trading environment can vary greatly depending on the instrument in question and the applicable regulation. At one end of the spectrum, trading can occur on regulated exchanges or on MTFs in full transparency and on a multilateral basis, i.e. with multiple buying and selling interests interacting on the platform. At the other end the transaction can be negotiated privately and bilaterally without transparency, which is

referred to as over-the-counter ("OTC") trading. There are a number of trading methods that are in between these two extremes of the spectrum and which may or may not be classified as either exchange or OTC trading.

(34) Clearing refers to all activities in the trading cycle between the commitment to enter into a transaction (trade execution) and the fulfilment of that commitment (settlement). The main function of clearing is to ensure that the obligations resulting from the trade are honoured by the transacting parties. In other words the role of clearing is to manage counterparty risk, i.e. the risk that one of the parties defaults on its commitment. If the clearing service is performed by a neutral third party, this third party is referred to as a central counterparty ("CCP") or clearing house and the activity is referred to as central clearing. In central clearing, once a trade has been executed by two counterparties, the trade can be handed over to a clearing house, which steps between the two original counterparties and assumes the legal counterparty risk for the trade. This implies that one trade between two parties - "A" and "B" - is split into two separate transactions: one between "A" and the central counterparty and a second between the central counterparty and "B". This process of transferring the trade title to the clearing house is referred to as "novation".

(35) In order to manage the risk taken over by the CCP, specific provisions exist between the central counterparties and its members including contributions to default funds as well as specific collateral requirements for individual transactions, called "margin".[7] These margin requirements can be very significant in size and are important factors for the selection of a clearing venue.

(36) In addition to their principal function of managing counterparty risk, CCPs often also perform other activities such as the registration and verification of the trade and of its counterparties and the transmission of the details of the trade to the relevant settlement body. As the Notifying Parties are infrastructure providers, their activity in the clearing field is always central clearing. Bilateral clearing is performed by the counterparties trading an instrument directly among themselves.

(37) Settlement is the final stage of the trading life cycle in which a security traded by a seller is delivered to the purchaser in exchange for payment. Settlement therefore fulfils the contractual obligations of the buyer and the seller respectively in relation to a trade. This service is provided by the relevant national or International Central Securities Depositaries ("CSDs" or "ICSDs", respectively) or, in some cases, by intermediaries (such as custodians).

(38) Settlement services are often provided together with custody services, which refer to safe-keeping services such as the maintenance of securities' accounts on behalf of investors and the processing of corporate actions like dividend and interest payments or voting rights in the case of shares.

(39) Collateral management consists in managing and optimising the use of securities or other assets provided as collateral in different types of transactions (in particular, repo transactions, securities lending, and derivative transactions).

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[7] There are two types of margin: initial margin depending on the potential loss a contract or portfolio of a clearing member could incur based on a risk model, and variation margin to cover fluctuations in the market affecting the potential loss, and possibly requiring the posting of additional margin.

5.1.2.1. Service layer competition versus bundle-to-bundle competition

(40) The Commission notes that executing a trade of a financial instrument requires customers to obtain a number of complementary services from market infrastructure providers (in particular trading, clearing, settlement, custody and, under certain circumstances, collateral management). Where a concrete product inevitably implies the purchase of at least two complementary services (for instance trading and clearing of exchange-traded derivatives) and customers are limited in their choices of these complementary services, the Commission considers that exchanges compete in offering bundles of services (or integrated services).

(41) In situations where the counterparties to a financial transaction demand the full composite product and not only individual service components, competition takes place between the available bundles of services. Assessing the competitive implications of a merger requires in such a case evaluating the impact of a transaction on the bundle (and not merely on a component-by-component basis).

(42) The most evident example for bundle-to-bundle competition is exchange-traded derivatives ("ETDs"): when trading on exchange, customers must in general also buy the complementary clearing service.[8] Furthermore, when the Markets in Financial Instruments Directive "MIFID II" and the Markets in Financial Instruments Regulation ("MIFIR")[9] starts to apply, trading venue operators will be legally required to ensure that ETDs are cleared by a CCP.[10] Therefore, exchanges compete in the provision of service bundles combining both the trading and clearing of ETDs. In its decision *DBAG/NYSE Euronext*[11], the Commission noted with regard to derivatives that, while, in theory, trading and clearing could potentially be provided as separate services, many exchanges at present generally provide users with an integrated service including the trading and clearing of derivative contracts and for which they may charge a single fee.

(43) For OTC traded derivatives on the other hand, the situation is different. There is a multitude of options for customers on where and how to trade. Depending on their choice of trade executions, customers also have options on where and in some cases even whether, to clear. In this situation, the Commission considers it more appropriate to assess competition on each service layer separately, for example to analyse separate trading and clearing markets for OTC traded derivatives. Similarly, when, as in bonds, there is neither an obligation to clear, nor a market structure or

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8 Indeed, many derivatives exchanges (such as Eurex, CME, ICE, etc.) are vertically integrated into clearing by operating clearing houses for clearing of instruments traded on their venues. Other exchanges, while not being strictly speaking vertically integrated into clearing, offer clearing services for contracts executed on their platforms through agreements with third-party clearing houses that they select, generally on an exclusive basis. In such a scenario, customers also purchase an integrated service from the trading venue and have ultimately no choice of clearing service provider.

9 Directive 2004/39/EC on markets in financial instruments (OJ L 145, 30.4.2004) and Regulation No 600/2014 on markets in financial instruments "MiFIR" (OJ L 173, 12.6.2014) Directive 2004/39/EC, OJ L 145, 30.4.2004..

10 Article 29(1) MIFIR.

11 See Case COMP/M.6166 – DBAG / NYSE Euronext, paragraph 240.

practice that entails that clearing is inherently linked to trading,[12] the Commission will assess the individual service layers.

(44) There are also financial instruments where it cannot be clearly delineated whether they are characterised by service level or bundle-to-bundle competition. For example for ATS traded non-triparty repos, there are, as discussed in Section 7.2.2.4. and Section 7.2.2.5., a number of compelling arguments that indicate that competition takes place between bundles even though, contrary to ETDs, there is no legal obligation to clear, and that there exists on a limited (for practical purposes, extremely limited) degree of optionality for customers to mix-and-match trading and clearing service providers.

5.1.2.2. Bundle-to-bundle competition can potentially lead to horizontal effects even if the Notifying Parties do not control all service components

(45) The Transaction involves a combination of DBAG (through Eurex Clearing) and LSEG (through LCH.Clearnet primarily[13]), which together make up [80-90%] of all clearing of derivatives in Europe, and [90-100%] of all repo and bond clearing. Nonetheless, the Notifying Parties argue that Eurex Clearing and LCH.Clearnet are not in competition with each other and that the Transaction cannot, therefore, create anticompetitive horizontal effects. The reason, according to the Notifying Parties, why Eurex Clearing and LCH.Clearnet would not be in competition with each other, is that, unlike LCH.Clearnet, Eurex does not provide merchant clearing services to third parties. Since Eurex does not offer services to the same customers (in the Notifying Parties' view), there would be no horizontal competition that could be restricted.

(46) From an economic perspective, this view of competition disregards the fact that competition in ETD derivatives and certain repos takes place through integrated bundles of services (bundle-to-bundle competition).

(47) In order to illustrate the mechanics of competition between service bundles where the component services can be supplied by different firms one can consider the following example. Assume that customers can choose between two bundles of trading and clearing services:

- Firm 1 offers an integrated bundle that consists of its own clearing and trading services (C1 and T1)
- Firm 3 offers a composite bundle consisting of the clearing services of Firm 2 (C2) and of its own trading services (T3)

(48) Figure 2 illustrates a hypothetical merger between Firm 1 and Firm 2.

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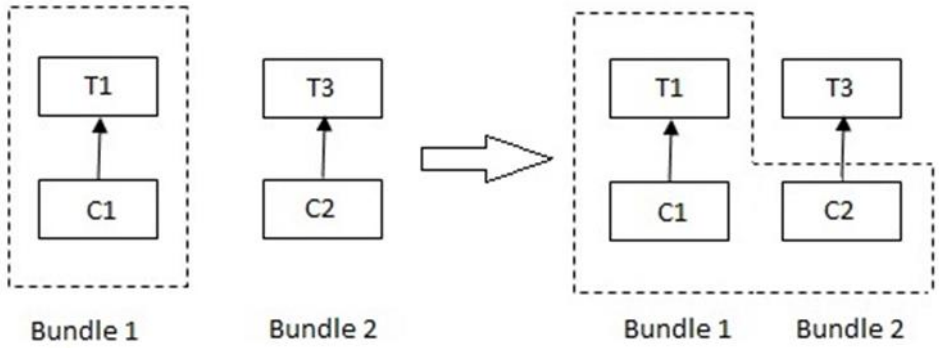
[12] For example, bonds traded on the D2D trading platform of LSEG, MTS Cash, can be either CCP cleared or uncleared: [50-60%] of MTS Cash trading volumes are cleared on various CCPs (LCH.Clearnet SA, LCH.Clearnet Ltd, CC&G in particular) and [40-50%] are uncleared.

[13] Also through CC&G for bonds and repos.

Figure 2: Pre-merger (left) and post-merger (right) competition between bundles



Source: Commission's illustration.

(49) According to the Notifying Parties' view of financial infrastructure competition, such a transaction could not give rise to anticompetitive horizontal effects, because Firm 1 is not active in the "merchant market" of providing clearing services to third party trading venues (such as T3). At most, the Notifying Parties argue, such a situation could give rise to foreclosure concerns in the sense that post-merger, C2 might hamper access for T3 or engage in a margin squeeze to divert customers to bundle 1.

(50) While this potential for vertical effects does exist, it is easy to see, however, that this perspective overlooks the main competitive implication of the above transaction. After all, the merger not only gives rise to a combination of vertically related services (C2 and T1), but also to a combination of horizontally related services (C1 and C2). As a result it is likely to have substantial horizontal effects by permitting the merging parties to monopolise the clearing component of both bundles. As a result, the merging parties would be in a position to raise all prices of all offerings (including those of separate clearing components and those of integrated trading/clearing bundles).

(51) The price increases from the horizontal effect would not be intended to divert customers away from T3, but rather to increase the combined final price to customers and therefore total profits of the combined entity. Therefore, the horizontal effects in bundle-to-bundle competition are similar to classical horizontal effects: the cost increase of T3 is not undertaken in order to foreclose T3 in the sense of diverting customers away from T3 to T1, instead, its purpose is simply to extract consumer surplus from the customers of both providers by exploiting the newly won market power in clearing. In addition, it is noted that this horizontal merger effect does bring about an increase in the clearing costs for the independent trading platform T3.

(52) In effect, the transaction in Figure 2 can be studied by first assessing the merger between C1 and C2 on clearing prices and in a second step assessing the additional vertical effect by comparing foreclosure incentives between the original firm C1+T1 and the merged firm C1+C2+T1. The first step, the merger of C1 and C2, is a purely horizontal merger to (near) monopoly. As such it is likely to generate very substantial market power in the provision of clearing services with the associated negative effects, in particular increase in the price of clearing services. The second step would be to assess the increased foreclosure incentives of the merged firm C1+C2+T1 compared to C1+T1. This vertical effect might be small and unclear in its direction. The main competitive effect of the transaction can therefore be considered as an elimination of horizontal competition.

5.1.2.3. On top of horizontal effects bundle-to-bundle competition can also lead to vertical effects

(53) Since product bundles combine complementary products, similarly to vertical relationships, they can also lead to vertical effects if the merging parties denied clearing access to the independent platform T3 (non-price foreclosure) or if they engaged in a margin squeeze in order to divert customers away from T3 to T1 (price-based foreclosure). Such non-horizontal conduct, contrary to the horizontal price effect described in the previous section (which is primarily exploitative), would attempt to shift customers away from the independent platform T3 (and hence is primary of an exclusionary nature).

(54) As part of its competitive assessment of the Notifying Parties' activities with respect to repos and single stock equity derivatives, the Commission assesses whether, on the basis of the competitive dynamics on the markets defined in Sections 7.2.2 and 9.2.4 below, the potential vertical and, in particular, horizontal effects identified above would arise as a result of the Transaction, and whether any such effects would result in a significant impediment to effective competition within the meaning of Article 2 of the Merger Regulation.

5.2. Key features of the relevant financial infrastructure markets

(55) The various infrastructure markets assessed in the Decision share a number of key characteristics which constitute an important background for the assessment of the Transaction. These specifically include:

- strong network effects and economies of scale and scope translating into specific market structures with incumbency advantage and high barriers to entry,
- the existence of a differentiated customer base, which has an impact on the relevance of home bias, the degree of price sensitivity, general trading behaviour and preferences for the execution environment, and
- the regulatory framework that shapes the markets at different levels of the value chain by seeking to mitigate network effects and introduce competition between infrastructure providers, and changing the drivers in the industry.

5.2.1. Strong network effects and economies of scale and scope at all levels of the value chain

(56) Financial market infrastructure platforms at all levels of the value chain are characterised by significant network effects. Market participants are naturally driven to the venues where other market participants are already active. As such market participants tend to concentrate their activities on a single venue to achieve synergies.[14] Therefore, one of the intrinsic qualities of a platform, be it a trading venue, a clearing house, or a settlement venue stems from the number of other market participants that are concentrating their activities on that specific venue. This is because, for instance, in the area of trading, the accumulation of customers implies that more people actually trading or at least showing their willingness to do so for a

[14] [BUSINESS SECRETS]. Thus, "*[h]igh order flows are self-sustaining, i.e., attract and retain clients and ensure stable market position in the mid-term*". DBAG's internal document, "Eurex—Strategy compendium", January 2015, page 19 [ID 3750-12574].

specific price results in a higher likelihood of one participant finding a suitable counterparty for a specific trade. This is typically referred to as the "liquidity" of a venue[15] or the "depth" of the order book.[16] Higher liquidity on a platform is typically associated with narrower and, therefore, better bid-ask spreads[17] which increases the likelihood of execution. These characteristics lead to two main consequences. First, there are significant first mover benefits in these markets, and second, once liquidity has built up on one large venue, this naturally attracts further liquidity. As a result, exchanges with less liquidity are more likely to suffer from wider bid-ask spreads and lower order book depth.

(57) Similarly, in the area of clearing, traders tend to concentrate their clearing in a CCP where also other traders clear their trades in the same or correlated instruments.[18] This is because concentration of clearing in one place allows traders to net offsetting positions they may have with several counterparties. As a consequence, only the net positions at the end of a trading day have to be settled. CCPs can take into account correlations between different positions held at the same venue and allow for calculation of initial margin based on the total risk within one asset class portfolio (portfolio margining) or across portfolios of different asset classes like OTC and exchange traded derivatives (cross-margining).[19]

(58) Second, financial platforms are typically characterised by strong economies of scale and scope.[20] Indeed, a large proportion of the costs of setting up and running financial markets infrastructure platforms are independent of the volume of trades executed, cleared or settled on the platform. Conversely, the variable costs of trading, clearing or settling are typically small, since all instructions are predominantly executed digitally through an automated system. As a result, the average cost of trading, clearing or settling declines substantially as a platform draws larger amounts of liquidity. Moreover, the same infrastructure can be, to a certain extent, used for additional products without a proportionate cost increase, leading, again, to a reduction of average unit costs for each service.

(59) These industry characteristics have two main implications.

(60) First, many financial infrastructure markets are characterised by high market shares of incumbents and considerable market power in the markets where they enjoy

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15 Liquidity describes the degree to which an asset or security can be quickly bought or sold in the market without affecting the asset's price.

16 (Order-book) depth is closely related to the liquidity of the market. A deep market can be expected to absorb larger buy and sell orders before an order moves the prices.

17 A bid-ask spread is the amount by which the ask price exceeds the bid price for an asset in the market. The bid-ask spread is essentially the difference between the highest price that a buyer is willing to pay for an asset and the lowest price that a seller is willing to accept to sell it.

18 Accordingly, DBAG explains in its internal documents: "*significant existing exposures primarily in a single currency across products under a single default fund lead to a higher efficiency in terms of funding & capital requirements*". DBAG's internal documents, Eurex—Strategy compendium, January 2015, page 37 [ID 3750-12574].

19 There is however no single terminology in the industry. In this Decision, the Commission uses the two terms as synonyms.

20 For instance, DBAG explains in its internal documents that "*only a few players have the scale to deliver superior value and efficiency*". Hence, larger platforms have the "*[p]ossibility to exploit economies of scale from large order volume/ number of clients*" and the "*[p]ossibility to exploit economies of scope by offering services along the whole value chain*". DBAG's internal document, "Eurex—Strategy compendium", January 2015, pages 18, 43 [ID 3750-12574].

incumbency. In this context, DBAG explains in its internal documents that infrastructure markets are typically dominated by a leading provider: [BUSINESS SECRETS].[21] The incumbency advantage typically translates into higher profit margins.[22]

(61) Second, as a result of these considerable network effects, economies of scale and scope, financial infrastructure markets are generally characterised by the existence of significant barriers to entry. Indeed, liquidity has a natural tendency to concentrate on a limited amount of platforms.

(62) This does not imply that there is no competition in these markets or that entries are always futile. Smaller competitors can impose a significant competitive threat on incumbents under certain circumstances, for example if they are well placed and have the necessary support by large liquidity providers. Also, established players can pose competitive threats if they are in a position to leverage strong positions in one market for entries into neighbouring markets.[23] Finally, new and innovative unique selling propositions which distinguish a new entrant from established offerings can be a successful entry strategy. In this context the size of the specific market and the potential gains are also to be considered; entry attempts are generally more likely in large profitable markets than in smaller, more local markets.[24]

(63) Product/service differentiation either through superior product features or through unique selling points may help to mitigate or to overcome the network effects and sort users to different platforms thus permitting the co-existence of rival platforms.[25] Successful new entrants have typically been able to offer superior product features or technological improvements such as faster speed of execution, greater anonymity for block trades or more innovative pricing models. This has been observed both in the U.S., when Electronic Communication Networks (ECNs) entered into competition with established U.S. exchanges such as Nasdaq and NYSE,[26] and in Europe, when MTFs entered into competition with incumbent national exchanges[27] targeting their offering to accommodate the needs of high frequency traders.[28]

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21 DBAG's internal document, "Eurex—Strategy compendium", January 2015, page 19 [ID 3750-12574].

22 According to data from http://www.4-traders.com/ (downloaded on 15 November 2016), the Notifying Parties' 2016 EBIT margins are estimated to be 49% (DBAG) and 42% (LSEG), respectively. By comparison, Google (Alphabet) achieves 33%, Microsoft 30% and Intel 28%.

23 [BUSINESS SECRETS].

24 See Assonime submission dated 25 October 2016, page 7, [ID 3843], explaining that the limited size of a market may make entry unlikely if risks and costs are disproportionately large as compared to the potential reward.

25 For instance, Estelle Castillon & Pai-Ling Yin, Competition Between Exchanges: Lessons From the Battle of the Bund, Working Paper (7 October 2011): "*We find that horizontal differentiation between the two exchanges dominates the vertical differentiation induced by liquidity effects. This phenomenon, which we interpret as the result of intermediation, reduces the importance of liquidity as a determinant of exchange competition and rationalizes the coexistence of different exchanges trading the same products.*"

26 See, for instance, Michael J. Barclay, Terrence Hendershott & D. Timothy McCormick, Competition among Trading Venues: Information and Trading on Electronic Communications Networks, 58 Journal of Finance 2637 (2003).

27 See, for instance, Robert Jung & Thomas Kratzschner, The Contribution of Multilateral Trading Facilities to Price Discovery, Working Paper (14 August 2012).

28 Financial Times Alphaville, High frequency trading in Europe (24 July 2009), available at: https://ftalphaville.ft.com/2009/07/24/63651/high-frequency-trading-in-europe/.

(64) Horizontal differentiation (i.e. targeting one's offering towards a specific customer group) is a factor that permits an entrant to be successful and has been observed, for instance, in the famous "battle of the Bund" - an episode of intense competition in Bund futures, where the market ultimately shifted from the incumbent LIFFE to a new entrant (DTB, today part of DBAG's Eurex Group). Economic research found that DTB's ability to target buy-side traders directly (who had previously traded through a sell-side intermediary) was a key determinant in its successful entry.[29]

(65) Therefore, on a general level, there are regular entry attempts in large markets, and while they often fail, the mere fact that there are attempts shows that market participants and rational investors do not consider it impossible to overcome these barriers. If entry is successful, however, it can result in significant shifts in the market and the rewards for the new entrant could be considerable. This high risk / high reward profile of entries ensures that entry attempts happen regularly even though only a few of them succeed. Indeed, the threat of entry and the existence of alternatives[30] do constrain incumbents and spur them to innovate more than would be the case absent competition. This idea was expressed in *DBAG / NYSE Euronext* as follows: "*However, while for most ETDs, it has historically proven to be difficult in Europe to make the liquidity shift to any substantial extent to a different trading venue once liquidity has settled on the platform that "won" the battle, this does not mean that competition is over at that point of time and split liquidity is observed for a number of contracts. Indeed, the fact that liquidity has settled on one platform does not per se preclude competition… the mere threat that liquidity might shift, in whole or in part, to the other platform, is a credible constraint on the competitive behaviour of exchanges. In this context, exchanges keep each other on their toes constantly*."[31]

5.2.2. Different customer groups

(66) Another important feature of financial markets resides in the heterogeneous demand-side composed of two broad categories of customers, namely the "sell-side" including large dealer banks including intermediaries and market makers, and the "buy-side" composed of hedge funds, pension funds, mutual funds, institutional investors and large corporates.

(67) The sell-side typically comprises direct customers of financial market infrastructure providers, who trade a large variety of financial instruments with the main aim of making a profit. The buy-side, on the other hand, are so called "end-users" of financial instruments which they use for investment or hedging purposes. Buy-side participants have traditionally accessed the financial markets through intermediaries. Recently, however, this has been changing as financial infrastructure providers have started to offer services to attract buy-side market participants.

(68) This heterogeneity has a number of implications on the way the two groups of market participants behave on the market. While in particular smaller buy-side customers tend to display some home bias (that is the tendency to trade on home markets as opposed to international market places), sell-side market participants and

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29 Estelle Castillon & Pai-Ling Yin, Competition Between Exchanges: Lessons From the Battle of the Bund, Working Paper (7 October 2011).

30 Subject to considerations above.

31 See Case COMP/M.6166 – DBAG / NYSE Euronext, paragraph 518.

large buy-side customers are typically active on platforms across jurisdictions. Similarly, a number of buy-side market participants prefer executing transactions on regulated trading platforms (preferably even traditional exchanges as opposed to MTFs) while sell-side participants use both regulated markets and over-the-counter environments.

5.2.3. Regulatory framework

(69) As explained above, due to strong network effects and economies of scale and scope the provision of financial market infrastructure services is characterised by a high degree of concentration. For any given product, there are, generally speaking, few infrastructure providers offering it, or at least having a meaningful market share. As a result, one of the principal aims of regulatory initiatives in this industry is to mitigate the network effects by opening up the markets to competition.

(70) In 2007 the Markets in Financial Instrument Directive ("MiFID I"),[32] aimed in particular at making financial markets more transparent and at liberalising the equities markets by opening access to the market for entities other than traditional exchanges[33] (such as MTFs); and abolished the concentration rule, which required that trading be undertaken only on the trading venue of the listing. As a result, new competitors – the MTFs – emerged. The increase in the number of competitors changed the structure of the equities markets and, as a consequence of these dynamics, the markets have generally seen a reduction in the level of trading costs.[34] This new competition, besides having a positive impact (decrease) on the trading fee levels, also introduced innovation in the market with the emergence of new trading models and fee structures as well as technological innovations (for example reduced latency in trading).

(71) Currently, other areas of financial markets, ETDs in particular, are becoming subject to regulatory intervention through MiFID II[35]/MIFIR.[36] These legislative instruments aim at mitigating network effects by, amongst other things, introducing open access provisions.

(72) Another driver in the industry stemming from the regulation is the increased need for margin and capital efficiencies sought after by customers. Indeed, the post-crisis regulation brought about higher capital requirements and the requirements to clear more financial instruments. Of importance in this regard is the revision[37] of the capital requirements within the framework of the Basel Committee on Banking Supervision (the "Basel III" framework), which were implemented into EU law through the CRD IV package.[38] The rules contained in the Capital Requirements Regulation ("CRR") and the Capital Requirements Directive ("CRD") required banks

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32 Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on markets in financial instruments ("MiFID"), OJ L 145, 30.4.2004, p.1. The deadline for transposition in Member States was 31 January 2007.

33 "Regulated markets" under MiFID.

34 See Case COMP/M.6166 - DBAG / NYSE Euronext, paragraph 99.

35 Directive 2014/65/EU on markets in financial instruments,"MiFID II" (OJ L 173, 12.6.2014).

36 Regulation No 600/2014 on markets in financial instruments "MiFIR" (OJ L 173, 12.6.2014, p. 84).

37 The revision followed and was prompted by the 2008 financial crisis, which revealed that banks had too little capital to absorb losses.

38 That is, Regulation (EU) No 575/2013 (the "Capital Requirements Regulation") and Directive 2013/36/EU (the "Capital Requirements Directive").

to increase the quality and quantity of capital they have. The Bank for International Settlements ("BIS") estimated that the incremental cost of increased regulatory capital[39] is 6.7%,[40] implying a cost of EUR 67 000 for every million EUR of additional capital. As a result, there is a tendency of customers to optimise their activities so that they minimise their overall costs.

(73) In view of the above, the Commission considers that the regulatory framework is an important backdrop against which the effects of mergers in financial infrastructure markets ought to be assessed.

5.3. LSEG's control over LCH.Clearnet

(74) Another important issue in the context of the assessment of the Transaction is the extent to which LSEG controls LCH.Clearnet and has the ability to influence its commercial behaviour.

(75) LCH.Clearnet consists of a holding structure where the holding company controls two separate legal entities: LCH.Clearnet Ltd. ("LCH Ltd"), based in London and LCH.Clearnet SA ("LCH SA"), based in Paris. [BUSINESS SECRETS].

5.3.1. Notifying Parties' views

(76) The Notifying Parties argued[41] that, due to the specific governance structure put in place at the time of the acquisition of a majority stake in LCH.Clearnet by LSEG, LSEG's influence over the commercial behaviour of this clearing house is limited.

(77) Specifically, the Notifying Parties argue that LSEG does not exercise sufficient control over LCH.Clearnet to allow the merged entity to implement full or partial foreclosure strategies. They further underline this statement by claiming that LSEG's limited abilities to influence LCH.Clearnet's decision making do not extend to being able to determine key strategic decisions made by LCH.Clearnet for the interest of LSEG and against the interests of venues and users.

(78) The Notifying Parties further submit that LCH.Clearnet's commitment to provide open access on Fair, Reasonable, and Non-Discriminatory (FRAND) terms prevents it from engaging in any type of foreclosure strategy. In addition, the Notifying Parties consider that forthcoming regulation and its pro-competitive effect on the market should also be taken into account.

(79) Finally, the Notifying Parties consider that they face significant buyer power exercised by trading platforms and user banks via the specific governance structure of LCH.Clearnet and in addition based on the constant threat of customers to support alternative clearing houses.

5.3.2. LCH.Clearnet Governance

5.3.2.1. Contractual agreements

(80) LSEG holds a majority stake of almost 58% of LCH.Clearnet. [BUSINESS SECRETS]. From an accounting perspective, LCH.Clearnet is fully consolidated into LSEG. It accounts for approximately 25% of LSEG's total income at group level and

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39 That is the cost of equity over the cost of debt.

40 See http://www.bis.org/publ/othp21.pdf, page 11.

41 Notifying Parties' response to the Decision opening the proceedings, paragraph 1021 and Notifying Parties' response to the Statement of Objections I, paragraph 529 et seq.

is referred to on an equal footing with other wholly owned subsidiaries in the group overview of the annual report.[42]

(81) LSEG's participation in LCH.Clearnet's governance is based on two main contractual arrangements: the Articles of Association of LCH.Clearnet ("Articles of Association") and the Relationship Agreement between LCH.Clearnet, London Stock Exchange Group, and London Stock Exchange Ltd. ("Relationship Agreement").[43] Both texts provide for rights and obligations of shareholders and define specific rights of LSEG which are discussed in further detail below.

5.3.2.2. Board and senior management

(82) LCH.Clearnet's group level board comprises 17 directors in total, including the Chairman and the Chief Executive Officer (CEO). The remaining 15 directors fall into the following groups based on the type of shareholders they represent: four user directors representing large global banks (Bank of America Merrill Lynch, BNP Paribas, Barclays, and JP Morgan),[44] three LSEG directors, two venue directors (representing Euronext and Nasdaq), and one customer director (currently the CEO of Amundi). The remaining five posts are held by independent non-executive directors (iNEDs).[45]

(83) While LSEG does not directly appoint a majority of board members for LCH.Clearnet Group, it needs to approve the candidates proposed for the seven directors appointed by the venues, customers, and users. Therefore, together with the direct appointment of the "LSEG directors" as well as the CEO, LSEG is involved directly or indirectly in the appointment of 11 out of 17 board members. In addition, the remaining five independent directors as well as the Chairman are to be independent and need to be approved by a shareholder's meeting where LSEG holds a majority.

(84) As regards LSEG’s team of senior executive officers, LSEG has the right to appoint and remove the CEO of LCH.Clearnet.[46] The CEO is then responsible for the recruitment of senior managers and appoints the executive team of LCH.Clearnet on the group level. The CEO is delegated with the day-to-day responsibility of running LCH.Clearnet's operations and the implementation of the strategy and business plan as specified in the terms of the executive delegation, which may not be changed without LSEG's consent.[47] In addition, it is specifically agreed that LCH.Clearnet's CEO has to consult with LSEG's CEO on the recruitment of senior executives, including the right of LSEG's CEO to meet with possible candidates.[48] No other shareholder has comparable rights.

(85) Moreover, [THE CEO OF LCH IS TO USE ALL REASONABLE EFFORTS TO INFORM HIMSELF, AND INSTRUCT HIS MANAGEMENT TEAM TO INFORM HIM, OF ANY MATTER THAT IS INCONSISTENT WITH LCH'S

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42 LSEG Annual Report, 31.12.2015, p. 8 and 9.

43 Relationship Agreement between LCH.Clearnet Group and LSEG and LSE Ltd. from May 2013.

44 [BUSINESS SECRETS].

45 [BUSINESS SECRETS].

46 Article 10.2.2 Relationship Agreement.

47 Article 10.5 Relationship Agreement.

48 Article 10.6 Relationship Agreement. However, this clause does not constitute a formal veto right as the Notifying Parties have clarified in their response to the Statement of Objections I, paragraph 568.

CORE OPERATING PRINCIPLES, WHICH HE MUST THEN INFORM THE BOARD],[49] while LCH.Clearnet's group CEO is a member of LSEG's executive committee.[50]

5.3.2.3. Specific rights conferred on LSEG

(86) The Articles of Association and the Relationship Agreement provide three categories of matters for which specific rights of specific shareholders (or groups thereof) have been defined. These are so-called "LSEG consent matters",[51] "push matters",[52] and "minority protection reserved matters".[53]

(87) [LSEG CONSENT MATTERS INCLUDE THE REQUIREMENT FOR LSEG TO AGREE TO THE ADOPTION OF THE ANNUAL BUDGET AS WELL AS TO ANY MATERIAL VARIATION OF THE BUSINESS. THEY ALSO INCLUDE THE PROVISION THAT LSEG MUST POSITIVELY CONSENT TO ANY MATERIAL IT INVESTMENT.].

(88) [IN PRACTICE, LSEG CONSENT MATTERS INCLUDE A RANGE OF DECISIONS AND WHILE THE NOTIFYING PARTIES CLAIM THEM TO BE "UNCOMMON", THEY ALSO SUBMIT THAT "THERE HAVE BEEN OTHER LSEG CONSENT MATTERS SINCE 1 MAY 2013, THE "MOST ROUTINE" OF WHICH IS THE ADOPTION OF NEW BUDGETS.].[54] [THE RELATIONSHIP AGREEMENT SPECIFIES THAT "*A LSEG CONSENT MATTER WILL NOT OCCUR OR BE IMPLEMENTED OTHER THAN WITH LSEG'S PRIOR WRITTEN CONSENT*"]"[55] [AND LISTS THE RELEVANT TYPES OF DECISION WHICH WILL CONSTITUTE A CONSENT MATTER, UNLESS THE EXCEPTIONS AS SET OUT IN THE RELATIONSHIP AGREEMENT APPLY. FOR THOSE MATTERS THAT ARE CONSIDERED A CONSENT MATTER, LSEG HAS TO CONSENT TO ANY DECISION FALLING UNDER THESE SPECIFICALLY DEFINED CASES. NO OTHER SHAREHOLDER HAS CONSENT MATTER RIGHTS.].

(89) Similarly, the provisions on push matters enable LSEG to elevate matters for resolution by the shareholders, even if a decision by the board has already been taken.[56] The possible content of push matters includes key elements for the strategic development of LCH.Clearnet like the expansion to new geographies and the admission of new venues wishing to become shareholders as well as material deviations from budget or business plan and any matter related to the company's IT strategy [BUSINESS SECRETS]. While the respective investment is also covered by the provisions on LSEG consent matters, the push matters provisions reinforce and clarify the influence of LSEG by specifically including strategy decisions, not only questions of the financial investments. In case a push matter has been raised, a decision has to be taken by the shareholders. A positive decision requires a majority

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49 Article 10.7 Relationship Agreement.
50 Article 10.7 Relationship Agreement.
51 Schedule 1 to the Relationship Agreement.
52 Schedule 2 to the Relationship Agreement.
53 Schedule 3 to the Relationship Agreement.
54 Notifying Parties' response to RFI 25 of 11 November 2016 received on 18 November 2016 (as updated on 22 November 2016), question 9, paragraph 49.
55 Article 7 Relationship Agreement.
56 Article 8 Relationship Agreement.

of 60% of the votes cast on that matter, including 25% of the votes cast on that matter attached to shares cast by user shareholders.

(90) While this provision shows that LSEG requires additional support from user shareholders for a positive decision, it also demonstrates that LSEG is in a position to elevate matters as push matters and block a positive decision on them. [BUSINESS SECRETS].[57] However, the fact remains that once a matter is raised as a push matter LSEG needs to agree before the matter can move forward (i.e. it has the possibility to block decisions). In addition, the very existence of these powers underlines the special powers of LSEG, given that no other shareholder can raise such a push matter.

(91) Finally, the minority protection reserved matters specify arrangements that can only be amended with the support of 80% of votes cast at a shareholder meeting. The minority protection reserved matters include any changes to the Relationship Agreement and the Articles of Association as well as the current shareholder structure. They also cover changes to the Core Operating Principles which are described further below.[58] These matters are limited to typical minority shareholders protection rights, relating to the existing overall structure and purpose of the company. They do not affect the actual managerial decisions relevant for the development of LCH.Clearnet. As a result, the fact that LSEG cannot act unilaterally on these matters is irrelevant for the assessment of LSEG's control over LCH.Clearnet.

5.3.2.4. Core operating principles

(92) In addition to the various matters referred to above, the Relationship Agreement sets out the core operating principles.[59] These principles include the general commitment to open access under FRAND terms but also the status of LCH.Clearnet Group as a fully commercial for-profit business. With regards to LSEG they specify that any contractual relationship between LSEG and LCH.Clearnet should be conducted on arm's length commercial terms. The core operating principles also confer on LSEG the special right to exercise full discretion to determine whether and to what extent distributable profits are actually paid as dividends to all of LCH.Clearnet's shareholders.

5.3.2.5. SwapClear Agreement

(93) SwapClear is a business unit of LCH Ltd and not a separate legal entity. There are specific contractual arrangements in place that provide a selective group of 14 banks that are among themselves organised in OTCDerivNet Ltd. (the "SwapClear banks")[60] with additional influence over the clearing of OTC instruments offered by SwapClear.

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57 Notifying Parties' response to RFI 25 of 11 November 2016 received on 18 November 2016 (as updated on 22 November 2016), question 6, paragraph 45.

58 Article 9 Relationship Agreement.

59 Schedule 4 to the Relationship Agreement.

60 The following banks are organised in OTCDerivNet and therefore parties to the SwapClear Agreement: Bank of America Merrill Lynch, Barclays, BNP Paribas, Citigroup, Credit Suisse, Deutsche Bank UK Holdings, Goldman Sachs, HSBC, JP Morgan, Morgan Stanley, Nomura, RBS, Société Générale, and UBS.

(94) [THE SWAPCLEAR BUSINESS HAS A CONTRACTUALLY ESTABLISHED CONSULTATIVE COMMITTEE THE MAJORITY OF THE MEMBERS OF WHICH ARE NOMINATED BY THE SWAPCLEAR BANKS.].

(95) [IN ADDITION, THE SWAPCLEAR BANKS, THROUGH A COMPANY ESTABLISHED BY THEM, HAVE THE CONTRACTUAL RIGHT TO BE CONSULTED PRIOR TO LCH IMPLEMENTING ANY CHANGE WHICH WOULD HAVE A MATERIAL IMPACT ON CERTAIN PRE-AGREED MATTERS. FINALLY, THE SWAPCLEAR BANKS ARE ALSO LINKED TO SWAPCLEAR VIA A COMPLEX REVENUE SHARING AGREEMENT.][61]

(96) [THE SWAPCLEAR BANKS HAVE THE COMMERCIAL OPTION TO MOVE THEIR BUSINESS TO ANOTHER CCP.][62]

5.3.3. The Commission's assessment

(97) The degree of influence that LSEG is able to exercise over LCH.Clearnet is relevant for several issues related to the assessment of the Transaction. All of the concerns that are directly related to clearing services provided by LCH.Clearnet or any of its subsidiaries are affected by the direct or indirect control that LSEG has over its clearing houses. In relation to vertical concerns, the question of effective influence is also important because it is a prerequisite for any potential ability to foreclose or otherwise impede competition.

(98) The assessment of LSEG's control over LCH.Clearnet has to be based on the ability to effectively influence the decision making within the clearing house, based on the factual and contractual powers conferred upon LSEG. The Notifying Parties' arguments that relate to historic developments and the intention behind the structuring of the contractual relations[63] are therefore less important than the final rules as set down in the relevant agreements. In addition, it is also not relevant for the assessment if LSEG has actually fully exploited its powers in the pre-merger context given that incentives for a specific behaviour could change because of the Transaction.

(99) The assessment can also only be based on the existing arrangements and does not assume any change in the relevant governance framework post-Transaction as the Notifying Parties seem to suggest.[64]

5.3.3.1. LSEG has at least negative control over LCH.Clearnet Group

(100) The Commission's Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings (the "Consolidated Jurisdictional Notice")[65] provides guidelines to assess means of control. According to the Consolidated Jurisdictional Notice, it is not necessary to show that decisive influence is or will actually be exercised. Rather, the effective possibility of exercising such influence, based on rights, contracts, or other means

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61 Article 7 SwapClear Agreement.

62 [IF THE SWAPCLEAR AGREEMENT IS TERMINATED, THE SWAPCLEAR BANKS ARE ENTITLED TO A DUPLICATE LICENSE OF THE SOFTWARE SYSTEMS USED BY LCH IN FAVOUR OF ANOTHER PROVIDE.].

63 Notifying Parties' response to the Statement of Objections I, paragraphs 553 et seq.

64 Notifying Parties' response to the Statement of Objections I, paragraphs 555 and 604.

65 Consolidated Jurisdictional Notice, paragraph 11 et seq.

should be taken into account.[66] In addition, the Consolidated Jurisdictional Notice specifies that sole control over an entity is not only given in situations where one entity possesses the power to determine strategic commercial decisions of another entity but also in situations of negative control where one entity possesses specific veto powers that are sufficient to produce a deadlock situation without having to cooperate with other shareholders.[67]

(101) While LCH.Clearnet's governance structure contains certain particularities, the Commission considers that LSEG can exercise at least negative sole control over LCH.Clearnet in which it holds a majority stake and that is fully consolidated in its accounts.

(102) The Commission takes the following specific elements of control into consideration: First, the Commission notes that influence may not only follow from price related decisions, but also from influencing key business decisions in a broader sense. In this regard, also minority shareholdings can be used to limit the ability of target companies to compete effectively.[68] The Commission has found before that influence on a company even based on minority shareholdings can lead to a possible elimination of competition.[69]

(103) With regards to competition concerns related to pricing decisions, it should be considered that relevant control is not limited to openly rising direct fees,[70] but can also be exercised by the blockage of possible price reductions. In this respect, pricing decisions within LCH.Clearnet can be taken at [BUSINESS SECRETS][71, 72]

(104) [WHILE THE LARGE LIQUIDITY PROVIDERS ARE REPRESENTED AT THE LCH GROUP BOARD WITH FOUR USER DIRECTORS, FINAL CUSTOMERS ARE ONLY REPRESENTED BY ONE DIRECTOR. UNDER THESE CIRCUMSTANCES, THE COMMISSION CONSIDERS THAT AN ALIGNMENT BETWEEN LSEG AND USER DIRECTORS FOR A SELECTIVE PRICE INCREASE COULD BE A LIKELY EFFECT OF THE PROPOSED TRANSACTION.]

(105) [IN ADDITION, GIVEN THAT LSEG HAS SIGNIFICANT INFLUENCE THROUGH THE DIRECT REPORTING LINE OF LCH.CLEARNET'S CEO TO

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66 Consolidated Jurisdictional Notice, paragraph 16.

67 Consolidated Jurisdictional Notice, paragraph 54.

68 For possible impact on commercial development caused by veto powers of minority shareholders see for example the decision of the UK Competition Commission on *Ryanair / Aer Lingus*, elaborating on the ability to influence the commercial policy and strategy of a corporation based on minority investments which could be used to block special resolutions, restricting abilities to issue shares and raise capital, and to limit the ability to effectively manage portfolios of relevant assets (CC report on Ryanair Holdings plc and Aer Lingus Group plc dated 28 August 2013, paragraphs 7.23 et seq.; Ryanair's appeal was subsequently dismissed by Appeal Tribunal [2015] CAT 14, Case No. 1239/4/12/15).

69 See Case COMP/M.4153 – Toshiba / Westinghouse, paragraph 87 et seq.

70 Fee increases can however not be ruled out in general, as it is not contested by the Notifying Parties that such increases have taken place for different reasons at several points in time (Notifying Parties' reply to SO, part F, paragraph 581). Results of the market investigation also identify that such increases have occurred in the past (Replies to questionnaire Q11 "Sell-side customers", question 179).

71 [LCH HAS MADE CERTAIN CHANGES TO THE APPLICABLE FEES (NOTIFYING PARTIES' RESPONSE TO RFI 25 OF 11 NOVEMBER 2016, TABLE 3).].

72 [BUSINESS SECRETS].

LSEG'S GROUP CEO,] the Commission considers that LSEG can at least indirectly influence pricing decisions.

(106) The Commission also notes that the FRAND commitment [BUSINESS SECRETS] does not, in itself, set an absolute ceiling to a price and thus prevent price increases. It would also not prevent a differentiated price increase for specific customer groups as described above as long as all customers falling within one of the two categories are treated equally.

(107) In addition to price changes, the Commission also notes that LSEG can exercise effective influence over other relevant decisions such as those related to innovation.

(108) First, when it comes to technological innovations, LSEG's rights related to its consent matters enable it to veto significant investments in IT projects.

(109) Second, when it comes to the introduction of new products, LSEG's control is particularly important in relation to the provision of merchant clearing services. Euronext is one specific example of a venue that depends on clearing by LCH.Clearnet. In order for Euronext to be able to compete with market participants like Eurex, it has to regularly introduce new products. [REDACTED PART DESCRIBES AN EXAMPLE OF PAST INTERACTION BETWEEN LCH AND EURONEXT].[73] Given LSEG's ability [TO IMPACT EURONEXT'S ABILITY TO INTRODUCE NEW PRODUCTS QUICKLY AND AT COMPETITIVE TERMS], it is plausible that LSEG could [BUSINESS SECRETS] at least prevent any future improvements to the [BUSINESS SECRETS] processes that led to the [EXPERIENCE REPORTED BY EURONEXT].

(110) Finally, the market investigation generally confirmed that LSEG's influence in LCH.Clearnet is real. For instance, some market participants indicated that LSEG has "*significant*" influence over LCH.Clearnet[74] which is also described as "*dominating*"[75] and leading to a "*strategic alignment*"[76] between both LSEG and LCH.Clearnet. Specifically the replies of shareholders of LCH.Clearnet are very noticeable in this context when mentioning that LSEG has an important *"say in strategic planning […] including topics of a commercial nature and product development"*.[77]

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73 Euronext's response to RFI of 8 September 2016, received on 16 September, Annex 3, [ID 5821]. Euronext submits that out of the Single Stock Dividend Futures that Euronext intends to list, and that Euronext and Eurex have in common, there are only [MINIMUM AMOUNT] where LCH.Clearnet's margin is lower than Eurex Clearing's.

74 Société Générale and Jefferies International, replies to questionnaire Q11 "Sell-side customers and issuers", question 178.1, [ID 4200] and [ID 4549], Virtu Financial Ireland reply to questionnaire Q11 "Sell-side customers", question 178.5, [ID 4536].

75 DekaBank Deutsche Girozentrale, reply to questionnaire Q11 "Sell-side customers and issuers", question 178.1, [ID 6016].

76 Danske Bank, reply to questionnaire Q11 "Sell-side customers and issuers", question 178.1, [ID 4146] Hudson River Trading Europe sees "strategic guidance" (reply to questionnaire Q11 "Sell-side customers and issuers", question 178.5, [ID 4947]).

77 Barclays, reply to questionnaire Q11 "Sell-side customers and issuers", question 178.1, [ID 4552]. ABN Amro Clearing Bank NV also sees significant influence of LSEG over LCH.Clearnet (reply to questionnaire Q11 "Sell-side customers", question 178.1, [ID 4504]) While Nomura replied that they would expect "*LCH seeks to determine its own strategy"* (reply to questionnaire Q11 "Sell-side customers and issuers", question 178.1, [ID 5338]), the same respondent also replied that "*LSEG may potentially be able to exert some degree of influence over the introduction of new products*", mentioning

(111) Moreover, it is noteworthy that the proposed merger between LSEG and DBAG [DOES NOT REQUIRE CONSULTATION WITH SHAREHOLDERS ON THE TRANSACTION].[78]

(112) Finally, in its analysis of the acquisition of LCH.Clearnet Group by LSEG[79] the Office of Fair Trading ("OFT") considered that the governance structure put in place does not exclude influence by LSEG over LCH.Clearnet.[80] Specifically, the OFT noted that *"the corporate governance and open-access provisions set out in the transaction agreements and UK regulatory framework would not, in themselves, prevent the Notifying Parties' ability to engage in partial foreclosure"*[81] and that *"the Notifying Parties would be likely to retain the ability to engage in partial foreclosure strategies (namely a uniform price rise and/or quality degradation)"*.[82] The decision of the OFT to nevertheless not oppose the proposed transaction was based on the fact that the incentives for any anti-competitive behaviour were limited given the relevant competitive landscape at the time of the transaction. In this scenario, LCH.Clearnet had incentives to distribute its services to other trading venues because LSEG was not a relevant competitor in any of the areas where potential customer platforms of merchant clearing services would compete. This is significantly different in the current case, where LCH.Clearnet serves direct competitors of Eurex.

(113) In light of the above, the Commission concludes that LSEG has significantly more influence over decision making processes within LCH.Clearnet than any other shareholder. Even if LSEG cannot necessarily unilaterally impose its strategy on LCH.Clearnet in all cases, it has the means to block key decisions which would lead to dead-lock situations, significantly affecting LCH.Clearnet's future development.

5.3.3.2. The SwapClear Agreement

(114) The Notifying Parties claim that [BUSINESS SECRETS] would counterbalance [BUSINESS SECRETS].

(115) The Commission takes note of additional rights conferred upon the SwapClear banks in the SwapClear Agreement, including the [RIGHTS IN RELATION TO TERMINATION]. However, the Commission notes that this agreement covers only the activities of SwapClear, namely the clearing of OTC traded interest rate derivatives ("IRD"). It has no bearing on the ability of LSEG to control LCH.Clearnet in general and is therefore not relevant for LCH.Clearnet's activities

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specifically CurveGlobal as one example (Nomura reply to questionnaire Q11 "Sell-side customers and issuers", question 178.3, [ID 5338]).

78 Notifying Parties' response to RFI 26 of 21 November 2016 received on 25 November 2016, question 7.

79 While the Notifying Parties suggest that the OFT has based its clearing decision on the analysis of the governance structures in place, a closer look to this assessment reveals a different picture. While the OFT has considered the specific system in place, it stated: "*the OFT does not rely on the specific corporate governance provisions in its decision to mitigate any competition concerns, it is only one of a number of factors the OFT has taken into account in reaching a decision*". (OFT decision ME/5464-12 from 14 December 2012 on the anticipated acquisition by London Stock Exchange Group plc of Control of LCH.Clearnet Group Limited, paragraph 137).

80 OFT decision ME/5464-12 from 14 December 2012 on the anticipated acquisition by London Stock Exchange Group plc of Control of LCH.Clearnet Group Limited, paragraphs 145, 154 and 337.

81 OFT decision ME/5464-12 from 14 December 2012 on the anticipated acquisition by London Stock Exchange Group plc of Control of LCH.Clearnet Group Limited, paragraph 336.

82 OFT decision ME/5464-12 from 14 December 2012 on the anticipated acquisition by London Stock Exchange Group plc of Control of LCH.Clearnet Group Limited, paragraph 337.

related to those markets where the Commission concludes that significant impediment to effective competition would arise as a result of the Transaction.

(116) As a result, for the purposes of this Decision, it is not necessary for the Commission to conclude on whether, or to what extent, SwapClear banks would have the ability to defeat any attempts by the merged entity to exercise market power.

5.3.3.3. Conclusion on LSEG's control over LCH.Clearnet Group

(117) In light of the above, and for the purposes of the assessment of this case, the Commission concludes that LSEG has at least negative control over key decisions of LCH.Clearnet, including price setting.[83] The core operating principles do not effectively limit LSEG's ability to implement anti-competitive behaviour as long as is not openly discriminatory.

6. BONDS

6.1. Introduction and the Notifying Parties' activities

6.1.1. Introduction to the bonds' market

(118) Bonds are fixed income securities, or debt instruments which guarantee (to the bond holder) the right to repayment, with interest, of the borrowed amount, at a specific date. Interest is generally paid at pre-determined levels and predetermined intervals. As in the case of equities, services related to bonds include listing, trading, clearing, settlement and custody. However, aspects of the life cycle of a bond that are specific to this financial instrument are set out below.

(119) Bonds are initially issued by borrowers, i.e. governments (public issuers), supranational (quasi-government) organisations (for example the European Central Bank or public companies) or private companies (including financial institutions) and are, on this basis, classified as "government bonds", "supranational bonds" and "corporate bonds" respectively.

(120) After their issuance, bonds are sold by issuers to investors in the "primary market", either through bond auctions or through bought deals.

(121) In bond auctions, certain market making banks pitch to attain a share of the issue with a view to either place it directly with investors or progressively sell it on the secondary market. Access to these auctions is usually restricted to pre-selected banks ("primary dealers") which are appointed by the issuer or the local debt management office ("DMO") to buy, promote and distribute government bonds on the secondary market. This mechanism (referred to as primary dealer regime) is specific to government bond issues.

(122) In a bought deal, which is the standard procedure for corporate bonds, the bank (also called syndicate bank) that will eventually buy ("underwrite") the issue at a set price is selected on the basis of bids submitted to the issuer.

(123) Listing is the practice of including a particular cash security (in this case a bond) on a Regulated Market ("RM") in the meaning of MiFID I. The decision on whether to list

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[83] In any event, focusing solely on the ability of LSEG to increase prices in LCH.Clearnet (including SwapClear) would be missing the key fact that Eurex will be free to increase such prices on its end, as neither absent the Transaction, nor post-Transaction banks have any say on pricing decisions of Eurex.

or not to list a particular bond and the choice of listing venue is driven by the issuer (usually indicated in their prospectus). Unlisted bonds can also be in principle admitted for trading on the secondary market (on a venue or OTC).

(124) Usually bonds are negotiable, that is, the ownership of the instrument can be transferred in the secondary market. Investors can sell or buy (i.e. trade) bonds in the secondary market any time up until maturity or early redemption. Bonds are usually traded much less frequently than equities (with the exception of some very liquid bonds such as for example German government bonds that are traded very regularly). This is mainly due to the fact that many investors hold the bond until maturity (buy-to-hold investors). Market makers therefore play a central role in this space by providing liquidity.

(125) The bond market is characterised by a two-tiered trading structure that includes a dealer-to-client ("D2C") space where market-making dealers provide liquidity directly to their customers (i.e. buy-side firms which include asset managers, insurance companies, etc.) and a dealer-to-dealer ("D2D") segment where market making dealers manage their inventory risk and source liquidity from other dealers (i.e. sell-side firms) for their respective clients business. Within these two segments, various execution environments exist: on the one hand, inter-dealer platforms / broker operated electronic venues (which include RM/MTFs[84] and are D2D), on the other hand, multi-dealer platforms (including RM/MTFs) and single dealer platforms (which are both D2C). Bonds can be traded electronically on the platforms listed above, by voice (also through voice brokers) or through hybrid execution.

(126) There are essentially three types of "risk management" options for bond trades, namely CCP clearing, uncleared trading with bilateral settlement (where buyers and sellers make their own arrangements to manage each other's risk of default) and matched principal trading. In matched principal trading, a facilitator (usually an inter-dealer broker) interposes itself between the buyer and the seller of a transaction in such a way that it is never exposed to market risk throughout the execution of the transaction, with both sides executed simultaneously, and the transaction is concluded at a price where the facilitator makes no profit or loss, other than a previously disclosed commission, fee or charge for the transaction.[85]

(127) Similarly to equities, settlement (which involves the transfer of the purchased securities by book entry against payment) is the final step of the life cycle for bonds.

(128) An assessment of the impact of the transaction on settlement and custody services for fixed income (i.e. bonds and repurchase agreements) is conducted in Section 8. below.

6.1.2. Notifying Parties' activities

(129) DBAG is active in listing, trading and clearing of bonds.

(130) DBAG provides listing services for government and corporate bonds via the Frankfurt Stock Exchange or FWB.

(131) DBAG is active in bonds trading through FWB and through Eurex Bonds, an MTF platform in which DBAG has an ownership interest of 79.44% which provides

84 Under MiFID II, OTF will be a third category of trading venue for multilateral trading of bonds.

85 See definition of matched principal in Article 4 (38) of Directive 2014/65/EU..

participants with dealer-to-dealer ("D2D") trading services in European bonds (in particular of German government bonds).

(132) All trades executed on Eurex Bonds are cleared by Eurex Clearing (ECAG).

(133) DBAG also provides settlement and custody services for cash instruments, including bonds, through its subsidiaries Clearstream Banking (Frankfurt) AG ("CBF") and Clearstream Banking (Luxembourg) S.A. ("CBL").

(134) LSEG provides cash bonds listing services via LSE and Borsa Italiana.

(135) LSEG provides trading services for bonds via the LSE by operating ORB, an electronic Order Book for Retail Bonds, and OFIS, the Order Book for Fixed Income Securities. Through Borsa Italiana, LSEG operates MTS (which is 60.37% owned by Borsa Italiana), which operates different trading venues for the secondary trading of fixed income products, including MTS Cash, MTS Bondvision and MTS BondsPro. In addition Borsa Italiana operates Mercato Obbligazionario Telematico (MOT), ExtraMOT (the Group's Italian retail bond trading platforms), and EuroTLX, a majority-owned MTF in the European retail fixed income market.

(136) Bonds traded on MTS' venues are cleared by various clearing houses, namely LCH SA, LCH Ltd and CC&G.

(137) LSE is active in settlement and custody services for cash instruments, including bonds, via Monte Titoli (the Italian CSD).[86]

6.2. Market definition

(138) In the sections below, the Commission only assesses the impact of the Transaction on CCP clearing of bonds, as it is the only layer of the bonds value chain (among listing, trading and clearing) in relation to which the Commission concludes that the Transaction would lead to a significant impediment to effective competition.

6.2.1. Notifying Parties' views

(139) In the Form CO and in their response to the Decision opening the proceedings, the Notifying Parties consider that an overall market for "risk management" of bonds, comprising all "risk management" options, including clearing through a CCP as well as bilateral settlement and matched principal trading (despite being distinct, these latter two options are referred to by the Notifying Parties together as the "uncleared" options) should be considered. In their response to the Statement of Objections, the Notifying Parties reiterate their claim that the Commission's analysis is based on an artificially narrow market for CCP clearing of bonds which disregards the competitive pressure posed by other uncleared forms of "risk management".

(140) According to the Notifying Parties, CCPs face significant competitive constraint from uncleared trades, which constitute the vast majority of all cash bonds trades (80-90%).

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[86] LSEG also owns globeSettle SA, a newly established CSD and ICSD in Luxembourg, currently only active in relation to equities. By nature, globeSettle is not a traditional CSD (not having a captive market of reference) and, as such, globeSettle can be characterised as both a CSD and an ICSD. This distinction between CSD and ICSD thus only serves to describe the commercial practice of globeSettle and does not indicate any limitation on the services that it can provide as either a CSD, on the one hand, or an ICSD, on the other.

(141) In this respect, the Notifying Parties argue that customers (including LSEG MTS' customers) usually have the choice of whether to clear a trade via a CCP or to rely on other forms of "risk management" (i.e. bilateral settlement or matched principal trading through an interdealer broker).

(142) The Notifying Parties further argue that in particular matched principal trading is a close substitute to CCP clearing at least in the D2D space and offers comparable benefits.

(143) The Notifying Parties submit that the geographic scope of the market for bonds clearing services is EEA-wide.

6.2.2. The Commission's assessment

(144) In its previous practice, the Commission considered the possibility to distinguish clearing services by type of customer, i.e. a segmentation between (i) a merchant market for the provision of clearing services to trading platforms on the one hand; and (ii) a downstream market for the provision of clearing services to CCP customers, on the other hand, but left open whether a separate market for the provision of cash clearing services to third party trading venues and platforms exists.[87]

6.2.2.1. CCP clearing of bonds should be considered separately from CCP clearing of other asset classes

(145) The Commission firstly considers that, under the narrowest possible market definition, CCP clearing of bonds should be analysed separately from CCP clearing of other asset classes.[88]

(146) From a demand-side perspective, customers' demand usually relates to the clearing of individual transactions, in this case of individual bond transactions, pointing to the existence of a market limited to CCP clearing of bonds

(147) In addition, in relation to supply-side substitutability, certain elements indicate that the degree of supply-side substitutability between CCP clearing of bonds and CCP clearing of other asset classes is limited.

(148) First, clearing requires specific authorisations per asset class and depends on instrument specific expertise and technology, even if the basic infrastructure would appear to be common across financial instruments.

(149) In addition, clearing houses that offer one category of instruments are unlikely to start offering clearing of another category of instruments within a relatively short time frame and without incurring significant investment costs[89] (including building out workflow, creating or adapting a guarantee fund, devising risk models, purchasing underlying data, adopting or creating new IT systems, establishing connections etc.). In addition, in view of the importance of clearing houses from a systemic risk point of view, launching clearing also (and importantly) requires a

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87 See Case COMP/M.6166 – DBAG / NYSE Euronext, paragraph 89.

88 This is without prejudice to the potential existence of a wider market for the provision of integrated clearing services which is discussed in Section 10.

89 Commission Notice on the definition of the relevant market for the purposes of Community competition law, "Market Definition Notice", OJ C 372, 09.12.1997, paragraphs 20-23.

detailed regulatory review. Obtaining the necessary approvals for a new clearing service (i.e. for a new asset class) therefore cannot be done swiftly.

(150) The lack of immediate supply-side substitutability from clearing of one asset class into clearing another is also illustrated by the attempts of some established equities clearing houses, such as EuroCCP, to penetrate adjacent clearing markets (in the case of EuroCCP, stock loans).

(151) As explained by EuroCCP itself (which is only active in the clearing of equities space), the process of bringing to the market a new, even if due to the underlying, closely related clearing service, entails a very time consuming and investment intensive effort. According to EuroCCP, entering a totally new asset class, for example entering the fixed income clearing space (i.e. clearing of repos and bonds) would be particularly burdensome, and it "*would take significantly longer, entail much higher investments (in terms e.g. of risk management enhancement, validation, etc.) and increased fixed costs, while commercial barriers to entry are also much higher*", compared to for example expanding into other equities clearing (for example equities lending).[90]

(152) Therefore, the Commission concludes that for the purposes of this Decision a separate market for CCP clearing of bonds should be considered.

6.2.2.2. CCP clearing of bonds and other forms of "risk management" of bonds do not form part of the same market

(153) The Commission has not previously considered whether CCP clearing of bonds and other "risk management" options for bonds form part of the same product market.

(154) In the Decision opening the proceedings and in the Statement of Objections, the Commission preliminarily identified a separate market for the provision of CCP clearing services for bonds in the EEA.

(155) In this respect, the results of the Phase II market investigation confirmed that, while alternative forms of "risk management" (bilateral settlement and matched principal trading) remain very relevant in the bonds' space, a separate demand for CCP cleared bonds exists, will continue to exist and is bound to increase in the near future.

(156) First, a significant number of sell-side customers centrally clear at least part of their bond trades through a CCP.[91] In addition, while some buy-side customers either do not clear any of their bond trades or clear only a small part of them,[92] several other respondents stated that they clear the entirety or the near entirety of their bond trades.[93] On this basis, while it is acknowledged by the Commission that some

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90 Agreed minutes of a teleconference call with EuroCCP of 21 October 2016, [ID 4135].

91 Replies to questionnaire Q11 "Sell-side Customers", question 72.

92 See, e.g. EDF, Pimco and Eurizon, replies to questionnaire Q13 "Buy-side customers", question 52 [IDs 5215, 4671, 5252].

93 See, e.g. Cheyne Capital, Banca Sella, Lyxor, Pine River Capital, replies to questionnaire Q13 "Buy-side customers", question 52 [IDs 5400, 4574, 5259, 5722]. In their response to the Statement of Objections, the Notifying Parties contest the Commission's interpretation of the replies to this question and consider that of the 25 market participants who responded to this question 9 said that they clear 100% of their bonds through a CCP, 8 said that they clear 0% of their trades and 8 cited a "*percentage somewhere in between*" and infer from this that market participants have a "flexible" approach to clearing. The Commission does not agree with the Notifying Parties' presentation of the results of the market investigation and notes that out of the 8 respondents that, according to the Notifying Parties,

customers either do not clear their bonds' trades though a CCP or they only clear a percentage of their bonds trades, the market investigation indicates that, at least for some customers, CCP clearing is viewed as the preferred, if not the only, option.

(157) Furthermore, a significant number of sell-side customers that responded to the Commission's Phase II market investigation do not appear to consider CCP clearing, matched principal trading and bilateral settlement as substitutable options.[94] More specifically, they do not consider CCP clearing to be substitutable with bilateral settlement[95] or matched principal trading.[96]

(158) With specific reference to matched principal trading, the Phase II market investigation did not confirm the Notifying Parties' argument that this option is widely considered as a substitute of CCP clearing.[97] When asked to compare CCP clearing with matched principal trading in terms of, for example, counterparty risk, netting or any other relevant parameter, only a few respondents considered these options as comparable. On the contrary, respondents indicated that CCP clearing differs from other forms of "risk management", due, among other things, to credit risk reduction, settlement risk reduction or netting efficiencies provided by CCPs. One market participant stated that: "*Credit risk reduction and netting are higher when we operate with CCP.*"[98] Another market participant responded that they are not comparable as "*the safety of ccp clearing is not comparable in other type of settlements where ccp is not involved.*"[99] In addition, another market participant stated that "*From a rates perspective CCP is preferable for netting to reduce settlement risk and also counterparty credit risk reduction benefits.*"[100]

(159) The market investigation provided evidence that, while due to the nature of the bonds market, "uncleared" still constitutes the most used way of settling a bond transaction, market participants acknowledge that clearing through a CCP still proves to be advantageous vis-à-vis other forms of risk management also in relation to bonds. In

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cited a percentage "*somewhere in between*", 5 respondents stated that they clear a percentage of their trades ranging from 90 to 99% (1 respondent said more than 70% and 2 respondents stated less than 5%).

94 Replies to questionnaire Q11 "Sell-side Customers", question 74..

95 Replies to questionnaire Q11 "Sell-side Customers", question 74.3.

96 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 74.2. Some respondents to this question indicated that they do not use matched principal.

97 In their response to the Statement of Objections, the Notifying Parties submit *"the Commission seeks to diminish the relevance of matched principal trading"* and cite the replies to questionnaire Q1, "Sell-side Customers", question 114 to support their contention. The Commission does not agree with the Notifying Parties' presentation of the results of the market investigation and notes that among the 11 respondents to this question stating that they use more options, only one respondent (Lloyds) mentions matched principal trading, suggesting that market participants either clear through a CCP or settle bilaterally their bonds, rarely considering matched principal trading as a relevant option. In addition, when explicitly asked to compare CCP clearing and matched principal trading in question 75 of questionnaire Q11 "Sell side customers and issuers", out of 31 informative responses, 7 market participants said they do not use or know matched principal trading, only 3 said that the two systems can be considered *"comparable"* or that *"differences are minimal"*, while all the remaining respondents list specific distinguishing features of CCP clearing and/or matched principal and many of them find CCP clearing more efficient.

98 Banca Akros, reply to questionnaire Q11 "Sell-side customers and issuers", question 75. [ID 4481].

99 IW Bank, reply to questionnaire Q11 "Sell-side customers and issuers", question 74.2 [ID 4194].

100 Bank of America Merrill Lynch, reply to questionnaire Q11 "Sell-side Customers and issuers", question 75. [ID 6053].

this respect, a market participant stated that they prefer central clearing because "*it reduces credit risk and operational costs associated with it.*"[101] According to another market participant "*Clearing of bond transactions provides several advantages – it removes considerations about the credit worthiness of counterparties, and instantly broadens the number of counterparties with whom one can trade. The removal of credit risk from the trade decision makes prices from counterparties fungible and central clearing greatly simplifies settlement. Clearing also enables one to enjoy netting benefits and lower risk capital charges in facing a CCP as opposed to other counterparties in the period between trading and settlement. Lastly, central clearing can allow for pre and post trade anonymity to exist since the counterparties have no need to be made aware of the identity of the other party.*"[102] The same market participant stated that "*the regulatory regime incentivizes clearing over non-cleared activity. Consequently to the extent that CCPs are capable of managing the risk associated with the instrument e.g. liquidation risk in a default, banks are motivated to use clearing.*"[103] The fact that customers do not consider CCP clearing as substitutable with "uncleared" options is further evidenced by the fact that the large majority of respondents do not systematically compare the options of central clearing through a CCP and trading without centrally clearing (matched principal and/ or bilateral settlement).[104]

(160) Even more importantly, when asked how they would react to a 5-10% increase in clearing fees (i.e. a small but significant and non-transitory increase of price ("SSNIP")), the majority of sell-side customers that provided informative answers to the Commission's question responded that they would continue to centrally clear their trades and only a minority of respondents would switch to trading without clearing through a CCP.[105] Also, some customers do not have internal mandates to transact on an uncleared market.[106]

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101 Optiver, reply to questionnaire Q11 "Sell-side Customers and issuers", question 73, [ID 4061].

102 BNY Mellon, reply to questionnaire Q11 "Sell-side Customers and issuers", question 73 [ID 5132].

103 BNY Mellon, reply to questionnaire Q11 "Sell-side Customers and issuers", question 86 [ID 5132].

104 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 78 and replies to questionnaire Q13 "Buy-side customers", question 55.

105 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 81. The Notifying Parties contest the Commission's analysis of the responses to this question and claim that the Commission has incorrectly reported the results of the SNIPP test in the Statement of Objections. In particular, the Notifying Parties consider that the answers of those that responded "Other" and stated that they would evaluate the specific conditions should be considered as a further indication that CCP clearing and other options should be considered as substitutable. The Commission notes that 19 respondents stated that they would continue to centrally clear, 8 respondents answered that they would go uncleared and 15 respondents answered "other". Out of these 15, 5 responded "N/A" or stated that they do not currently clear their bonds trades. Out of the other 10, the large majority did not provide informative answers or answers that would alter the Commission's analysis of the SNIPP test. For example, IW Bank stated that "*We would continue to offer bond trading to our customers, but customers fees may be increased";* Credit Agricole stated that: "*At this stage, it is difficult for us to answer this hypothetical question*"; BNY Mellon answered: "*It would very much depend upon which credit standing of counterparties with whom one was trading, the netting and capital benefits available from clearing and the trading margins available to cover the increased costs. To the extent that there was competition between CCPs, as there has been in equity clearing, one might expect price and innovation competition between the CCPs to alleviate such cost increases.*"

106 See for example. Case COMP/M.6166 – DBAG / NYSE Euronext, paragraphs 287, 290, 291 and 304.

(161) The existence of a separate demand for CCP cleared bonds is also acknowledged by the Notifying Parties in their internal documents. For example, [BUSINESS SECRETS][107]

(162) While it is uncontestable that "uncleared" options including matched principal are still prevalent in terms of volumes, the Phase II market investigation yielded evidence that the demand for CCP clearing of bonds not only exists but is bound to increase also at the expense of matched principle trading as a result of the upcoming regulatory changes.[108]

(163) In this context, one market participant stated that "*in view of forthcoming regulation, clearing bonds will become more advantageous as compared to other alternatives. In the specific, we can consider regulations such EMIR, IFRS 9 and Basel 3 important steps towards a more and more centralized clearing activity*."[109] Another market participant explained that "[…] *Centrally clearing could become more advantageous under the CSDR regulation which is aimed to reduce the number of failing trades. If centrally clearing is linked to guaranteed delivery this option could become more valuable.*"[110]

(164) In addition, one of the Notifying Parties' competitors, an interdealer broker that offers matched principal trading to its customers, after having explained the reasons why CCP clearing is not particularly common compared to "uncleared" forms of "risk management" in the bonds' space, stated that this "*current market structure will change dramatically with the onset of MiFID II where the rules surrounding non-discretionary execution on MTFs will ban matched-principal trading. As MTFs will need to offer centrally cleared or name give up access*[111] *after January 2018*[112] *it is likely that the adoption of central clearing will rise significantly and therefore the competitive impact of merging execution and clearing will be much more significant than is the case today.*"[113]

(165) This regulatory push towards clearing is also acknowledged and viewed by the Notifying Parties as an opportunity to leverage their position in their internal documents. [BUSINESS SECRETS][114] In their response to the Statement of

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107 LSEG internal email [BUSINESS SECRETS], 26 June 2015, [ID 3549-15385].

108 See, in particular, MiFID II/MIFIR and CRR rules on capital requirements. For a general introduction to the regulatory framework, please refer to Section 5.2.3 above.

109 Veneto Banca, reply to questionnaire Q11 "Sell-side Customers and issuers", question 86, [ID 4173].

110 Deutsche Bank, reply to Q11 "Sell-side Customers and issuers", question 86 [ID 4745].

111 Agreed minutes of a teleconference call with BGC of 20 October 2016, [ID 6076]. In relation to the difference between matched principal trading and name give up, BGC explained that "*BGC's matched-principal protocol* [is] *where BGC becomes the counterparty to each party to the trade"* while in bilateral name give up *"BGC does not become principal to the trade, it arranges the trade and gives the name of the other party to each customer. In case of name-give up execution, the counterparties to the trade are responsible for the risk management and settlement.*".

112 BGC refers to Article 19.5 MiFID II that provides that: "*Member States shall not allow investment firms or market operators operating an MTF to execute client orders against proprietary capital, or to engage in matched principal trading"*. In relation to Organized Trading Facilities ("OTFs"), Article 20 MiFIR limits the possibility of matched principle trading for the new venues only to cases where "*the client has consented to the process*". While it is generally expected that interdealer brokers may register as OTFs as pointed out by the Notifying Parties in their response to the Statement of Objections, this is at this stage at the very least uncertain.

113 Agreed minutes of a teleconference call with BGC of 20 October 2016, [ID 6076].

114 LSEG internal email [BUSINESS SECRETS], 26 June 2015, [ID 3549-15385].

Objections, the Notifying Parties did not comment on the evidentiary value of this internal document.

(166) Therefore, the Commission concludes that, for the purposes of this Decision, in particular as regards bonds, CCP clearing and other forms of "risk management" do not form part of the same product market. Hence, for the purposes of this Decision, a separate product market for CCP clearing of bonds should be considered.

6.2.2.3. Any possible further sub-segmentation of the market for CCP clearing of bonds can be left open

(167) In the Decision opening the proceedings and in the Statement of Objections, the Commission left open the question whether the market for CCP clearing services for bonds should be further sub-segmented on the basis of the other potential segmentations, for example the type and liquidity of the bond (for example German government bonds) that is cleared or whether the bond that is cleared is traded D2D and D2C. The Phase II market investigation did not provide any clear evidence in this respect, although it provided some indications that government bonds tend to be more often centrally cleared than corporate bonds[115] and that D2D bond trades are more commonly cleared than D2C trades.

(168) In any event, the question of whether the market for CCP clearing services for bonds should be further segmented on the basis, for example, of the type and liquidity of the bond that is cleared or on the basis of whether the bond that is cleared is traded D2C or D2D can be left open for the purposes of this Decision as it does not affect the Commission's competitive assessment in relation to bonds.

6.2.2.4. Geographic market definition

(169) As regards geographic market definition, in *DBAG /NYSE Euronext*,[116] the notifying parties submitted that the market for cash clearing was at least EEA wide. The Commission ultimately left the market definition open.

(170) The market investigation in this case did not yield any evidence that would contradict the Notifying Parties' claim that the geographic scope of the market for bonds clearing services is EEA wide.

(171) The market investigation showed that market participants generally purchase clearing services for bonds in the EEA.[117]

(172) Therefore, the Commission considers that, for the purposes of this Decision, the market for CCP clearing of bonds is EEA-wide.

6.2.2.5. Conclusion on relevant market

(173) Therefore, for the purposes of this Decision, the Commission considers that the relevant market in relation to bonds is the market for CCP clearing of bonds in the EEA.

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115 Replies to questionnaire Q13 "Buy-side customers", question 57. This appears to be also confirmed by the data submitted by the Notifying Parties that show that [BUSINESS SECRETS]. See Notifying Parties' response to RFI 21 of 14 October 2016 received on 23 October 2016 (final consolidated version), question 21, Annex 25.

116 DBAG/NYSE Euronext, paragraph 90.

117 See in particular replies to questionnaire Q11 "Sell-side Customers and issuers", and questionnaire Q1 "Sell-side Customers".

6.3. Competitive assessment

6.3.1. The Transaction would strengthen LSEG's dominant position in the market for CCP clearing of bonds in the EEA

6.3.1.1. Notifying Parties' views

(174) In their submissions, the Notifying Parties argue that, even if only a separate market for CCP clearing of bonds were to be considered, the Transaction would not lead to competition concerns.

(175) First, in the Notifying Parties' view, other forms of "risk management" (even if they are considered to form part of a separate market vis-à-vis CCP clearing), pose a significant competitive out-of-market constraint.

(176) The Notifying Parties claim that they are not close competitors since DBAG provides bonds clearing services only for its own trading venues (hence is not active on a merchant market for clearing), while LSEG's clearing houses also offer clearing services to non-vertically integrated third party venues. As a result, if LCH.Clearnet raised prices of clearing services, customers would also have to move their trades to Eurex Bonds if they wanted to switch to ECAG. In addition, due to the limited trade flow of bonds which is cleared [BUSINESS SECRETS], in the Notifying Parties' view, this renders the possibility of uncleared trades a closer alternative to clearing through LCH.Clearnet than ECAG.

(177) In addition, the Notifying Parties submit that the Transaction cannot give rise to competition concerns, as [NOTIFYING PARTIES DESCRIPTION OF ECAG POSITIONING, CONTAINING BUSINESS SECRETS].

(178) The Notifying Parties argue that other CCPs are present in the bonds clearing space and that sponsored entry of CCPs that are currently active in the clearing of other asset classes could occur.

(179) Finally, the Notifying Parties also argue that the merged entity will not have the ability or the incentive to foreclose rival trading platforms (for example BrokerTec) in the light of the LCH.Clearnet open access model approach.

6.3.1.2. The Commission's assessment

(180) In 2015, the Notifying Parties had a combined market share in CCP clearing of bonds in the EEA of [90-100%] by value, with an increment brought by ECAG of [0-5%]. LSEG's clearing houses' respective market shares accounted for [40-50%] (LCH SA), [5-10%] (LCH Ltd) and [30-40%] (CC&G).[118]

(181) The remaining CCPs which account for a very small fraction of the market (each with a market share of well below [0-5%]) do not constitute a credible alternative as they are very small local players with a narrow geographic focus (for example, Keller, KDPW, CCP Austria, Nasdaq OMX and BME). A market participant confirmed that other CCPs do not play a significant role in the market by stating that: "[…] *other competitors existing in the market only offer clearing of a smaller range of products.*"[119] Further, SIX x-clear only appears to have achieved a very marginal

[118] Form CO, Table B.24.

[119] BBVA, reply to questionnaire Q1 "Sell-side Customers", question 124.2 [ID 2334].

presence in the bonds' clearing space.[120] A market participant described SIX as "*strongly limited regionally.*"[121]

(182) The nearly monopolistic market shares of LSEG ([90-100%] overall) and the elimination of the only other competitor of any significance in the market already provide strong indications that the merger will strengthen LSEG's dominant position in the market for CCP clearing of bonds. The Commission acknowledges that, as put forward by the Notifying Parties in their submissions, the bond market is characterised by a variety of different options available to customers when entering into a bond transaction, including the possibility to trade and clear through an integrated trading / clearing facility (like DBAG's), the possibility to trade on one platform and clear through a CCP (for example trade on MTS or BrokerTec and clear through LCH), the possibility to trade OTC and register the trade for CCP clearing, the possibility to trade on a platform and settle bilaterally, the possibility to trade OTC via an interdealer broker offering matched principal trading. The Commission considers that, as also indicated by the market investigation,[122] customers can and often do use the different options that are available to them, but these options are not necessarily substitutable as the Notifying Parties suggest. In this respect, as discussed in detail in Section 6.2.2. above, the market investigation indicated that a separate demand for CCP clearing exists. On that basis, to the extent customers want to clear their bond trades, they necessarily have to clear through one of the Notifying Parties' CCPs, i.e. the only players that are credibly able to address this demand.

(183) The Commission further notes that, despite the fact that DBAG does not offer bonds' merchant clearing at present,[123] the Notifying Parties' clearing components are, at least indirectly, competing.[124]

(184) In this respect, the market investigation indicated that customers or at least some customers compare these different trading/clearing offerings, including MTS / LCH.Clearnet and Eurex (or BrokerTec / LCH.Clearnet).[125] When asked about the clearing houses where they want to clear their bond trades, customers that responded to the market investigation listed ECAG alongside LSEG's clearing houses.[126]In contrast, the market investigation did not provide any evidence that any other competitor has a meaningful presence or in any way constrains the Notifying Parties.

(185) The Commission further considers that the Notifying Parties' claim that going "uncleared" (in particular matched principal) would be a closer alternative to LCH.Clearnet for LCH.Clearnet's customers than switching to ECAG, [BUSINESS SECRETS] is not convincing. [BUSINESS SECRETS].[127] In addition, being an active CCP, ECAG presents by definition the same service characteristics and

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120 SIX x-Clear, reply to questionnaire Q6 "Competitors (listing, trading, clearing)", question 130 [ID 2518].

121 Unicredit, reply to questionnaire Q1 "Sell-side Customers", question 124.2 [ID 2411].

122 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 83.

123 For a description of the Notifying Parties' models and the "bundle-to-bundle" competition between them, see Section 5.1.2.2 above.

124 In addition, while it is currently unclear how exactly the upcoming regulation on open access will play out in practice, it is the aim of that regulation to break up the vertical silos.

125 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 83.

126 Replies to questionnaire Q1 "Sell-side Customers", question 120.

127 [BUSINESS SECRETS].

advantages as LSEG's CCPs (central position, netting possibilities, etc.) and is thus the most (and only) direct alternative to LSEG's CCPs in the CCP clearing of bonds space. It is appropriate to exclude that the Notifying Parties compete for cleared bonds or to conclude that going "uncleared" is a closer option for all market participants than switching to ECAG [BUSINESS SECRETS]. This is because, as explained in Section 6.2.2. above, a significant number of customers do not view cleared and uncleared bonds as substitutable and even customers that only clear part of their bond trades (and go uncleared for the rest), to the extent they want to clear, they would continue clearing even in the event of an increase in clearing fees.[128]

(186) In relation to the Notifying Parties' argument that ECAG's position in the bond clearing market will be further undermined by [NOTIFYING PARTIES DESCRIPTION OF ECAG POSITIONING, CONTAINING BUSINESS SECRETS], the Commission notes that, during the market investigation, [ONE CUSTOMER'S DESCRIPTION OF EUREX BONDS POSITIONING AND LIKELY FUTURE DEVELOPMENT][129]

(187) The Commission notes that it is still unclear [BUSINESS SECRETS][130] [DISCUSSION OF AVAILABLE OPTIONS FOR CUSTOMERS, CONTAINING BUSINESS SECRETS]:[131]

(188) The Commission further notes that, in any event, there are insufficient elements to determine the impact [DISCUSSION OF POTENTIAL CHANGES IN MARKET STRUCTURE, CONTAINING BUSINESS SECRETS].

(189) First, as [BUSINESS SECRETS].[132] This implies that [BUSINESS SECRETS], in any event, [BUSINESS SECRETS].[133] German government bonds will consequently continue to be cleared by ECAG (that, in any event, currently clears also other nationalities of bonds[134] and could do so in the future).

(190) There are, in addition, indications in DBAG's internal documents that Eurex Bonds' [NOTIFYING PARTIES DESCRIPTION OF STRATEGIC OPTIONS] or at least that Eurex is considering this possibility.[135] Thus, should DBAG decide to [DISCUSSION OF AVAILABLE OPTIONS, CONTAINING BUSINESS SECRETS]. In this respect, the Commission further notes that, although CCP clearing is not the standard in D2C space, the Notifying Parties are the only two players that offer already today CCP services in relation to D2C bond transactions: some volumes traded D2C on FWB are cleared through ECAG and volumes traded on some of the LSEG D2C platforms are cleared in CC&G.[136]

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128 See Section 6.2.2 on market definition and replies to questionnaire Q11 "Sell-side customers and issuers", question 81.

129 Agreed minutes [BUSINESS SECRETS].

130 Agreed minutes [BUSINESS SECRETS].

131 Agreed minutes [BUSINESS SECRETS].

132 Agreed minutes [BUSINESS SECRETS].

133 Agreed minutes [BUSINESS SECRETS].

134 [BUSINESS SECRETS].

135 Notifying Parties' response to the Decision opening the proceedings, Bonds trading Annex 2, LL_Gen_071, slide 15, [BUSINESS SECRETS].

136 Notifying Parties' response to RFI 21 dated 14 October 2016 received on 23 October 2016 (final consolidated version), Annex 25.

(191) Furthermore, it cannot be excluded that post-Transaction, the merged entity could consider implementing alternative strategies to maintain the clearing business [BUSINESS SECRETS]. Evidence of this possibility is shown, for example, in [BUSINESS SECRETS][137] This [BUSINESS SECRETS] shows that the merged entity could, for example, potentially offer [DESCRIPTION OF POTENTIAL STRATEGIES DERIVED FROM BUSINESS SECRETS].[138]

(192) In their response to the Statement of Objections, the Notifying Parties did not comment on [BUSINESS SECRETS] cited in the previous recital and did not comment on the possibility for [NOTIFYING PARTIES DESCRIPTION OF ECAG POSITIONING, CONTAINING BUSINESS SECRETS].

(193) It follows from the above considerations, that the impact of the decision of the [BUSINESS SECRETS] and its consequences on Eurex' position especially on the clearing market remain too uncertain to overcome the Commission's concerns with respect to the impact of the Transaction in relation to clearing of bonds.

(194) In any event and in view of the foregoing, the Commission considers that the [BUSINESS SECRETS] position of DBAG in the bonds clearing market ([BUSINESS SECRETS]) as well as any consideration on the extent to which the Notifying Parties closely compete for the clearing of bonds is not of particular relevance, since the Transaction eliminates the only relevant (and by definition closest) actual and potential competitor of LSEG in the market for CCP clearing of bonds. Through the elimination of the only competitive constraint currently exerted on LSEG and the creation of a *de facto* monopoly at clearing level, the Transaction would give the merged entity the ability to unilaterally increase prices for CCP cleared bonds, without risking a loss of volumes to other CCPs.

(195) The Commission finally considers that, contrary to the Notifying Parties' argument, customer sponsored entry in the bonds' clearing space of new CCPs or of CCPs that are active in neighbouring markets is unlikely.

(196) First, as already noted in Section 5.2.1. above, barriers to entry into financial infrastructure markets are high, due in particular to strong network effects and economies of scale and scope. In order to successfully enter the market, a new player would have to overcome high investments and high regulatory requirements, achieve low costs, position itself to offer innovative product offerings to challenge what existing CCPs are able to offer, and obtain the support of a sufficient number of market participants.

(197) These considerations also apply to bonds clearing. First, the market investigation did not yield any evidence or indications of a future entry or expansion from neighbouring markets.

(198) EuroCCP indicated that it is not considering entering the bonds clearing market. As explained by EuroCCP itself "*EuroCCP does not clear fixed income (either repos or bonds) and is not considering to enter this area.*"[139] EuroCCP further described the hurdles that CCP clearing equities would encounter in order to enter the fixed income space as follows: "*It is not easy for a CCP not active in fixed income clearing to*

137 [BUSINESS SECRETS].
138 [BUSINESS SECRETS].
139 Agreed minutes of a teleconference call with EuroCCP of 21 October 2016, [ID 4135].

enter this market: first, it requires to obtain a specific EMIR authorisation; second, and most importantly, clearing is characterised by high network effects and high fixed costs which constitute barriers to entry for potential new players. It would need to develop an entirely new management system for fixed income which requires investments and would increase EuroCCPs fixed costs (e.g. by engaging additional employees). Since every CCP needs to have a critical mass to operate, the defection of only a few companies (in case they decided, e.g. to sponsor the entry of a new CCP) from a CCP would not be sufficient for a new entrant to be viable. Furthermore, sponsors will incur additional costs due to the continued requirement to use the first CCP when transacting with counterparties who have chosen not to leave; this is a disincentive for firms to sponsor a new CCP. In short, compared to starting to clear equity lending transaction, entering the fixed income clearing space (i.e. clearing of repos and bonds) would take significantly longer, entail much higher investments (in terms e.g. of risk management enhancement, validation, etc.) and increased fixed costs, while commercial barriers to entry are also much higher."[140]

(199) In addition, the market investigation did not yield any evidence that other players, including CME and ICE, would be considering or have any plans to enter the bonds clearing space.[141]

6.3.1.3. Conclusion

(200) In view of the foregoing, the Commission concludes that the Transaction would lead to a significant impediment of effective competition through the strengthening of a dominant position and creation of a *de facto* monopoly in the market for CCP clearing of bonds in the EEA.

7. REPOS

7.1. Introduction and the Notifying Parties' activities

7.1.1. Introduction to the repo market

(201) Repurchase agreements ("repos") are financing transactions in which securities are used as collateral for borrowing cash, or cash is used as collateral for borrowing securities. In economic terms, a repo transaction is equivalent to a collateralised loan, but in contrast to such a transaction, the ownership of the "collateral" changes hands in a repo. At the end of the repo transaction, the specific or equivalent securities are returned to the original owner, the cash is repaid, and both counterparties are left with what they possessed originally (plus/minus interest).

(202) Repos are an important means of ensuring liquid (inter-bank) money and securities/bond markets.[142] Counterparties in a repo transaction can therefore either be "cash-driven" or "securities driven". In a repo transaction, "sellers" (i.e. the securities providers) are cash-driven meaning they are in need of obtaining temporary cash while they have the ability to offer securities as collateral for that financing. "Buyers" (i.e. the securities takers) can be either cash-driven (i.e.

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140 Agreed minutes of a teleconference call with EuroCCP of 21 October 2016, [ID 4135].

141 Replies to questionnaire Q6 "Competitors (listing, trading, clearing)", question 135.

142 Securities lending is an economically similar transaction to repos, though in practice more often entails the temporary exchange of securities (i.e. a security is borrowed with another security as collateral).

interested to lend money safely against interest) or securities-driven (i.e. driven by the need to obtain temporary use of specific securities).

(203) Repos are differentiated by a number of parameters including the interest rate and the duration of the transaction. The security is initially "sold" at the current market price and "repurchased" at a pre-agreed price - the original sale price plus a previously agreed upon rate of interest applied (the so-called "repo rate"). The duration of a repo typically ranges from one day to three months, sometimes longer.

7.1.1.1. Specific repos vs general repos

(204) Repos can be either specific or general. A "specific" is a repo having a particular security as underlying, i.e. the collateral provided is a specified security and cannot be substituted with similar collateral of equivalent creditworthiness. The counterparties to a repo trade can also agree a list (referred to as a "basket") of securities which are acceptable to the buyer and the seller, can then provide any security from that list. Such repos are known as general collateral or "GC" repos.

7.1.1.2. Non-triparty repos vs triparty repos

(205) Repos can be bilateral (non-triparty) or triparty, depending on whether or not they entail the use of a triparty agent for collateral management services ("CMS"). As explained above, repos function like loans: upon completion of the transaction, the buyer of the securities is obliged to return specific or equivalent securities. The need for collateral management is triggered by the requirement to value and potentially substitute the collateral on an ongoing basis. This can be done in-house or by a third-party, namely a triparty agent.

(206) In a triparty repo, a triparty agent, usually an ICSD or a custodian[143], holds the collateral in a single account (that contains securities of the buyer and seller) at an ICSD or a CSD[144]. The triparty agent ensures maintenance of the value, quality and performance of the collateral, which entails the substitution of securities if so needed.

(207) All triparty repos are GC repos, but not vice-versa (GC repos with narrow baskets are generally speaking non-triparty repos).

7.1.1.3. Repos traded on ATS vs bilaterally

(208) Repos can be traded on automatic repo trading systems ("ATS"), or bilaterally, through voice brokers or directly.

(209) Regarding bilateral trading, the counterparties can either use telephones or electronic messaging systems to enter into a transaction without the involvement of a third party ("direct trading"), or rely on voice-brokers, who in turn use telephones and electronic messaging systems.[145]

(210) ATS are dedicated networks of interactive screens on which prices are displayed for various repos. Transactions can be executed and cleared, and settlement can be

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143 Custodians or custodian banks provide settlement and custody services in quality of intermediaries (as opposed to CSDs or ICSDs where the security was issued which have a direct access to the securities), as well as collateral management services.

144 See definitions of ICSD and CSD in Section 8.1.

145 Voice-brokers may also operate networks of voice-assisted electronic trading platforms, called automated trading systems.

initiated and completed automatically by clicking on an interactive screen. ("straight-through processing").

7.1.1.4. Cleared vs. non-cleared repos

(211) Repos can be cleared through a CCP or counterparties can decide to go uncleared.[146]

7.1.2. Notifying Parties' activities

(212) DBAG is active in (ATS) trading of triparty and non-triparty repos through Eurex Repo, which operates an ATS. All repos traded through Eurex Repo are cleared and have to be cleared through Eurex Clearing AG (or ECAG). ECAG does not provide repo clearing services for trades not executed on Eurex Repo.

(213) DBAG provides CMS, for its own triparty repo product GC Pooling through Clearstream Banking Frankfurt ("CBF") and Clearstream Banking Luxembourg ("CBL") (together "Clearstream").

(214) DBAG is also active in settlement of repos through Clearstream.

(215) LSEG operates an ATS, MTS, for trading of triparty and non-triparty repos. Repos traded on MTS can be cleared through either LCH.Clearnet (SA and Ltd) or CC&G. LSEG's clearing houses also provide repo clearing services to third parties, including for customers of third parties' ATS such as BrokerTec or Tullett Prebon. LSEG offers triparty repo products in the form of X-COM, Term £GC and most notably €GC Plus.

(216) CMS for €GC Plus and for Term £GC is provided by a third party provider, Euroclear, while LSEG's Monte Titoli provides CMS for X-COM. LSEG is also active in settlement of repos through Monte Titoli (the Italian CSD).

7.2. Market definition

7.2.1. Notifying Parties' view

(217) The Notifying Parties submit that a broad distinction should be observed between triparty repos (GC repos which involve outsourced CMS), on the one hand, and non-triparty repos (which do not involve outsourced CMS), on the other hand. For both triparty and non-triparty repos, the Notifying Parties propose to define markets for the trading and clearing/risk management layers. The Notifying Parties do not consider that further segmentations are appropriate.

(218) The Notifying Parties also indicate that the distinction between triparty repos and non-triparty repos is supported by the European Central Bank ("ECB") and the International Capital Market Association ("ICMA").

(219) According to the Notifying Parties, demand for non-triparty and triparty repos is asymmetric, for a number of reasons. First, demand-side substitutability would depend on the motivation of the counterparties: a securities-driven collateral taker could not replace a non-triparty repo with a triparty/GC repo, whereas cash-driven collateral takers and collateral providers might see both types of repos as alternatives. Moreover, without triparty functionality, substitution of collateral would be a time-consuming process, and customers are not able to replicate the fluid re-use of collateral provided by a triparty agent. Finally, in the event of a non-transitory

[146] See Section 5.1.2. above for introductory remarks on clearing.

increase in fees or margin requirements, sellers with high quality collateral could opt to transact via a non-triparty repo, whereas sellers with lower quality collateral could not.

7.2.1.1. Plausible segmentations of the non-triparty repo market

(220) Within the non-triparty repo market segment, the Notifying Parties propose to define separate markets for trading and "risk management".

(221) For the trading level, the Notifying Parties contemplate a distinction by trading method (ATS, voice-broker and direct trading). The Notifying Parties however argue that demand-side substitutability across these types of repo transactions means that segmenting the market along these lines would not be appropriate, as every ATS repo trade could be done through a voice broker or directly, though not necessarily vice-versa. The Notifying Parties also argue that market participants constantly benchmark trading costs on ATS against those incurred when trading bilaterally. In their response to the Statement of Objections, the Parties reiterate that it is incorrect to define separate markets depending on the means by which repos are traded.

(222) Further, the Notifying Parties submit that there is a separate market for "risk management" for repos, meaning there are two substitutable manners in which to manage counterparty risk, which are bilateral risk management (i.e. going uncleared), and clearing through a CCP. In this regard, the Notifying Parties submit that the benefits of clearing accrue in particular for two-way traders[147], who can net their position by way of clearing through a CCP. One way traders would rarely use a CCP, and hence in principle manage their risk bilaterally. However, even two-way traders, predominately large banks, would, according to the Notifying Parties, switch to uncleared repo trading in the event of a 5-10% price increase in clearing fees.

(223) The Notifying Parties further argue that it is incorrect to conclude that ATS traded non-triparty repos compete in bundles, comprising also a clearing layer, as most non-triparty repos are not cleared by CCPs, and most ATS trading venues offer the choice to clear or go uncleared.

7.2.1.2. Plausible segmentations of the triparty repo market

(224) As for the triparty repo market segment, the Notifying Parties, while submitting that triparty repos compete in bundles in different collateral management systems, that means comprising trading, "risk management"/clearing as well as CMS, propose defining separate markets for trading (without further segmentation), for risk management (without further segmentation), for CMS, considering that the definition of these three markets sufficiently approximates the competitive dynamics in this space.

(225) In their response to the Decision opening the proceedings, the Parties argue that it is not appropriate to distinguish between ATS traded (and CCP cleared) and bilaterally traded (triparty) repos. In the Notifying Parties' view, competition between different triparty repo products takes place predominately within a given collateral pool. Accordingly, the Notifying Parties' triparty products compete rather with bilaterally traded triparty repos than with each other, in particular due to the costs associated

147 Being a two-way trader means in essence trading multiple repos daily in which they act as seller and buyer, often as intermediaries between cash providers and cash takers.

with moving collateral from one collateral pool to another, and because the triparty interoperability will not happen soon.

(226) In their response to the Statement of Objections, the Notifying Parties reiterate their view that bilaterally traded triparty repos belong to the same market as those traded on ATS.

7.2.1.3. Geographic scope of repo markets

(227) The Notifying Parties submit that the geographic scope of the above repo markets is EEA-wide, or, alternatively, for triparty repos, global with the exclusion of the US.

7.2.2. The Commission's assessment

(228) The Commission has not previously considered repos in its decisions.

(229) In the Decision opening the proceedings, and in the Statement of Objections, the Commission considered that securities lending and repos belong to distinct relevant markets in view of lack of demand-side substitutability resulting from different purposes of use (raise cash in bond market vs borrow specific stock), different types of securities generally used (bonds vs equities), different impact on the balance sheet, different regulatory treatment and the fact that in securities lending, securities are mostly exchanged for securities, whereas in repos, cash is lent in exchange for securities.[148] In their response to the Decision opening the proceedings the Notifying Parties did not contest this finding. Furthermore, the in-depth market investigation did not yield any evidence that would cast doubt on the Commission's preliminary findings as expressed in the Statement of Objections.[149]

(230) Second, a number of parameters are of particular relevance when defining relevant markets in relation to repos. Specifically, based on the different features with variables along three main axes, namely how repos are traded, how they are cleared, and how the collateral is managed, there are five main types of repo transactions which are commonly used in the EEA.[150]

- Triparty repos based on GC pools (for example GC Pooling, € GC Plus, etc.) traded on ATS and CCP-cleared;
- "Traditional" triparty repos, i.e. repos based on GC baskets that are bilaterally traded and not CCP-cleared;
- Non-triparty repos traded on ATS (and CCP-cleared);
- Non-triparty repos traded through voice brokers; and
- Non-triparty repos traded directly.

7.2.2.1. In the repo markets, a non-triparty segment and a triparty segment can be distinguished

(231) As explained above, the key difference between a triparty and a non-triparty repo is that a triparty repo entails collateral management service provided by a triparty

148 Replies to questionnaire Q1 "Sell-side Customers", question 140.

149 Replies to questionnaire Q11 "Sell-side Customers and issuers", questions 87-111.

150 Replies to questionnaire Q1 "Sell-side Customers", questions 137 and 139. See also agreed minutes of a teleconference call with ICMA of 8 July 2016 [ID 1540].

agent, who selects (and substitutes) securities from a pool of collateral to which s/he has access.

(232) This difference has important implications both for demand and supply-side substitutability across these two types of repos.

(233) First, and in line with the Notifying Parties' submission, in a triparty repo transaction[151], both counterparties are cash driven, whereas in a non-triparty repo, one of the counterparties may be security driven.[152] In other words, a non-triparty repo enables a trader to temporarily obtain a specific security of which s/he has need, a result that a triparty repo cannot guarantee. Thus, for a significant part of the non-triparty market – i.e. every trader looking to obtain a specific security –, triparty repos do not constitute a conceivable alternative.[153]

(234) Second, for a number of (cash-driven) market participants intending to raise or invest cash, triparty repos are clearly the preferred means of doing so, in particular for reasons of efficiency.[154] For instance, one market participant pointed to counterparties "*which exclusively conduct their cash lending activity through triparty repos rather than simple repos […] thanks to the intrinsic benefits of the instrument (ease of use, risk management and settlement outsourcing, collateral management conducted by the triparty agent)*"[155], whereas another explained that "*the vast majority of our repos are settled and managed using a triparty agent. Operational efficiency is the main factor*"[156].

(235) Other market participants in the market investigation argued along the same lines, explaining for example that "*for a cash investor the decision to trade depends primarily on the repo rate he can achieve taking into consideration the risk appetite. Some investors prefer triparty repos as it reduces the settlement burden for them.*", or that for cash-driven repos, it is mostly the following types that are relevant: "*Mainly broad general collateral (triparty and General Collateral Pooling). To a lesser extend narrow General Collateral (non-triparty). Specific repos are of minor importance".*[157]

(236) The Commission also notes that deciding which repo instrument to use – triparty, specific non-triparty or narrow GC non-triparty, for cash driven repos, depends on many factors that are difficult to capture. For example, for a trader seeking to obtain funding by means of repoing out collateral, the type of collateral available as well as the risk-appetite of counterparties may play a decisive role in which type of repo is best suited for his/her needs. For example, one bank explains that this choice "*depends on the Collateral. How much ISINs [different types of securities] we have and where we have the ISINs. Do we have a lot of ISINs we prefer triparty. If we have only a few ISINs and the price is better with non-triparty we prefer that*".

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151 The Commission notes that triparty repo, for practical purposes, appear to always be GC repos, whereas specific repos are normally non-triparty repos. See Replies to questionnaire Q1 "Sell-side customers", question 137-169.

152 Replies to questionnaire Q1 "Sell-side Customers", question 143.

153 See for example minutes of a teleconference call with ICMA of 8 July 2016, [ID 1540].

154 Replies to questionnaire Q1 "Sell-side Customers", question 141.

155 Intesa Sanpaolo, reply to questionnaire Q1 "Sell-side Customers", question 143, [ID 2365].

156 BNY Mellon, reply to questionnaire Q1 "Sell-side Customers", question 143, [ID 1730].

157 See replies to questionnaire Q11 "Sell side Customers and issuers", question 109. See in particular the responses of Commerzbank, [ID 6183] and Unicredit, [ID 6073].

Another states that "*high Quality (Government) collateral tends to be more non-tri-party and we have term financing for non-government collateral via tri-party*".[158]

(237) It would thus appear that, for a market participant in a given situation (i.e. with a specific type of collateral to use, a particular financing or funding need), only a very limited degree of demand-side substitutability exists across non-triparty and triparty repos.

(238) From a supply-side substitutability point of view, the distinction is even more clear-cut. The inherent presence of a triparty agent providing CMS requires, in particular for those triparty repos that are traded on ATS and CCP cleared, and on which this Decision focuses, the combination of three distinct services (trading, clearing and CMS) into one single product. As will be further explained below in Section 7.3.2, it took the Notifying Parties, the only providers of such products in the EEA, several years to bring their products to the market. A repo trading platform (or clearing house, or CMS provider) not active in ATS traded CCP cleared triparty repos could thus not start supplying such a product without a significant investment in terms of money and time.[159]

(239) In view of the above, the Commission concludes for the purposes of the Decision that the Notifying Parties' submission, namely that triparty and non-triparty repos do not form part of the same market, is correct.

(240) In the following sections, the Commission will assess whether, within triparty and non-triparty repos, further distinctions have to be drawn, in particular as regards the trading method and whether or not the repos are cleared by a CCP.

(241) In this context, the Commission notes that the response of the Notifying Parties to the Statement of Objections alleges that the evidence the Commission obtained from market participants in particular as regards those distinctions should not apply to triparty repos, because the Commission "*inappropriately mixes and confuses considerations*" for these two types of repos.

(242) The Commission considers firstly, that in the course of the market investigation, it has intentionally refrained from imposing on market participants an existing market definition. As a result, most questions do not, for example, explicitly distinguish between triparty and non-triparty repos, but rather aim at determining which products or services are seen as substitutes and competitive constraints for those of the Notifying Parties. Second, as regards the Commission's analysis, a distinction between triparty and non-triparty repos is drawn where the evidence suggests that it is appropriate to draw such a distinction.

7.2.2.2. Repos traded on ATS do not form part of the same product market with repos traded bilaterally

(243) In the Decision opening the proceedings, and in the Statement of Objections, the Commission preliminarily found that ATS traded repos and repos traded bilaterally – directly between counterparts or via a voice broker – do not form part of the same product market.

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158 See replies to questionnaire Q11 "Sell-side Customers and issuers", question 110. See in particular the responses of LBBW, [ID 4392] and Jefferies, [ID 4549].

159 Market Definition Notice, paragraphs 20-23.

(244) The Notifying Parties contest this finding in their response to the Decision opening the proceedings, and their response to the Statement of Objections, in particular by arguing that the relevant market should also comprise bilaterally traded repos, which are used interchangeably for the same purposes by market participants. The Commission will hence in particular assess the substitutability of ATS and bilaterally traded repos in the following sections.

7.2.2.2.1. Trading on ATS differs in many other aspects from bilateral trading

(245) Aside from liquidity which appears to be the most important driver for trading behaviour, market participants consider a range of parameters in deciding on the trading environment (ATS versus bilateral) for a given repo contract, including the contract term, whether they intend to clear it through a CCP, settlement, posting of margin, counterparty type and netting possibilities.[160]

(246) Based on the results of the market investigation, there are a number of important distinguishing factors affecting the demand-side substitutability between ATS traded and bilaterally traded repos.

(247) First, a clear majority of respondents stated that trading fees on ATS are lower than those for voice brokers (though higher than for direct trades, given that there is no intermediary).[161]

(248) Second, both in terms of speed as well as in terms of certainty of execution, ATS rate considerably better than alternative forms of repo trading. In addition, ATS offer, as one market participant explain *"highly efficient Straight Through Processing (STP) which is not or only to a lesser exten[t] available in the bilateral or voice broking markets."*[162]

(249) Evidence gathered by the Commission indicates that the highly efficient manner in which ATS enable trading of repos is set to become even more important going forward. For instance, [BUSINESS SECRETS].[163]

(250) Third, a considerable share of respondents does not consider it possible to centrally clear directly traded repos, and indicate that the possibility to centrally clear voice-brokered repos is limited.[164] As will be discussed in greater detail discussed in Section 7.2.2.3, the ability to submit a repo trade for central clearing appears to be of high importance to certain market participants.

7.2.2.2.2. For short-term repos in high quality bonds, ATS offer the most liquid markets

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160 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 87.

161 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 90. In their response to the Statement of Objections, the Notifying Parties argue that only 12 market participants supported this view. This is not correct. In fact, 13 market participants confirmed that this was the case, whereas 10 did not. Moreover, Intesa SanPaolo states in its reply to questionnaire Q11 "Sell-side Customers and issuers", question 90, that "*costs on ATS are lower than those charged by brokers*".

162 Unicredit, reply to questionnaire Q11 "Sell-side Customers and issuers", question 90, [ID 4537]. See also the remainder of the replies to this question.

163 DBAG's internal document, "Eurex Repo – Status & Strategic Outlook", 16 September 2015, LL_6C-8C, 011, page 6, [ID 1063-2022].

164 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 90.

(251) In general, the key driver for repo traders is liquidity, and, to a somewhat lesser extent, the cost of trading.[165] For example, one market participant explained that "*the main parameter on which basis UCB selects the environment for trading is liquidity*".[166]

(252) In terms of liquidity, the results of the market investigation provide clear indications that for certain types of repo contracts most of the liquidity has accumulated on ATS platforms. Generally, this is the case for repo contracts exhibiting two main characteristics, namely short maturities, and high quality liquid assets as underlying collateral ("HQLA").[167]

(253) As for the maturity, one market participant explains for example that "*actually, markets are split in buckets: Short Term maturities are largely traded on ATS and Long Term maturities are more easily traded otherwise (voice broker or directly)*".[168] Another market participant confirms this characterisation of the market by stating that *"trading on ATS is preferred on very short term maturities as ATS can offer higher liquidity than OTC market. On longer term maturities most of the liquidity is OTC or via voice broker*s".[169] When asked to compare the different repo trade execution environment based on a list of parameters, a large majority of respondents also indicates that ATS, in particular for short term trades, offer the most liquidity and the narrowest bid-ask spreads. For example, one market participant explains that "*ATS repo liquidity is centered on very short dated transactions of 1day. Voice brokers and bilateral transactions are typically much longer tenors of >1wk to 1yr.*"[170] In this context the largest ATS operator in repos, BrokerTec, indicates that 98% of the repos traded on its platform have duration of one day only.[171] Given that liquidity (and not fees) is the main driver in selection of the trading environment, it is unlikely that customers would switch the trading environment in response to a 5-10% fee increase.

(254) Against this background, the Commission does not consider the argument of the Notifying Parties submitted in the response to the Statement of Objections, namely that data from Eurex Repo indicates that most of the repos traded on this platform have a duration of [BUSINESS SECRET], and that therefore repos of all maturities are traded on ATS, to be convincing. First, only [SMALL AMOUNT] of ATS traded repos are concluded on Eurex Repo, and the Notifying Parties have not submitted any data for MTS, while it would in practice have a much larger market share. In that context, the Commission notes that in a submission of 21 February 2017, the Notifying Parties appear to contradict their earlier submission, when explaining that

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165 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 87. See also replies to questionnaire R2 "Customers", and in particular question 24.

166 Unicredit, reply to questionnaire Q11 "Sell-side Customers and issuers", question 87, [ID 4537].

167 Replies to questionnaire Q1 "Sell-side Customers", question 145.

168 Société Générale, reply to questionnaire Q11 "Sell-side Customers and issuers", question 88, [ID 4200]. See also the remainder of the replies to this question.

169 Mediobanca, reply to questionnaire Q11 "Sell-side Customers and issuers", question 87, [ID 4203].

170 RBC Europe, reply to questionnaire Q11 "Sell-side Customers and issuers", question 90, [ID 4191]. See also the remainder of the replies to this question, and agreed minutes of a teleconference call with BGC of 28 July 2016, [ID 3304].

171 Agreed minutes of a teleconference call with ICAP of 2 August 2016, [ID 3627].

"*the majority of non-triparty repos […] are short term, and [BUSINESS SECRET]*".[172]

(255) Second, even those figures suggest that a large majority of repos traded on Eurex Repo have a duration of [BUSINESS SECRET]. Third, the feedback from market participants – (larger) competitors and almost all customers – has been particularly unambiguous, indicating a strong preference to trade short-term repos on ATS. For example, one large bank indicated that it would "*only trade outside ATS for longer terms*"[173].

(256) Aside from maturity, the type of collateral that underlies a repo trade also appears to be an important factor for determining whether a repo would be traded on ATS or bilaterally. When asked about the parameters considered when making this choice, one market participant explained that the number one factor is "*collateral. Primarily HQLA paper (especially: Governments and Supranational can be traded on an ATS). Other collateral needs to be traded bilaterally […].*[174]"

(257) Conversely, repos based on other types of collateral, in particular equities or corporate bonds, are rarely traded on ATS.[175]

(258) Similarly to other financial instruments, the building up of liquidity on ATS is facilitated by one inherent element of electronic trading – the standardisation of contracts. The liquidity has in turn a direct consequence on the bid-ask spread which is narrowing, pulling further liquidity on to ATS. Liquidity also appears to be an important consideration for customers deciding between ATS traded and "traditional" triparty repos. For example, one large bank explains that "*there is a high degree of liquidity in GC pools via e-trading platform which might not exist in the bilateral 'traditional' triparty market"*, whereas another states that "*we deem traditional triparty repos suitable for non-liquid/non-Government collateral baskets, while triparty GC pools would be preferable for liquid collateral within standard baskets (better pricing on ATS's, no counterparty risk)*."[176]

(259) In their response to the Statement of Objections, the Notifying Parties submit that the Commission has ignored the fact that many repos traded bilaterally are also based on HQLA. The reason for this is not, in the Commission's view, that, as the Notifying Parties suggest, bilateral and ATS trading of repos form part of the same market, but that those market participants not trading repos on ATS, such as in particular buy-side customers, use other repo trading methods including when they trade repos based on HQLA, as discussed in Section 7.2.2.2.3. In contrast to these D2C transactions, D2D repo transactions based on HQLA are performed on ATS to a very large degree.[177]

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172 LSEG, letter pertaining to the modified LCH SA remedy, paragraph 10, fourth bullet.

173 BBVA, reply to questionnaire Q11 "Sell-side Customers and issuers", question 88, [ID 4823]. See also other replies to this question.

174 Commerzbank, reply to questionnaire Q11 "Sell-side Customers and issuers", questions 87, [ID 4853].

175 Replies to questionnaire Q11 "Sell-side Customers and issuers", questions 87. See also agreed minutes of a teleconference call with BGC of 28 July 2016, [ID 3304], and replies to questionnaire Q11 "Sell-side Customers and issuers", question 90 (for example from LBBW, [ID 4392]).

176 Replies to questionnaire Q1 "Sell-side Customers", question 140. See replies of Intesa SanPaolo, [ID 2365] and Unicredit, [ID 2411].

177 Agreed minutes of a teleconference call with ICAP of 2 August 2016, [ID 3627]. See also agreed minutes of a teleconference call with ICMA of 8 July 2016, [ID 1540].

(260) Therefore, and in line with the Notifying Parties' submission in the Form CO, the Commission considers that ATS trading is pre-dominantly used for short-term, standard transactions in highly liquid assets, in particular for government bonds. As most of the liquidity for these repo contracts is on ATS, the results of the market investigation indicate that other means of trading are currently considered to be inferior, given the importance of liquidity as a determinant for the choice of execution environment.

7.2.2.2.3. The ATS repo markets are currently in essence D2D markets

(261) In the Decision opening the proceedings and the Statement of Objections, the Commission preliminarily considered that ATS trading of repos is currently done almost exclusively by large banks/dealers trading with each other ("D2D").

(262) The Notifying Parties contest this finding in their response to the Decision opening the proceedings with respect to triparty repos. However, it did not submit any arguments pertaining to non-triparty repos.

(263) The Commission notes that while the question as to whether the market(s) for ATS traded repos are in essence limited to a particular group of customers (D2D) is an important element in defining the relevant market, it is not, as such, in itself decisive. Nonetheless, the fact that almost exclusively D2D repo transactions are traded on ATS provides a further indication for the existence of separate markets for ATS and bilaterally traded repos.

(264) The results of the in-depth market investigation confirm that, generally speaking, ATS trading remains mostly limited to D2D transactions. A large majority of respondents indicate that their counterparties on ATS are exclusively other banks and dealers, and of those that are large banks, only two indicate that they also encounter other types of customers.[178] One market participant, a large dealer, explained for example that *"ATS is the domain of the inter dealer market for repos. […] Client trades are generally manual i.e. via Sales and over the phone*."[179] Another, medium-sized dealer confirmed that "*D2D transactions are essentially executed via ATS or voice broking. Transactions with clients are essentially executed by voice directly*"[180], whereas a smaller dealer stated that "*we do not trade through voice trading or direct trading with other [interdealer] market participants; so we trade outside ATS only and marginally, when we trade with our clients*".[181] Finally, this finding is also consistent with a report by the ECB pertaining to the secured funding market for banks, which states that "*the bulk of repos traded in European markets are negotiated and executed on automatic trading systems (ATS)"*.[182]

(265) This does not mean that D2D repos exclusively take place on ATS. Dealers also use bilateral trading of repos, including in particular voice-trading through brokers, in a complementary way in a different set of circumstances. Indeed, the results of the market investigation indicate that dealers do bilateral trading for longer-term, larger

178 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 91.

179 Bank of America Merrill Lynch, reply to questionnaire Q11 "Sell-side Customers and issuers ", question 87, [ID 4215].

180 Crédit Agricole, reply to questionnaire Q11 "Sell-side Customers and issuers", question 87, [ID 4546].

181 Banca Akros, reply to questionnaire Q1 "Sell-side Customers", question 145, [ID 2495].

182 ECB, "Improvements to commercial bank money (CoBM) settlement arrangements for collateral operations", 2014, page 37. ("the 2014 COGESI report").

or more complex transactions, often based on less liquid collateral.[183] In this context a large dealer explained that "*voice brokers are used for more bespoke trading requirements when the underlying is less liquid*".[184] For these types of customers, trading repos on ATS and via voice brokers therefore seems to be complementary, rather than substitutable. For LSEG (LCH) itself, in its role as a repo user, one of its internal documents suggests that this complementarity between repo trading methods was a driver for it to seek access to an ATS: [BUSINESS SECRETS][185]

(266) Similarly, the above is not inconsistent with the fact that a large share of repo traders does not seem to use ATS at all. One of the non-bank respondents to the market investigation explained that they traded "*no ATS, always directly with a counterparty (via email or phone)*"[186], another simply stated "*No trading on ATS*".[187] This, according to the market investigation, seems to concern in particular buy-side customers such as asset managers or insurance companies. A large majority of those types of customers that responded to the market investigation confirmed that they trade repos only bilaterally.[188]

(267) Finally, the largest ATS, BrokerTec describes itself as "*a Bank to Bank platform (B2B). Membership of LCH Repoclear facility is required in order to trade on BrokerTec. Therefore currently only first and second tier banks (60-65) trade on BrokerTec as per the definitions of membership at LCH*".[189]

(268) As for the Notifying Parties' argument pertaining to triparty repos, namely that no clear D2D versus D2C distinction can be drawn in this respect, the results of the market investigation do not support the Notifying Parties' position.

(269) When asked to identify relevant differences between ATS and bilaterally traded triparty repos, respondents to the market investigation indicate that ATS traded triparty products are used essentially only in the D2D space.[190] One market participant for example explained that "*ATS Tri-party (EUREX GC POOLING) is cleared by CCP with predefined baskets controlled/governed by Eurex clearing. […]. Only banks are eligible on the CCP*".[191] Similarly, another large bank explains that for *"For GC Pooling you must be a member of Eurex clearing to trade. Outside of that we trade a range of complexity and counterparties but the trades are not cleared."*[192]

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183 Replies to questionnaire Q1 "Sell-side Customers", questions 147-148.

184 Bank of America Merrill Lynch, reply to questionnaire Q11 "Sell-side Customers and issuers", question 87, [ID 4215].

185 LSEG's internal documents, [BUSINESS SECRETS], 19 November 2014, page 3, [ID 3708-10453-8].

186 BMW, reply to questionnaire Q11 "Sell-side Customers and issuers", question 87, [ID 4259].

187 Lufthansa, reply to questionnaire Q11 "Sell-side Customers and issuers", question 87, [ID 4068].

188 Replies to questionnaire Q2 "Buy-side customers". A number of banks were characterised as both buy-side and sell-side customers by the Notifying Parties which blurred the results from the market investigation addressed to buy-side customers in Phase I.

189 Agreed minutes of a teleconference call with ICAP of 2 August 2016, [ID 3627].

190 Replies to questionnaire Q11 "Sell-side Customers and issuers", questions 94 and 94.1. Note that a number of respondents evidently did not understand that the Notifying Parties' ATS traded triparty products are characterised as triparty repos. For example, Bank of America Merrill Lynch explained that "*Tri-party repo are only executed bi-laterally on the BoAML Repo desk and not through ATS*", [ID 6053].

191 DNB, reply to questionnaire Q11 "Sell-side Customers and issuers", question 94, [ID 4498].

192 UBS, reply to questionnaire Q11 "Sell-side Customers and issuers", question 94, [ID 4617].

(270) It follows from those statements of banks that they consider the Notifying Parties' ATS traded triparty repos as D2D products, whereas "traditional", bilateral triparty repos are seen as a complementary product, as another large bank explains: *"The majority of our tri-party repo is executed on a bi-lateral basis. Most tri-party is client cash driven and collateral is extremely conservative. The majority is non intra-bank. ATS will be used for firm financing where the collateral baskets meet our firm financing needs."*[193]

(271) The Notifying Parties' submission in response to the Decision opening the proceedings aimed at demonstrating that numerous initiatives are underway to bring buy-side clients, who as explained below, currently trade predominately bilaterally, on ATS for (triparty) repo trading, would, against this background, rather have to be considered as an attempt to enter a new market, than to expand an existing market.

(272) First, [BUSINESS SECRETS]

(273) One of the Notifying Parties' internal documents [BUSINESS SECRETS][194],[BUSINESS SECRETS][195]. Similarly, in the specialist press, the prediction was shared that "*Elixium will most likely rival DBV-X, which also aims to match treasurers and asset managers with hedge funds and pension funds in need of short-term financing*"[196].

(274) Moreover, also LSEG's internal documents explain that the [BUSINESS SECRETS][197] As will be explained below in Section 7.2.2.3., essentially all repos traded on ATS are cleared, and hence the reference to the currently uncleared buy-side market means that D2C transactions do not occur on ATS to a relevant degree.

(275) Second, DBAG itself describes its GC Pooling Select product in its internal document [BUSINESS SECRETS][198] [BUSINESS SECRETS]

(276) In their response to the Statement of Objections, the Notifying Parties argue that these new products are signs of a gradual shift towards a combined D2C/D2D market. The Commission notes that the Notifying Parties thereby appear to acknowledge that presently, the market(s) for ATS traded repos are separate.

(277) In any event, even if it were correct to qualify DBAG's attempt [BUSINESS SECRETS], the Commission does not consider the fact that Eurex' triparty ATS D2C product, GC Pooling Select, [BUSINESS SECRETS], as sufficiently compelling evidence for the Commission to alter its overall characterisation of ATS trading of repos as being, in essence, a D2D domain.

(278) Third, only a very small share of market participants indicated in the Commission's market investigation that they would engage in ATS traded triparty repos with non-dealers.[199]

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193 Lloyds, reply to questionnaire Q11 "Sell-side Customers and issuers", question 94, [ID 6011].

194 [BUSINESS SECRETS].

195 [BUSINESS SECRETS].

196 See http://www.thetradenews.com/Trading-Venues/BNY-Mellon-confirms-interest-in-repo-trading-platform/.

197 LSEG's internal documents, [BUSINESS SECRETS], 10 October 2014, page 8, [ID 3503-34936].

198 DBAG's internal documents, "Eurex Clearing – Because safer markets are better markets!", slide 26, September 2013, [ID 3750-9866].

199 Replies to questionnaire Q1 "Sell-side Customers", question 141.

(279) Therefore, while it cannot be disputed that Eurex, and in fact also LCH, are attempting to win buy-side clients as ATS (and/or CCP members), this development appears to be in a nascent state. Moreover, the fact that DBAG considered it necessary to design a specific product targeting these non-bank clients would also appear to show that it is correct to draw a broad D2D versus D2C distinction along these lines.

(280) In view of the above, the Commission considers that, at least at this point in time, ATS trading of repos, for non-triparty and triparty repos alike, remains to a very large degree dominated by D2D trades.

7.2.2.2.4. Market participants would not switch to bilateral trading

(281) Contrary to the Notifying Parties' submissions in response to the Decision opening the proceedings and to the Statement of Objections, the results of the market investigation suggest that a majority of respondents do not systematically compare execution costs on ATS with those of other forms of trading repos. From those that can be characterised as large customers (and hence account for the lion's share of ATS volumes), only very few respondents indicated that they would make such a comparison.[200]

(282) One market participant explained for example that "*execution costs are a consideration but no cost comparison systematically occurs. Trading options are dictated by availability of liquidity.*"[201]

(283) The lack or at most very limited competitive interaction between ATS and voice brokered trading of repos is also illustrated by the fact that the largest ATS – BrokerTec – indicates that it does not monitor fees charged by voice broker firms, and that it has its own voice brokerage service to satisfy a different type of customer need, namely for bespoke transactions.[202]

(284) As for the reaction of ATS customers to a small but significant and non-transitory increase of price (or SSNIP), the results of the market investigation suggest that few, if any customers would switch. First, as explained in the foregoing, liquidity is the main determinant for trading choices.

(285) Therefore, market participants would appear to only consider a switch from ATS platform to voice brokers for reasons of liquidity.[203]

(286) In view of the results of the market investigation, it would appear to be very unlikely that a SSNIP (in fees) could induce such a shift of liquidity. First, there seem to be a

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200 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 89.

201 Bank of America Merrill Lynch, reply to questionnaire Q11 "Sell-side Customers and issuers", question 89, [ID 6053].

202 Agreed minutes of a call with ICAP of 15 November 2016, [ID 6038]: "*ATS trading and voice broker trading for repos are substantially different solutions. Electronic trading is used for the most regular, standardised transactions such as "spot next" (or 1-day) transactions. It provides a straight and transparent execution mode with a tight bid-offer spread. Voice brokerage is for bespoke transactions requiring typically an element of price discovery before execution. Moreover, fee levels in electronic are not based off a comparison with what voice offers and more generally what it costs for a customer to execute a trade on ATSs. These businesses are run and managed separately*."

203 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 89.

number of market participants that always prefer to trade on ATS.[204] The liquidity of these market participants would hence appear to be particularly tied to ATS. Second, fees on ATS seem to be so much lower than those for voice brokers[205] that a 5-10% increase in trading fees on ATS is unlikely to make voice brokers more attractive in that regard. Third, only a very small minority of respondents to the market investigation could recall an increase in trading fees in the recent past and only one provided a meaningful response as to their reaction then. This market participant referred to an event where "*fees […] increased from 50 to 100 euros for 2 weeks -3 months trades and from 50 to 150 Euros for longer period trades."* Their reaction was that *"we acknowledged the increase but we continue to use the ATS for liquidity reasons"*.[206]

(287) In view of the above, to the extent that liquidity is currently accumulated on ATS platforms for certain repo types, it can be inferred that customers would only switch to other repo trading methods for those types of repos that are currently traded predominately on ATS in the event that most customers did so, more or less simultaneously, so that liquidity would become larger elsewhere.

(288) In the response to the Statement of Objections, the Notifying Parties submit that the Commission's assessment has largely ignored direct repo trading. The Commission notes firstly that the Notifying Parties have argued that voice brokerage is a particularly important constraint on ATS platforms in their response to the Decision opening the proceedings. More importantly, however, most of the Commission's assessment described above pertains to both forms of bilateral trading, direct and voice-brokered.

(289) Further, the Notifying Parties submit in response to the Statement of Objections that bilateral repo trading accounts for approximately two thirds of all repo trades. However, as explained throughout this section on market definition, there are clear indications that a large part of these trades are performed by different types of customers (particularly D2C transactions), based on different types of underlying (for example equities or corporate bonds), or consist of complex, long-term transactions. In the Commission's view, the fact that there is a larger repo space has as such no decisive bearing on the defining relevant markets for the purposes of merger control.

(290) At least in the current market environment, bilaterally traded and ATS traded repos are therefore not to be regarded as substitutes.

(291) Therefore, the Commission concludes that, for the purposes of the Decision, that ATS trading of repos does not form part of the same product market as bilateral trading.

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204 See replies to questionnaire Q11 "Sell-side Customers and issuers", question 88. DekaBank Deutsche Girozentrale: "*Immer ATS wegen: Netting, Kosten, "straight through process""* [case team translation: Always ATS. Because: Netting, costs, straight through processing], [ID 6016]; Bundesrepublik Deutschland Finanzagentur*: "Only if it is a counterparty that is not connected to Eurex Repo"*, [ID 4084]*;* UniCredit*: "UCB executes repos only on ATS"*, [ID 4537].

205 RBC Europe, reply to questionnaire Q11 "Sell-side Customers and issuers", question 90, [ID 4191].

206 Intesa SanPaolo, reply to questionnaire Q11 "Sell-side Customers and issuers", question 92, [ID 4599]. See also other replies to these questions. Only few (3 respondents) indicated that they may review other trading options in such an event.

7.2.2.3. Centrally cleared repos and uncleared repos are not part of the same product market

(292) In its Decision opening the proceedings and in the Statement of Objections, the Commission preliminarily found that, in particular for repos traded on ATS, centrally cleared repos and those with bilateral "risk management" ("uncleared repos") do not form part of the same product market.

(293) The Notifying Parties contest this finding in their response to the Decision opening the proceedings and in their response to the Statement of objections, arguing in essence that all ATS except for DBAG's Eurex Repo allow traders to go uncleared [BUSINESS SECRETS] and that a majority of all repo volumes remain uncleared.

(294) Section 7.2.2.3. assesses whether a general distinction should be drawn between uncleared and cleared repos. Sections 7.2.2.4 and 7.2.2.5 will specifically focus on the ATS repo markets.

7.2.2.3.1. Some types of repos cannot be cleared by a CCP

(295) Today, approximately 30% of outstanding repos by value and 70% by turnover are centrally cleared in Europe.[207] This discrepancy between turnover and outstanding value is indicative of the fact that different types of repos tend to be cleared than those that are mainly uncleared. As will be explained throughout the remainder of this Section 7.2.2 on market definition, there is strong correlation between the repos traded on ATS and those that are centrally cleared: ATS traded (non-triparty) repos are mostly based on HQLA and, importantly, of short duration. Those repos are almost always cleared, as explained below, whereas repos with a longer maturity are often not cleared. The difference between outstanding value and turnover illustrates this difference.

(296) In addition to maturity, there are two main elements that explain why a significant part of repo trades is not cleared: either because counterparties are not clearing members[208], or because the CCPs do not accept to clear repos based on a given type of collateral.

(297) As regards the first element, the results of the market investigation indicate that it is not possible to clear repos traded with certain (non-bank) counterparties. When asked what types of repos were generally not cleared, market participants explained that these were "*trades where the counterparties are not members (client driven trades)*", "*repos with non-financial customers*", "*client business*", *client trades*", *repo trades with non-broker/Dealer*".[209]

(298) Regarding the collateral underlying the repo, the results of the market investigation indicate that there are restrictions on the eligibility of collateral from the side of the CCP, based on their acceptable risk profile ("*repo vs collateral not eligible on the ATS (RMBS etc.)*"[210]). For example, repos based on Greek governments bonds seem

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207 ICMA European Market Survey, No. 30, p. 30. European Central Bank, Euro money market study 2014 (April 2015), at p.37.

208 Clearing via a clearing member, as is a widespread practice for example as regards derivatives, does not seem to be common as regards repos.

209 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 97. See in particular replies of Danske Bank, Landesbank Hessen-Thüringen, Mediobanca, DNB, JP Morgan.

210 DNB, reply to questionnaire Q11 "Sell-side Customers and issuers", question 97, [ID 4498].

not to be accepted for clearing.[211] Second for some types of collateral, clearing has simply not become commonplace (possibly due to high margin requirements for "riskier" collateral) or due to some regional exceptions – for example, the Scandinavian and Spanish bonds seem to be not systematically cleared, if at all.[212] For example, one large Spanish bank explained that it did not clear repos "*with domestic counterparties and Spanish paper as underlying*"[213].

(299) More generally speaking, market participants explained that "*repo trades against non-government debt are typically not centrally cleared*"[214], and long term repos are not cleared ("*Long term" (>1yr for LCH ; >2yrs for EUREX*"[215])). Others identified equities as a type of repo collateral generally not cleared ("*Equity repo trades are not centrally cleared, generally speaking*"[216]), or simply referred to "*bonds [that] are not covered by a clearing service*"[217].

(300) The above considerations pertain predominately to non-triparty repos.

(301) Finally, with specific regard to triparty repos, one market participant explains that most triparty repos are not centrally cleared, explaining that "*Triparty repo – vast majority is not centrally cleared (exception is GC pooling basket, € GC plus service)*".[218] This is confirmed by the largest ATS on the market, explaining that "*the reason that fewer tri-party repos are cleared is that CCPs do not accept all qualities of collateral (and counterparties). In fact, few CCPs accept any other collateral than government bonds for repos – therefore the only specific Tri-party products that can be cleared are DBV and €uroGC+ […] also GC Pooling*."[219.]

(302) Therefore, it seems that there is a distinct group of repos which are not cleared based on their intrinsic characteristics, predominately the underlying collateral, their maturity and the counterparties to the trade.

(303) In sum, the results of the market investigation indicate that in essence the same type of repo transactions that tend to be traded on ATS (in particular short term HQLA) by sell-side customers are also cleared (this is further discussed below in Sections 7.2.2.4. and 7.2.2.5.).

7.2.2.3.2. CCP clearing of repos brings a number of benefits, in particular for frequent users

(304) For dealers which trade large repo volumes, involving a CCP enables them primarily to benefit from netting effects, reduce the size of their balance sheet and incur lower capital costs, in addition to reducing counterparty risk.[220] This seems to be confirmed by DBAG's internal documents explaining that there is a general drive towards CCP clearing for banks as "*new regulatory environment significantly impacts banks' funding and financing strategy; further reduction of balance sheets required.*

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211 Agreed minutes of a teleconference call with ICAP of 15 November 2016, [ID 6036].
212 Agreed minutes of a teleconference call with ICAP of 15 November 2016, [ID 6036].
213 BBVA, reply to questionnaire Q11 "Sell-side Customers and issuers", question 97, [ID 4823].
214 JP Morgan, reply to questionnaire Q11 "Sell-side Customers and issuers", question 97, [ID 5974].
215 Société Générale, reply to questionnaire Q11 "Sell-side Customers and issuers", question 97,[ID 4200].
216 Natixis, reply to questionnaire Q11 "Sell-side Customers and issuers", question 97, [ID 4197].
217 Danske Bank, reply to questionnaire Q11 "Sell-side Customers and issuers", question 97, [ID 4146].
218 Commerzbank, reply to questionnaire Q11 "Sell-side Customers and issuers", question 97,[ID 6183].
219 Agreed minutes of a teleconference call with ICAP of 2 August 2016, [ID 3627].
220 Replies to questionnaire Q1 "Sell-side Customers", questions 147-148.

Therefore, banks increasingly looking for infrastructures to allow netting opportunities as well as capital, collateral and cost efficiencies".[221]

(305) That these elements are important factors contributing to the attractiveness of clearing is summarised by one market participant that explains that *"when the deal is cleared the Bank can benefit from a number of positive contributions to the balance sheet. In particular, you may consider the reduction in capital charges associated to a generally reduced credit/counterparty risk as well as, in general, a reduction in the collateral posted by the CCP (if compared to that posted by bilateral counterparties), thereby improving the comprehensive liquidity degree of the balance sheet."*[222]

(306) The key drivers for repos to be cleared by a CCP seem to be netting,[223] and balance sheet netting.[224] The results of the market investigation indicate that, compared to other instruments, in repos this plays a more prominent role than for example counterparty risk, as the risk is largely collateralised with the security exchanged in repo transactions.

(307) The importance of these two types of netting was highlighted by a large number of market participants.[225] One explained, for example, that "*trades cleared over CCPs are eligible for netting and therefore have a smaller impact on balance sheet*".[226]

(308) This seems in particular important for frequent, or as the Notifying Parties submit two-way traders, comprising in particular large banks or dealers that engage in many repo transactions. As one market participant explains "*as most inter-bank trades are centrally cleared this results in greater balance sheet netting possibilities as the CCP is viewed as one counterparty"*.[227] Finally, another large bank explained that "*cleared repos are allowed […] to be netted down for each CCP as long as certain conditions are met viz. currency and maturity date. A similar ability to net for bilateral counterparts is very limited. This is a major advantage of clearing repos as it considerably reduces balance sheet impact for the firm*."[228]

(309) In response to the Statement of Objections, the Notifying Parties submit that under certain circumstances, it might also be possible to obtain similar benefits through bilateral netting, and refer to a statement of a bank which explains that direct trading may be preferred where there would be a netting advantage with the same counterparty. The Notifying Parties omit, however, that this is the only instance in the market investigation in which a market participant mentioned bilateral netting,

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221 DBAG's internal document, "Eurex Repo – Status & Strategic Outlook", 16 September 2015, LL_6C-8C, 011, page 2, [ID 1063-2022].

222 Banca Veneto, reply to questionnaire Q1 "Sell-side Customers", question 98, [ID 4173].

223 The CCP will net transactions between members on a multilateral basis. This means that a delivery of a security due to the CCP from parties A and B can be netted off against deliveries of the same security due on the same day from the CCP to parties C and D. This produces much smaller net exposures than bilateral netting, and hence also considerably lower settlement. See http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/repo-and-collateral-markets/frequently-asked-questions-on-repo/27-what-does-a-ccp-do-what-are-the-pros-and-cons/

224 See in also Section 11 (on commitments) below and the explanations of the Notifying Parties in the Form RM and its annexes.

225 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 98.

226 Landesbank Hessen-Thüringen, reply to questionnaire Q11 "Sell-side Customers and issuers", question 98, [ID 4495].

227 Danske Bank, reply to questionnaire Q11 "Sell-side Customers and issuers", question 98.1, [ID 4146].

228 BNP Paribas, reply to questionnaire Q11 "Sell-side Customers and issuers", question 98.1, [ID 5646].

that the same bank also explained that, regarding CCP clearing of repos, "*a similar ability to net for bilateral counterparts is very limited*"[229], and most importantly, that when asked to explain the differences between uncleared and cleared repos, 17 out of 20 informative responses entail an emphasis of netting as a key feature of CCP clearing of repos[230].

(310) Further, in the Form RM[231], the Notifying Parties explain that through the implementation of T2S (see also below in Section 11.2.2.2.), balance sheet netting will become an even more important factor (for euro denominated repos), and even outweigh liquidity as the key driver for the choice of trading/clearing venue. To this end, [BUSINESS SECRETS]

(311) While customers did not fully share the Notifying Parties' view that balance sheet netting would be or become more important than liquidity[232], they also emphasise the significance of savings that can be obtained[233].

(312) None of these savings can be realised without clearing through a CCP.

(313) In addition to the above, there are a number of other factors that, for repo trading, make central clearing attractive as compared to going uncleared.

(314) First, and related to the above, clearing a repo through a CCP can reduce the risk-weight of this balance sheet item. As one market participant explains, clearing achieves a "*reduction in regulatory risk capital*".[234]

(315) Second, for a number of market participants, the decrease in counterparty risk also seems to be an important factor in deciding whether or not to clear a repo, even if, as explained, this seems to be a less relevant factor than netting possibilities.[235]

(316) Third, for some market participants CCP clearing may even entail posting less margin with the CCP than they would have to with their bilateral counterparties.[236]

(317) Fourth, the overall reduction of the size of the balance sheet that can be achieved through clearing of repos, has, according to one market participant "*knock-on, second order effect for annual regulatory charges such as the Single Resolution Funds, UK Levy and so on*"[237]. This statement illustrates that clearing, as compared to going uncleared, has effects that go beyond the costs and benefits of a single trade. Many banks in the current environment in which capital is expensive and scarce would thus likely need considerable efforts to keep their balance sheets as small as possible.

(318) In view of the above, the Commission considers that from the perspective of a customer, in particular those that trade repos frequently, such as large banks and dealers, clearing repos through a CCP has a multitude of different effects and distinguishing elements as compared to going uncleared. As a result, cleared and

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229 BNP Paribas, reply to questionnaire Q11 "Sell-side Customers and issuers", question 98.1, [ID 5646].
230 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 98.
231 Form RM, in particular as of paragraph 91.
232 Replies to questionnaire R2 "Customers", question 24.
233 Replies to questionnaire R2 "Customers", question 24.
234 Mediobanca, reply to questionnaire Q11 "Sell-side Customers and issuers", question 98.1, [ID 4203].
235 Banca Akros, reply to questionnaire Q11 "Sell-side Customers and issuers", question 98.1, [ID 4481].
236 Banca Veneto, reply to questionnaire Q11 "Sell-side Customers and issuers", question 98, [ID 4173].
237 BNP Paribas, reply to questionnaire Q11 "Sell-side Customers and issuers", question 101, [ID 5646].

uncleared repos have both their own reasons for existence and seem to cater for different portions of demand.

7.2.2.3.3. For CCP cleared repos, going uncleared is not a substitute for most customers

(319) In response to the Decision opening the proceedings and to the Statement of Objections, the Notifying Parties reiterate their argument that central clearing and going uncleared form part of an overall "risk management market".

(320) The Commission acknowledges that an abstract question as to the general substitutability between cleared and uncleared repos has not yielded conclusive answers (approximately half of the respondents indicated that they were substitutes, whereas the other half did not).[238] In view of the overall results of the market investigation, as explained in this section, the Commission does not consider this as decisive for the purposes of defining the relevant market. Nor does the Commission consider the fact that a number of market participants[239] confirm the Notifying Parties' submission that in response to a drastic increase in margin requirements for clearing certain repos in CCPs, there seems to have been in the past a limited shift of activity to the uncleared market, as a particularly strong in argument in favour of an overall market for "repo risk management.

(321) Similarly, while a certain degree of competitive interaction may exist between the cleared and uncleared repo space – for example one large bank explained that "*significant dislocations between cleared margin and bilateral haircuts could potentially lead to a re-evaluation of clearing behaviour*"[240],– this does not put into question the fundamental economics of repo clearing as opposed to uncleared repo transactions.

(322) One first reason to consider CCP cleared repos to form part of different markets from uncleared repos is the fact that a majority of respondents to the market investigation do not systematically compare the options of clearing and going uncleared for a given repo trade.[241]

(323) Aside from the intrinsic benefits of clearing repos as described above, the key reason for this appears to be again liquidity: given that most market participants trade on ATS and clear short-term HQLA repos, liquidity accumulates in cleared repos (for those types of collateral). In other words and as further explained below, even on those ATS that enable going uncleared, the same offer will not be available in a cleared and uncleared "version". As one market participant explains, "*basically we choose trading through CCP since […] it is the preferred option by counterparties [and therefore] market depth is higher*".[242]

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238 Replies to questionnaire Q1 "Sell-side Customers", question 150.

239 Replies to questionnaire Q1 "Sell-side Customers", question 153. See for example the answer of Morgan Stanley, explaining that "*During the European Sovereign Debt Crisis in 2010, the repo market saw a significant widening of certain sovereign haircuts, leading to a market driven shift from CCPs into the uncleared space*", [ID 3184].

240 Morgan Stanley, reply to questionnaire Q11 "Sell-side Customers and issuers", question 100, [ID 4212].

241 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 96.

242 Intesa SanPaolo, reply to questionnaire Q11 "Sell-side Customers and issuers", question 96, [ID 4599].

(324) It thus is logical that most market participants that would consider switching from cleared to uncleared repos would appear to do so only for reasons of liquidity.[243]

(325) In view of the results of the market investigation, it would appear to be very unlikely that a SSNIP (in clearing fees) could induce such a shift of liquidity. This is also the case because there seem to be a number of market participants that always prefer clearing. For example, one large dealer indicated that "*the firm chooses to clear where the trading activity is clearing eligible",*[244] whereas another market participant explained *"we have a preference for centrally cleared repos and our experience i*s *that the Banks who are our counterparties have the same preference*".[245]

(326) Moreover, while only a few respondents to the market investigation report on the existence of internal guidelines for themselves that would not allow them to go uncleared,[246] a considerable number of market participants including some large dealers but also smaller players confirm that there are counterparties that would not agree to trade a repo with them without the involvement of a CCP.[247] One market participant states that "*Yes, [X] has experienced in the past that repo counterparties are seeking to clear repo activity due to internal counterparty credit limit constraints*".[248] Another market participant explains that "*we are aware of counterparties who only wish to trade via CCP for capital and netting reasons, regardless of the credit standing of counterparties*."[249] The liquidity from those customers would hence appear to be particularly tied to CCPs.

(327) Furthermore, one market participant illustrates the potential quantitative advantages of clearing as follows: "*Due to the netting benefit as described above, the balance sheet and liquidity ratio of a centrally cleared repo are substantially reduced. By way of example: - 100million Uncleared repo: balance sheet impact is 100million, leverage exposure is 100 million; - 100million Cleared repo: balance sheet impact is zero, leverage exposure is zero except for haircut element*".[250] This indicates that, in a given situation, the difference in the overall costs between having a repo cleared or not can potentially be substantial.

(328) Finally, when asked about how they would react to a SSNIP (in clearing fees), only a small percentage of respondents indicated that they would switch to uncleared trades in such an event. A much larger share of respondents would instead continue to rely on (the Notifying Parties') clearing services and absorb the price increase.[251]

(329) In response to the Statement of Objections, the Notifying Parties submitted that given low or even non-existent marginal costs for clearing, even a small share of customers switching to other forms of clearing would amount to a critical loss that makes a hypothetical price increase unprofitable. Given the dynamics as described above, the Commission considers it highly unlikely that a SSNIP would lead to a critical loss.

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243 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 96.

244 Morgan Stanley, reply to questionnaire Q11 "Sell-side Customers and issuers", question 96, [ID 4212].

245 Bundesrepublik Deutschland Finanzagentur, reply to questionnaire Q11 "Sell-side Customers and issuers", question 96, [ID 4084].

246 Replies to questionnaire Q1 "Sell-side Customers", questions 103

247 Replies to questionnaire Q1 "Sell-side Customers", questions 104.

248 Morgan Stanley, reply to questionnaire Q1 "Sell-side Customers", question 104, [ID 4212].

249 BNY Mellon, reply to questionnaire Q11 "Sell-side Customers and issuers", question 104, [ID 5132].

250 RBS, reply to questionnaire Q11 "Sell-side Customers and issuers", question 99, [ID 4555].

251 Replies to questionnaire Q1 "Sell-side Customers", question 151.

(330) One of the reasons given as part of the responses to the market investigation for the preference to absorb fee increases rather than move to uncleared repos is that those participants who clear repos on CCPs can usually pass on fee increases to their customers. For example, one large bank explained that "*LCH Ltd has increased its costs on several occasions, to offset cost induced by regulatory changes. These increases were translated in the clients prices connected to the clearing activity",*[252] whereas another bank stated that *"clearing costs are generally accepted and passed to the customer"*[253].

(331) Indeed, one bank explained that "*short dated repo will remain cleared by a CCP. Switching back to uncleared trading is not possible taking the administrative burden (booking of tickets, checking confirmations, physical settlement of gross exposure) into consideration*".[254]

(332) Against this background, it is highly unlikely that a 5-10% increase in clearing fees would bring about a switch of sufficient volume that would put, for those types of repos currently cleared, clearing on an equal footing with going uncleared.

(333) LSEG's internal documents, as shown below, support this definition of de-facto dealer-to-dealer (or interbank) repo market(s), which to a large extent consist of cleared repos (traded predominately on ATS), whereas the remainder of the market (for buy-side repos) is largely reliant on bilateral, uncleared repo trading.

Figure 3: [GRAPHIC ILLUSTRATION OF THE EUROPEAN FIXED INCOME REPO MARKET]

(334) The uncleared interbank repo market, on the other hand, would appear to be comparatively small (around [20-30%] of the total interbank market) and mostly pertain, as this slide and the results of the market investigation indicate, to all those repos that for various reasons cannot or are not traded on ATS (and are not cleared by CCP): larger and/or more complex deals (which are then traded via voice brokers), repos based on collateral that CCPs would not accept for clearing (or only against high margin), such as corporate bonds, some "domestic" transactions and repos concluded outside CCP opening hours, and repos between counterparties that are not clearing members.[255]

(335) In their response to the Statement of Objections, the Notifying Parties submit that, as regards triparty repos, [BUSINESS SECRETS], and should therefore be considered as forming part of the same market. Moreover, it submitted that [BUSINESS SECRETS]

(336) The Commission does not contest this, but notes that the Notifying Parties have not provided any indications as to whether the uncleared volumes are based on D2D or D2C transactions. Given the above figures, the Commission considers it highly likely that most of these uncleared triparty repos are traded with (buy-side) counterparties not active on GC Pooling.

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252 Société Générale, reply to questionnaire Q1 "Sell-side Customers", question 153, [ID 2647].

253 Landesbank Hessen-Thüringen, reply to questionnaire Q1 "Sell-side Customers", question 153, [ID 2600].

254 Commerzbank, reply to questionnaire Q11 "Sell-side Customers and issuers", questions 100, [ID 6183].

255 See for example agreed minutes of a teleconference call with ICMA of 8 July 2016, [ID 1540].

(337) In view of all of the foregoing, the Commission concludes that CCP cleared repos and uncleared repos do not form part of the same product market.[256]

7.2.2.4. ATS traded and CCP cleared triparty repos compete in bundles

(338) The Notifying Parties submit that "*triparty repo products effectively compete in bundles*"[257]. The Commission agrees with this statement, and considers that for the purposes of assessing the competitive interaction between ATS traded triparty products, it is important to bear in mind that these products comprise three distinct services which are inherently linked in the product.

(339) When trading DBAG's GC pooling product, for example, this entails that it has to be cleared through DBAG's Eurex and CMS will be provided by DBAG's Clearstream. No other option to buy one of the three composite services from another provider, or dispense of one of them entirely, are available. Similarly, when trading LSEG's € GC plus, there is optionality on the trading layer (it can either be traded on LSEG's MTS or on the third party ATS BrokerTec), but it has to be cleared through LCH SA and CMS will be provided through Euroclear (a third party CMS provider).

(340) In view of the above, the Commission concludes that there is bundle-to-bundle competition on the market for ATS traded and CCP cleared triparty repos.

7.2.2.5. For non-triparty repos traded on ATS, clearing is generally (seen as) an inherent part of a combined service

(341) In the Decision opening the proceedings and the Statement of Objections, the Commission preliminarily considered that ATS traded CCP cleared non-triparty repos compete in bundles. The Notifying Parties argue however that this approach to market definition is not appropriate, as customers can – or could –choose to go uncleared.

(342) On the basis of the results of the market investigation, the Commission considers that there are strong indications of such bundle-to-bundle competition.

(343) First and as already indicated in the foregoing sections, almost all ATS traded repo transactions are centrally cleared by a CCP, even when it is not mandatory. This is confirmed for example by the ECB's 2014 COGESI report, stating that "*The bulk of repos traded in European markets are negotiated and executed on automatic trading systems (ATS) and most of these (over 90%) are cleared across central clearing counterparties (CCP).*"[258]

(344) As for the Notifying Parties' ATS, the vast majority of the repos trades on their platforms are also cleared. On Eurex, it is obligatory to clear repos traded on ATS, whereas [THE LARGE MAJORITY] of the non-triparty repos traded on MTS are cleared.[259]

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256 See also replies to questionnaire Q1 "Sell-side Customers", question 149 for an overview of differences between uncleared and cleared repos.

257 Form CO, paragraph 2524.

258 ECB, 2014 COGESI report, page 37.

259 Notifying Parties' response to RFI 12 of 9 August 2016 received on 12 September 2016, question 3: Annex FBD_Gen_030_M.7995_DBAG_LSEG_RFI12_Annex1a_Additional Market Structure Data, tab "Repos".

(345) When trades are not cleared, it seems to be due to regional specificities (Scandinavia, Spain), or because CCPs do not accept to clear corporate bonds or government bonds in certain currencies.[260] As a result, ICMA explains that ATS traded but uncleared repos "a*re now limited to currencies in which there is still no CCP (Poland)*."[261]

(346) The almost perfect correlation between ATS trading and CCP clearing is explained by one market participant as follows: "*There is a very substantial degree of overlap between repos that are CCP-cleared and repos that are ATS-traded. This is explained by the fact that an ATS such as Eurex Repo or BrokerTec will generally open trading books only for standardised and thus highly liquid repos. Since the higher quality repos that CCPs accept for clearing are also generally highly liquid, eligibility for ATS trading and CCP-clearing will usually be aligned*".[262]

(347) Similarly, another market participant stated that "*the CCP market is very liquid and due to the trading platforms very easy to handle. GC pools are only tradable with CCP's and also some government markets especially short dated are only possible on the platforms with CCP background*".[263]

(348) Responses to the market investigation indicate that there are several reasons for this. While on two of the major ATS, CCP clearing is a binding requirement (when trading on Eurex (Repo) through ECAG), or always done except for particular circumstances (on BrokerTec, all trading members are also LCH.Clearnet clearing members, and 95% of the trades are cleared)[264], the fact that most customers actually do clear seems to be predominately a result of the benefits that accrue for ATS traders from CCP clearing as explained in Section 7.2.2.4.

(349) Moreover, there are two additional key benefits for those who avail themselves of the combined ATS-CCP service for repos.

(350) First, anonymity, which trading through an ATS and clearing through a CCP achieves, is an important factor for a number of market participants including a large majority of large banks/dealers responding to the market investigation.[265]

(351) Market participants explain that anonymity is important because it contributes to increasing liquidity on ATS traded, CCP cleared markets. One market participant explained for example that "*it is important because, as CCP guarantees, the name of the counterparty is not relevant. This anonymity increases the number of the counterparties accessing the market and increases liquidity*".[266] Similarly, one large dealer confirms that "*We believe clearing ATS executed repo activity encourages market liquidity due to its anonymity*".[267] Even those that do not consider it important for themselves acknowledge this effect on liquidity "*This is not important [for us],*

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260 Agreed minutes of a teleconference call with ICMA of 8 July 2016, [ID 1540]; Agreed minutes of a teleconference call with [anonymous] of 11 July 2016; Agreed minutes of a teleconference call with ICAP of 2 August 2016, [ID 3627].

261 Agreed minutes of a teleconference call with ICMA of 8 July 2016, [ID 1540].

262 Euroclear, submission dated 4 August 2016, page 3, [ID 2249].

263 LBBW, reply to questionnaire Q1 "Sell-side Customers", question 149, [ID 6004].

264 See agreed minutes of a teleconference call with ICAP of 2 August 2016, explaining that "*Membership of LCH Repoclear facility is required in order to trade on Brokertec"*, [ID 3627].

265 Replies to questionnaire Q1 "Sell-side Customers", questions 102.

266 Banca Sella, reply to questionnaire Q11 "Sell-side Customers and issuers", question 102, [ID 4158].

267 Bank of America Merrill Lynch, reply to questionnaire Q11 "Sell-side Customers and issuers", question 102, [ID 4215].

although anonymity may improve liquidity for weaker counterparties or issuers' names in times of stress (despite trading in CCP)".[268]

(352) There are however also those that appreciate anonymity due to its most direct effect: they simply do not want to reveal – at least in specific circumstance – that they are standing behind a particular trade. For example, one market participant explained that "*anonymous trading is crucial in the following scenario:- big size orders - discretional and reputation risk"*[269] whereas another stated more generally that *"it is important to trade anonymously on ATS to avoid sharing our positions with the whole market"*.[270]

(353) Second, the ATS-CCP combination allows for straight through processing, which a significant number of market participants have identified as highly beneficial. For example, one bank explained that trading on ATS "*offers a significant advantage by simplifying the entire settlement chain (straight-through processing)*"[271], whereas another explains that *"Trading via an ATS allows for straight through processing trade booking and settlement which is more favorable vs voice broking where bookings and clearing are more manual*".[272] Finally, one bank explained that "*Straight-through processing significantly reduces operational risk / risk of misbookings and so on, as well as operational resources required. It also results in time savings for all market participants*"[273].

(354) As for the Notifying Parties' argument that their customers would regularly switch between uncleared and cleared ATS traded repos, the responses to the market investigation indicate that a significant number of customers are not aware of the possibility to "go uncleared" when trading on ATS.[274] One of them, when asked if it compared uncleared and cleared repos systematically, answered that "*In general, yes we do. However, in a number of cases (e.g. ATS), clearing is not an available option, rather a commitment. In all those cases, the cost becomes an irrelevant variable as it can[not] be considered as a determinant of the transaction*".[275] A large bank also describes as one of the specificities of ATS trading that it is "*always cleared*".[276] Another bank states that *"trades on ATS (Eurex Repo and Btec) are always cleared through CCPs*".[277]

(355) Thus, while it may be theoretically possible to "go uncleared" on most of the ATS, it seems to be an option that is partly unknown, or at least practically ignored.

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268 RBS, reply to questionnaire Q11 "Sell-side Customers and issuers", question 102, [ID 4555].

269 Intesa SanPaolo, reply to questionnaire Q1 "Sell-side Customers", question 102, [ID 4599].

270 HSBC, reply to questionnaire Q11 "Sell-side Customers and issuers", question 102, [ID 5991].

271 Commerzbank, reply to questionnaire Q11 "Sell-side Customers and issuers", question 87, ID [ID 6183].

272 RBC Europe, reply to questionnaire Q11 "Sell-side Customers and issuers", question 102, [ID 4191].

273 BNP Paribas, reply to questionnaire Q11 "Sell-side Customers and issuers", question 102, [ID 5646].

274 See for example replies to questionnaire Q11 "Sell-side Customers and issuers", question 90.

275 Veneto Banco, reply to questionnaire Q11 "Sell-side Customers and issuers", question 96, [ID 4173].

276 Morgan Stanley, reply to questionnaire Q11 "Sell-side Customers and issuers", question 94.1, [ID 4212].

277 Landesbank Hessen-Thüringen, reply to questionnaire Q11 "Sell-side Customers and issuers", question 105, [ID 4495].

(356) In this context, it should be noted that the vast majority of ATS customers do not specifically choose for each trade whether they want to clear it or not.[278] Similarly, most customers indicated that they would not compare, for a given repo, an option combining ATS with going uncleared against other options combing ATS trading with CCP clearing.[279]

(357) For some, this process is automatic, and based on software that does not capture the "uncleared repo market", to the extent it exists at all for repos normally traded on ATS. For example, one bank explained that "*Our internal system systematically aggregates all of the above [ATS] market quotations and displays the best bid and offer at any given time. Our system will automatically execute at the best level when trading excluding non-cleared markets*".[280]

(358) As indicated above, the fact that the majority of those trading on ATS do not even consider going uncleared is likely to be also the result of the liquidity on ATS being accumulated for cleared, not uncleared repos.

(359) Indeed, one market participant explains that "*When trading on an ATS a pre required field is selected to opt for execution on a cleared basis only*".[281] This means that the preference for clearing is usually made at the time when somebody enters an offer on an ATS.

(360) If now all or most of those trading on ATS check the "clearing field" (because they know, that for those repos, this is where the liquidity is), the choice of there being an uncleared option becomes almost irrelevant. There is simply no "uncleared" alternative offering the same rate at this very moment. The "uncleared" ATS repo market is therefore, to the extent it exists for repos that are normally cleared, not liquid. This is exactly what one market participant explains: "*On the Euro Govies Repo Market, the vast majority of quotes on ATS are for Central Clearing*".[282]

(361) In view of the above, it would seem that for most of the regular ATS users, for short-term repos in HQLA, the situation seems to be as one bank describes it: "*When we trade on an ATS we always opt for CCP clearing. Only if CCP clearing is no longer available we settle bilateral. CCP clearing is not available for overnight trades (a trade executed today, starting today and ending on the next business day) which are closed after the CCP deadline*".[283]

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278 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 105. This result is all the more striking as a number of those that indicated, in response to the more abstract question as to whether or not they compare cleared and uncleared repos for a given trade, that they would do so, don't compare for ATS traded repos – see replies to questionnaire Q11 "Sell-side Customers and issuers", question 96.

279 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 107

280 RBC Europe, reply to questionnaire Q11 "Sell-side Customers and issuers", question 107, [ID 4191].

281 RBC Europe, reply to questionnaire Q11 "Sell-side Customers and issuers", question 105, [ID 4191].

282 Intesa SanPaolo, reply to questionnaire Q11 "Sell-side Customers and issuers", question 105, [ID 4599]. This same market participant nuances his answer with regard to some type of repos - *"However when they look for a special bond the bilateral trading is also possible. Trading on a bilateral basis is more frequent with domestic counterparties when credit lines are available".* In the Commission's view, all this means is that the ATS-CCP combination is less (or not at all) used for certain types of repos, certain counterparties, or certain circumstances, including for example repos concluded after the CCP deadline.

283 Commerzbank, reply to questionnaire Q11 "Sell-side Customers and issuers", question 105, [ID 6183].

(362) All the above appears to imply that for the vast majority of ATS traded repos, clearing is seen as a logical consequence or even an inherent, or at least a very important part, of a combined service.

(363) The Commission considers that the competitive dynamics in these markets are therefore best captured by defining a market consisting of bundles comprising ATS traded and CCP cleared non-triparty repos.

(364) This apparent bundle-to-bundle competition is also illustrated by explanations obtained in the course of the Commission's market investigation. In this context market participants mentioned that alternatives to a non-triparty repo traded and cleared on Eurex are repos traded on BrokerTec, MTS or tpRepo and cleared on LCH Ltd, LCH SA or CC&G, depending on the underlying bond.[284] Some market participants for example explained that, "*for short dated repos in German Government bonds we systematically compare the liquidity of several repo trading platforms. Short dated repos are almost always centrally cleared. Therefore we either trade on Brokertec, MTS or Eurex Repo or other ATS depending on the best price*".[285] Another respondent mentioned that "*we trade German Government Bonds on Brokertec and choose LCH Ltd as clearer of the deals because of market liquidity; Italian Government Bonds are conversely traded on MTS and cleared through CCG. We also check interests on Eurex via ECAG"*.[286] Finally, one market participant states that "*Eurex is a separate and unique silos (ATS-CCP), while you can choose which LSEG's CCPs to clear with on MTS and BTEC (f.i. Italy on LCG sa od CC&G or, in the near future, Bunds on LCH Ltd or LCH sa*)".[287]

(365) Further, one market participant explained that *"customers who wish to clear repo transactions conducted on these trading platforms do not have an independent choice of CCP clearing service. ATSs and CCPs have long-run relationships either through contract or through outright vertical integration. Trading on an ATS thus determines where clearing occurs. As a result, [..] competition occurs with respect to a "stack" of complementary services comprising trading and clearing. Customers base their choice of trading platform not only on the products and conditions offered by each trading platform, but also on the conditions governing the clearing services they must use as part of the stack"*.[288]

(366) For these reasons, this market participant considers that "*The significant benefits of CCP-cleared repos make non-cleared […] repos poor substitutes for purposes of defining the relevant markets. For high quality bonds with related high trading volumes, trading on ATS and CCP-clearing provide the most operationally and cost-efficient way of financing and, as a consequence, customers with eligible bonds will opt for ATS-traded/CCP-cleared repos barring exceptional circumstances*".[289]

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284 Replies to questionnaire Q1 "Sell-side Customers", question 163; see also replies to questions 165 and 166, and replies to questionnaire Q11 "Sell-side Customers and issuers", question 107.

285 Commerzbank, reply to questionnaire Q11 "Sell-side Customers and issuers", question 107, [ID 6183].

286 Intesa SanPaolo, reply to questionnaire Q11 "Sell-side Customers and issuers", question 107, [ID 4599].

287 Intesa SanPaolo, reply to questionnaire Q1 "Sell-side Customers", question 163, [ID 2365].

288 Euroclear, submission dated 4 August 2016, page 4, [ID 2294].

289 Euroclear, submission dated 4 August 2016, page 3, [ID 2294].

(367) For these reasons, the Commission considers that it is appropriate to consider that there is a market for bundles comprising ATS trading and CCP clearing of non-triparty repos.

(368) Alternatively, if one were to accept the Notifying Parties' argument that customers trading repos on ATS could choose to go uncleared, and that therefore it is inappropriate to consider there to be market comprising bundles of trading and clearing services, separate markets could be defined for these two regularly intertwined services. For the purposes of assessing the Transaction, and in view of the Notifying Parties' activities, this can be left open, as it does not have a decisive bearing on the competitive assessment.

7.2.2.6. Geographic market definition

(369) The market investigations did not yield any evidence that would put in doubt that the geographic scope of repo markets, as proposed by the Notifying Parties, is EEA-wide.

(370) In the course of the market investigation, not a single respondent mentioned the possibility of trading or clearing a repo outside the EEA.[290]

(371) Therefore, the Commission considers that the markets for ATS traded and CCP cleared repos are EEA-wide.

7.2.2.7. Conclusion on relevant markets

(372) In view of the foregoing, the Commission considers that, both with respect to triparty and non-triparty repos, ATS traded repos have to be distinguished from bilaterally traded repos. For ATS traded repos, cleared repos do not form part of the same product market as uncleared repos.

(373) As regards ATS traded and CCP cleared triparty repos, they entail a collateral management layer, a service performed by the triparty agent. As this service forms an inherent part of triparty repos, and the choice of the collateral manager is predetermined by where the repo is traded (and cleared), the Commission considers it appropriate to consider these services – ATS trading, CCP clearing and CMS – as a bundle and belonging to the same product market.

(374) As for ATS traded and CCP cleared non-triparty repos, the Commission also considers that ATS trading and CCP clearing, are, for a vast majority of customers, regarded as an inherently linked service, and are thus best assessed as a bundle. However, if, alternatively, a market for the clearing of ATS traded non-triparty repos were defined separate from the trading of ATS non-triparty repos that are CCP cleared, this would not affect the Commission's conclusion in the competitive assessment, and therefore this question can be left open.

(375) For bilaterally traded triparty and non-triparty repos, the questions as to whether the same distinctions have to be drawn can ultimately be left open, as the Notifying Parties do not overlap in this respect.

(376) Therefore, for the purposes of this Decision, the Commission considers that the relevant markets in relation to repos are (i) ATS traded and CCP cleared non-triparty

290 See in particular questionnaire Q11 "Sell-side Customers and issuers", and questionnaire Q1 "Sell-side Customers".

repos, or alternatively the clearing of ATS traded non-triparty repos[291] and (ii) ATS traded and CCP cleared triparty repos. These markets all have an EEA-wide geographic scope.

7.3. Competitive assessment

7.3.1. The Transaction would strengthen LSEG's dominance in the market for ATS traded and CCP cleared non-triparty repos in the EEA

(377) The Decision opening the proceedings and the Statement of Objections preliminarily concluded that the Transaction would likely strengthen LSEG's dominance in the market for ATS traded and CCP cleared non-triparty repos.

7.3.1.1. Notifying Parties' views

(378) In the Notifying Parties' view, the Transaction cannot give rise to competition concerns given that DBAG only holds a small market share (as regards trading).

(379) The Notifying Parties argue that the merged entity would *inter alia* be constrained by other ATS, including notably BrokerTec, at trading level. Moreover, they would be constrained by repo trading based on voice brokerage or direct interactions between counterparties, and by providers of securities lending services. The Notifying Parties reiterate this argument in their response to the Statement of Objections, and refer in particular to one internal document of LSEG, which, as acknowledged in the Statement of Objections, mentions bilateral trading as a competitive constraint.

(380) In their response to the Decision opening the proceedings, the Notifying Parties do not contest that there are no other (meaningful) CCPs currently providing clearing services for repos. However, they argue that market participants have the choice to manage risk bilaterally ("go uncleared"), and that rival CCPs, in particular EuroCCP, could launch repo clearing within a relatively short amount of time and with limited investments.

7.3.1.2. The Commission's assessment

7.3.1.2.1. Introduction and market structure

(381) First, in line with the market definition of repos in Section 7.2, the Commission considers that the potential constraints from securities lending services and from bilaterally traded and uncleared repos can be dismissed, because they are not to be considered as meaningful substitutes.

(382) Second, according to the Guidelines on the assessment of horizontal mergers ("Horizontal Merger Guidelines"),[292] a merger gives rise to a significant impediment to effective competition if it strengthens a firm's dominant position. The guidelines mention in particular that high market shares, closeness of competition between the

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[291] While the Notifying Parties also have overlapping activities on a plausible market for ATS trading of non-triparty repos, their market shares on this layer of the value chain are relatively modest. The Commission considers, in view of the assessment in the next section, that assessing competition on this alternative market would not be meaningful and in any event not alter its conclusion as regards the effects on competition resulting from the Notifying Parties' overlapping activities with respect to non-triparty repos traded on ATS.

[292] Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 31, 5 February 2004, p.5, paragraph 25.

parties, and the absence of countervailing entry as factors that indicate that a merger would result in the strengthening of a firm's dominant position.

(383) The market structure in the market(s) for non-triparty ATS traded and CCP cleared repos is the following:

(a) Customers trading on MTS or the two third party ATS, BrokerTec and tpRepo, clear through LSEG's clearing houses: LCH.Clearnet (SA and Ltd) and CC&G, and represent [90-100%] of the market.

(b) Eurex Repo provides a vertically integrated offer combining trading and clearing, and has a [0-5%] market share.

(384) Importantly, the clearing houses of the Notifying Parties clear 100% of all ATS traded non-triparty repos. The increment arising from the merger on both the trading and clearing layers is equal to Eurex' share, 1.8%. The high market shares of LSEG and the elimination of its only competitor as regards the clearing of non-triparty repos are a very strong indication of the Transaction resulting in the strengthening of a dominant position. Against this background, and given that, as described below in Section 7.3.1.2.4, countervailing entry is extremely unlikely and in any event no meaningful constraint, the Transaction results in the disappearance of the only other meaningful competitive constraint on LSEG.

Table 1 - Market shares for non-triparty ATS trading and CCP clearing

		2013		2014		2015	
Trading venue	**Clearing house**	**Notional outstanding volumes (EUR bn)**	**Share (%)**	**Notional outstanding volumes (EUR bn)**	**Share (%)**	**Notional outstanding volumes (EUR bn)**	**Share (%)**
DBAG (Eurex Repo)	DBAG	[BUSINESS SECRETS]	**[0-5%]**	[BUSINESS SECRETS]	**[0-5%]**	[BUSINESS SECRETS]	**[0-5%]**
LSEG (MTS Repo)	LSEG	[BUSINESS SECRETS]	**[20-30%]**	[BUSINESS SECRETS]	**[10-20%]**	[BUSINESS SECRETS]	**[10-20%]**
BrokerTec	LSEG	[BUSINESS SECRETS]	[70-80%]	985.6	[70-80%]	1,277.1	[80-90%]
tpREPO	LSEG						
Other ATS	LSEG						
Total	**100%**	[BUSINESS SECRETS]	**100.0**	[BUSINESS SECRETS]	**100.0**	[BUSINESS SECRETS]	**100.0**

Source: Parties' response to RFI 10, Annex 07 Market data for Section 6C-8C – Repos, Table 7 (data source: ICMA and the Notifying Parties).

(385) The Commission also notes that the revenue figures provided by the Notifying Parties in the Form CO confirm the importance of the clearing services: clearing contributed to roughly [BUSINESS SECRETS] of DBAG's non-triparty repo revenues.[293]

[293] Form CO, Table C.3, paragraph 2262.

7.3.1.2.2. On the market for (clearing of) ATS traded and CCP cleared non-triparty repos, DBAG is a particularly close (or only) competitor to LSEG and the most important competitive constraint

(386) The Commission firstly recalls that in the area of ATS traded CCP cleared non-triparty repos, competition between market participants takes place in bundles comprising ATS trading and CCP clearing services. Even if that were not the case, clearing is an important, strongly related and, for many customers trading non-triparty repos on ATS, indispensable service. As one market participant explains, *"the fact that the clearing service is of higher value than the trading service makes the competiveness of the clearing service critical to the competiveness of the overall stack"*.[294]

(387) Therefore, despite their different business models,[295] the Notifying Parties clearly compete in the market for ATS traded CCP cleared repos.

(388) Following the Transaction, the merged entity will control *de facto* all clearing houses[296] in the EEA active in ATS traded non-triparty repo clearing. While at the trading level the merged entity will continue to face competition from rival ATS that currently account for approximately [70-80%] of the market, this competitive constraint would be, as a result of the Transaction, lessened through the fact that customers trading on the platforms of these competitors rely on LSEG for the clearing service – an indispensable service for ATS traded repos.

(389) It is therefore not surprising that, even though Eurex currently is a relatively minor player in this market, it follows clearly from the results of the market investigation, [BUSINESS SECRETS] that it exerts significant competitive pressure on LSEG's repo clearing business. In fact, there are no indications from the market investigation that any other company – a rival trading platform or clearing houses – is regarded as a competitive constraint by either the Notifying Parties or market participants.

(390) [BUSINESS SECRETS].[297] [BUSINESS SECRETS].[298]

(391) [BUSINESS SECRETS].[299]

(392) [BUSINESS SECRETS].

(393) In the Commission's view, [BUSINESS SECRETS] This quote therefore illustrates well how the Transaction could harm competition in a number of ways.

(394) First, it may eliminate or at least reduce the constant need to innovate in the competitive race to retain customers, which is a common feature of financial

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294 Euroclear, submission dated 4 August 2016, page 4, [ID 2294].

295 See above Section 7.1.

296 There are also some minor players such as Meffclear for Spanish bonds. As there are neither indications from the market investigation nor submission from the Notifying Parties that these CCPs play a meaningful role for the competitive dynamics in this space, the Commission will disregard them for the remainder of its analysis.

297 LSEG's internal documents, [BUSINESS SECRETS], page 10, [ID 3503-34936]. The Commission acknowledges that this presentation [BUSINESS SECRETS]. However, in view of its assessment in Section 7.2 on market definition, the Commission and this isolated mentioning as constraint, [BUSINESS SECRETS]

298 LSEG's internal documents, [BUSINESS SECRETS], February 2015 [ID 5185-83101].

299 [BUSINESS SECRETS].

infrastructure markets. This concern is also shared by market participants. One customer confirmed that the Transaction might stifle innovation of future competition in this field, and explained that "*Eurex clearing is the only one to clear equity repos. No direct competition actually. But the merger would prevent LSE to implement its own equity clearing offer*."[300]

(395) Second, it shows that even though Eurex does not [BUSINESS SECRETS] allow customers trading on rival ATS to clear through its CCP, the mere possibility that it could do so constrains the incumbent repo clearing houses of LSEG.

(396) Third, it illustrates that, in particular for repos based on German government bonds ("bunds") to which it refers more specifically, the (pricing) constraint that the Notifying Parties exercise on each other are particularly pronounced and important.

(397) DBAG's internal documents show a similar picture. In 2012, in a presentation [BUSINESS SECRETS].[301] [BUSINESS SECRETS].[302]

(398) It follows from the above that, given that the only relevant competitive constraint is eliminated as a result of the Transaction, the merged entity will be in a position to exert pricing control over ATS traded non-triparty repos.

(399) This is because through the disappearance of the only competitor that is clearing non-triparty repos, the merged entity will have the ability to simultaneously increase the prices for clearing services without running the risk of leaking customers to other CCPs (or trading venues), because the customers trading on non-triparty repos on ATS have to clear through one of the Notifying Parties' clearing houses.[303]

(400) During the Phase I and Phase II market investigation, a number of the Notifying Parties' repo customers expressed concerns about the impact of the concentration brought about by the merger at the repo clearing level. In this context, one market participant expressed that as a result of the Transaction, *"three major CCPs in Europe (Eurex Clearing, LCH SA, LCH Ltd) would be owned by the same company. […]. Therefore the CCPs would be in the situation to define the rules for doing repo business"*.[304]

(401) In view of the foregoing, it is of limited relevance that the increment brought about by the transaction is relatively minor, that BrokerTec seems to be a close competitor to each of the Notifying Parties at the trading level,[305] and that the Notifying Parties' ATS seem to predominately compete only with respect to both German and Italian bonds,[306] because importantly, the Transaction eliminates the only competitor of

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300 Société Générale, reply to questionnaire Q1 "Sell-side Customers", questions 163, [ID 2647].

301 DBAG's internal documents, "Review of clearing fees for Eurex Repo", 23 May 2012, page 12. [ID 3750- 60177].

302 DBAG's internal documents, "Review of clearing fees for Eurex Repo", 23 May 2012, page 13, [ID 3750- 60177].

303 See also Euroclear, submission dated 4 August 2016, [ID 2294].

304 Replies to questionnaire Q1 "Sell-side Customers", questions 164-165.

305 BrokerTec was mentioned repeatedly in the course of the market investigation as the Notifying Parties' closest rival with respect to both types of underlying. See agreed minutes of a teleconference call with ICAP of 2 August 2016, [ID 3627]; agreed minutes of a teleconference call with ICMA of 8 July 2016, [ID 1540]. See also replies to questionnaire Q1 "Sell-side Customers", questions 155-156.

306 Replies to questionnaire Q1 "Sell-side Customers", questions 155-156. See also replies to questionnaire Q1 "Sell-side Customers", question 165 and 166. When asked about where to trade repos with a certain (national) underlying, customers also mentioned a number of times bilateral trading as an alternative. At

LSEG in clearing ATS traded non-triparty repos. Regardless of whether the Commission considers competition on a bundle-to-bundle level, or solely at the level of clearing ATS traded non-triparty repos, the merged entity would be in a position to unilaterally increase prices for ATS traded CCP cleared repos, because in either scenario, there would not be an independent competitor that could replace the constraint that DBAG currently exerts on LSEG.

7.3.1.2.3. Absent the Transaction, T2S (and other developments) would further intensify competition between the Notifying Parties

(402) With the gradual switch to T2S,[307] there are strong indications that competition between the Notifying Parties, in both the market for ATS traded and CCP cleared triparty repos (see below Section 7.3.2.2.3) and in the market(s) for ATS traded (and CCP cleared) non-triparty repos would, absent the merger, further intensify, to the benefit of customers. Such an increase in competition is expected as a result of cross-system settlement becoming cheaper and faster through T2S, as well as through LCH SA possibly opening an account in Clearstream Frankfurt, which means that customers will not have to take into account any longer the additional cost, risk and inconvenience of having to move collateral across settlement systems when trading and clearing repos.

(403) To illustrate the above points, the Commission refers to a DBAG internal email exchange[308] relating to [DISCUSSION OF THE IMPACT OF A HYPOTHETICAL FUTURE POSSIBILITY FOR LCH CUSTOMERS TO SETTLE BUND REPOS IN CLEARSTREAM].[309]

(404) The decision of LSEG/LCH.Clearnet to [EXPAND INTO BUND REPO CLEARING SERVICES AT LCH SA] and described in more detail below in Section 11.2.1.1, apparently caused some concern [BUSINESS SECRETS].[310]

(405) It follows from the above that both parties to the Transaction clearly expect competition in ATS traded non-triparty repos to intensify going forward.

(406) The results of the market investigation suggest that this expectation is shared by a large number of market participants, including in particular some of the largest banks and dealers.[311] One market participant, for example, explains that "*Once T2S is implemented across all participating CS[D]s in the EEA the current limitations with respect to moving collateral will be gone. In the short time that should increase the*

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this stage, and for the purposes of the Decision, the Commission considers that this would predominately relate to repo trades in which the liquidity on ATS is relatively limited, or that are unsuitable for ATS trading due to duration, size or complexity. The Commission notes that in response to the Statement of Objections, the Notifying Parties refer to these isolated statements, and submit that in none of these statements the respondents to the market investigation have indicated that certain types of repos are unsuitable for ATS trading. The Commission did not state that they did, and considers that in view of the evidence on file, there are evidently certain repos (complex, long deal possibly based on uncommon collateral) that are unsuitable for ATS trading.

307 T2S (TARGET2-Securities) is a new European securities settlement engine which aims to offer centralised delivery-versus-payment (DvP) settlement in central bank funds across all European securities markets.

308 DBAG internal documents, [BUSINESS SECRETS], 3 June 2016, [ID 3420-18677].

309 DBAG internal documents, [BUSINESS SECRETS], 3 June 2016, [ID 3420-18677].

310 LSEG internal documents, [BUSINESS SECRETS], 23 January 2014, [ID 5185-80862].

311 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 115.

competition between the several ATSs".[312] Similarly, another market participant confirmed that "*T2S offers settlement and payment harmonization which might lead to higher competition of ATS trading non-triparty repos*".[313] In the same vein one market participant even anticipates that as a result of T2S, there will be "*increased competition [which] may lead to fee reduction (on Eurex)*".[314]

(407) While some of the above statements refer specifically to trading, they apply, in the Commission's view, equally to clearing. This can be deduced from [BUSINESS SECRETS], as well as from the Commission's explanation in Section 7.2.2 on market definition regarding the quasi-inherent link between trading and clearing of non-triparty repos: as there is de-facto no trading on ATS without clearing, clearing appears to be an indispensable service for many of those trading on ATS, and intensification of competition in ATS for trading non-triparty repos would necessarily entail an intensification of competition between the CCPs clearing ATS traded non-triparty repos: DBAG and LSEG.

(408) This intensification of competition would be eliminated as a result of the Transaction.

7.3.1.2.4. Entry is unlikely and in any event not a significant competitive constraint

(409) In their response to the Decision opening the proceedings, the Notifying Parties argue that EuroCCP would be a rival clearing house that would be particularly well placed to enter the repo clearing market should anticompetitive effects materialise as a result of the Transaction.

(410) First, the Commission recalls that barriers to entry into financial infrastructure markets are high, due to in particular strong network effects and economies of scale and scope.[315] A new entrant would have to obtain the support of a sufficient number of market participants, contend with high regulatory requirements and high investments, as well as achieve low costs and propose an innovative / different offering to what existing CCPs supply in order to be successful.[316]

(411) These considerations also hold true for repo clearing, [BUSINESS SECRETS].[317] And with the chances for a successful entry of even a large, sophisticated clearing house with experience in repo clearing outside the EEA being low, the likelihood that this CCP (or another) would attempt to enter are even lower.

(412) Second, the market investigation did not reveal any indications of a future entry (or expansion from a neighbouring market) into the repo clearing market either by EuroCCP or any other clearing house.

(413) Indeed, EuroCCP itself indicated that it is not considering entering this market. It explained that it "*is considering to enter the area of clearing of stock loans (i.e. securities lending), segment […] As EuroCCP is already active in equity clearing, there is a business case for expanding into stock loan clearing. EuroCCP started to*

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312 Commerzbank, reply to questionnaire Q11 "Sell-side Customers and issuers", question 115, [ID 6183].

313 Unicredit, reply to questionnaire Q11 "Sell-side Customers and issuers", question 115, [ID 6073].

314 Crédit Agricole, reply to questionnaire Q11 "Sell-side Customers and issuers", question 115, [ID 4546].

315 See above Section 5.2.1.

316 Replies to questionnaire Q1 "Sell-side Customers", questions 170-170.1; Agreed minutes of a teleconference call with CME of 22 July 2016, [ID 3543].

317 [BUSINESS SECRETS].

examine stock loan clearing in late 2015. If a decision to proceed with the initiative and submit for regulatory filing is taken in December 2016 / January 2017, EuroCCP aims to start an initial service offering in Q3/Q4 2017. […] EuroCCP does not clear fixed income (either repos or bonds) and is not considering to enter this area. It is not easy for a CCP not active in fixed income clearing to enter this market: first, it requires to obtain a specific EMIR authorisation; second, and most importantly, clearing is characterised by high network effects and high fixed costs which constitute barriers to entry for potential new players. It would need to develop an entirely new management system for fixed income which requires investments and would increase EuroCCPs fixed costs (e.g. by engaging additional employees). Since every CCP needs to have a critical mass to operate, the defection of only a few companies (in case they decided, e.g. to sponsor the entry of a new CCP) from a CCP would not be sufficient for a new entrant to be viable. Furthermore, sponsors will incur additional costs due to the continued requirement to use the first CCP when transacting with counterparties who have chosen not to leave; this is a disincentive for firms to sponsor a new CCP. In short, compared to starting to clear equity lending transaction, entering the fixed income clearing space (i.e. clearing of repos and bonds) would take significantly longer, entail much higher investments (in terms e.g. of risk management enhancement, validation, etc.) and increased fixed costs, while commercial barriers to entry are also much higher".[318]

(414) The results of the market investigation also strongly indicate that the Notifying Parties' argument that EuroCCP would be a strong constraint as it could swiftly and easily enter, is not plausible. In fact, aside from EuroCCP's own assessment as reported above, not a single market participant mentioned EuroCCP when asked which company could potentially start to clear repos in the next 1-3 years.[319] More generally speaking, a clear majority of respondents did not expect any company to enter, or could not think of any company that would do so.[320]

(415) In any event, the Commission has not received any evidence to indicate that a rival clearing house currently has plans to start clearing (non-triparty) repos. The Commission also notes that not only are there no other CCPs clearing repos that could constrain the merged entity going forward, but there are also no other clearing houses active in the bond area, which, given that most cleared repos are based on bonds, could therefore find it easier to expand their offering into this market.

(416) In view of the explanations of EuroCCP, namely that it is much more challenging, as well as time and cost intensive to expand beyond an existing asset class (such as equities for example), the Commission considers that any potential entry could not possibly be considered as likely, timely and sufficient to deter or defeat any anti-competitive effects of the Transaction.[321]

(417) Finally, the absence of countervailing entry is also evidenced by the fact that a majority of respondents to the market investigation consider that trading and/or

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318 Agreed minutes of a teleconference call with EuroCCP of 21 October 2016, [ID 4135].

319 Replies to questionnaire Q1 "Sell-side Customers", question 170.

320 Replies to questionnaire Q1 "Sell-side Customers", question 170.

321 Horizontal Merger Guidelines, paragraph 68 et seq.

clearing fees for ATS traded CCP cleared non-triparty repos might increase as a result of the Transaction.[322]

7.3.1.2.5. Conclusion

(418) In view of the foregoing, the Commission concludes that, considering the fact that the Transaction would result in eliminating the only other player active in clearing ATS traded non-triparty repos, the importance of clearing for customers trading non-triparty repos on ATS, and the lack of likely entry, the Transaction would lead to a significant impediment of effective competition through the strengthening of a dominant position on the market(s) for ATS traded and CCP cleared non-triparty repos in the EEA, regardless of whether the markets are defined as a combined market for the trading and clearing of ATS traded non-triparty repos or a market for clearing of ATS traded non-triparty repos that is separate from trading of ATS non-triparty repos that are CCP cleared.

7.3.2. The Transaction would strengthen DBAG's dominant position in the market for ATS traded and CCP cleared triparty repos in the EEA

(419) In the Statement of Objections, the Commission preliminarily concluded that the Transaction would likely strengthen the dominant position of DBAG in the market for ATS traded (and CCP cleared) triparty repos by eliminating a particularly close (and only) competitor.

7.3.2.1. Notifying Parties' view

(420) In their response to the Decision opening the proceedings, the Notifying Parties recall that the increment arising from the Transaction is very small as LSEG's presence is minimal [BUSINESS SECRETS].

(421) Moreover, and also in response to the Statement of Objections, the Notifying Parties submit that their main triparty products (GC Pooling and €GC Plus) are not close competitors, as DBAG has not reacted in any way to the market entry of LSEG. In addition, according to the Notifying Parties, for each of them, non-ATS traded triparty products would be closer alternatives. This is because the use of these products is linked to where customers' collateral is held (Euroclear or Clearstream), and if customers wanted to switch to an alternative (triparty) repo, they would instead forgo ATS trading (and clearing), and trade repos bilaterally, while retaining Euroclear or Clearstream as CMS providers. Moreover, the necessary moving of collateral which would be necessary to trade the respective other triparty product would be time consuming and costly, and would not be undertaken solely for the purposes of trading on a rival triparty ATS.

(422) Finally, the Notifying Parties submit that the refinancing operations with central banks have increasingly substituted "public" liquidity provision to private liquidity. In the Notifying Parties' response to the Decision opening the proceedings, they argue that even if central banks were to scale back their operations, the commercial repo markets are unlikely to attain the volumes again in the mid-term that they had prior to central banks' interventions.

[322] Replies to questionnaire Q1 "Sell-side Customers", question 190.2.

7.3.2.2. The Commission's assessment

7.3.2.2.1.In the market for ATS traded CCP cleared triparty repos, only the Notifying Parties are active

(423) In the market for ATS traded and CCP cleared triparty repos, DBAG has a market share of [90-100%], as such already a strong indicator for a dominant position. LSEG's products (for which trading and CMS are partly provided by third parties) are the only competing offer in this market.

(424) The Commission recalls that this market is characterised by bundle to bundle competition.

(425) The vertical stacks or composite products of the Notifying Parties comprise, on the one hand, DBAG's vertical silo (DBAG is active with its GC Pooling product), and on the other hand, for €GC Plus, a bundle offering which comprises trading provided by MTS (LSEG) or by BrokerTec, a third party venue, and clearing by LCH SA (LSEG), whereas CMS is provided by a third party, Euroclear. [323]

(426) The following table visualises the above described market structure.

Table 2: Market structure and shares for ATS traded and CCP cleared triparty repos

	Venue	2013	2014	2015
Trading	DBAG	[90-100%]	[90-100%]	[90-100%]
	LSEG	[0-5%]	[0-5%]	[0-5%]
	BrokerTec	[0-5%]	[0-5%]	[0-5%]
	TOTAL	[90-100%]	[90-100%]	[90-100%]
Clearing	DBAG	[90-100%]	[90-100%]	[90-100%]
	LSEG	[0-5%]	[0-5%]	[0-5%]
	TOTAL	[90-100%]	[90-100%]	[90-100%]
CMS	DBAG	[90-100%]	[90-100%]	[90-100%]
	Euroclear	[0-5%]	[0-5%]	[0-5%]
	TOTAL	[90-100%]	[90-100%]	[90-100%]

Source: Form CO, Commission's own calculations. Note that figures in bold related to the Notifying Parties' entities, whereas figures in italics refer to activities of third parties.

(427) The remainder of this section focuses on GC Pooling and €GC Plus. Based on the results of the market investigation, the competition between them seems most direct and hence most relevant for the Commission's assessment, whereas the results of the market investigation support the Notifying Parties' argument that LSEG's other ATS traded and CCP cleared triparty products, Term £GC and X-COM, are not to be seen as meaningful constraints.[324]

7.3.2.2.2. The Notifying Parties' products are closely competing with each other

(428) The above table also illustrates that LSEG's entry has been successful as it has increased its market position in the course of the last two years.

(429) In addition, the Notifying Parties' argument that their products are not in competition with each other, and that DBAG has not reacted, for instance by a decrease in fees to

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323 LSEG has two other ATS traded triparty products: Term £GC, cleared by LCH Ltd and for which CMS is provided by Euroclear, and X-COM, cleared by CC&G and for which CMS is provided by Monte Titoli.

324 Replies to questionnaire Q1 "Sell-side Customers", questions 161.

LSEG's market entry do not seem to be confirmed by their internal documents [BUSINESS SECRETS].

(430) For instance, it follows clearly from LSEG's internal documents that [BUSINESS SECRETS][325], [BUSINESS SECRETS].

Figure 4: [SCREENSHOT OF INTERNAL DOCUMENT ON COMPETITIVE POSITIONING OF €GC PLUS]

(431) As for DBAG, [BUSINESS SECRETS][326] [BUSINESS SECRETS].[327]

(432) [FOLLOWING THE ENTRY OF LSEG INTO THIS MARKET, INTERNAL DOCUMENTS INDICATE THAT THERE IS A RISK OF COMPETITIVE RIVALRY BETWEEN € GC POOLING AND € GC PLUS][328]

(433) An email exchange between DBAG employees [BUSINESS SECRETS]

– [BUSINESS SECRETS].

– [BUSINESS SECRETS].

– [BUSINESS SECRETS].[329]

(434) [BUSINESS SECRETS].

(435) In any event, in 2015, and one year after the launch of €GC Plus, [BUSINESS SECRETS].[330]

(436) In their response to the Decision opening the proceedings, the Notifying Parties emphasise in particular that DBAG has neither responded in any way to the market entry of LSEG, in particular not by decreasing fees, nor does it regard €GC Plus as a competitor.

(437) First, the claim that DBAG does not see €GC Plus as a competitor contradicts both the spirit and the letter of the internal documents quoted above. Second, the Commission notes that the absence of a fee decrease, as confirmed by the results of the market investigation,[331] is not necessarily evidence of there not being a competitive interaction between the products. In the absence of LSEG's market entry, it is possible that DBAG would have increased its prices ([BUSINESS SECRETS]).[332]

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325 LSEG's internal documents, "LCH SA Presentation: Fixed Income", page 6, [ID 1063-138].

326 DBAG's internal documents, "Review of clearing fees for Eurex Repo", 23 May 2012, for example page 11, [ID 3750- 60177].

327 DBAG's internal documents, "Review of clearing fees for Eurex Repo", 23 May 2012, for example page 12, ID [3750- 60177].

328 DBAG's internal documents, "Eurex Repo - Secured Funding & Financing Markets", 26 March 2014, page 2 [ID 1063-2674].

329 [BUSINESS SECRETS].

330 DBAG's internal document, "Eurex Repo – Status & Strategic Outlook", 16 September 2015, LL_6C-8C, 011, page 6 [ID 1063-2022].

331 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 114.

332 DBAG's internal documents, Review of clearing fees for Eurex Repo, 23 May 2012, [ID 3750-60177], for example page 13. In this document, DBAG proposes to [BUSINESS SECRETS]

(438) In any event, DBAG reacted already before that point in time. [BUSINESS SECRETS].[333] [334]

(439) As for the success of €GC Plus, it is true that until now, as DBAG predicted, [BUSINESS SECRETS], and most market participants do not regard €GC Plus as being similarly attractive as GC Pooling.[335] [PARTIES' CONFIDENTIAL VIEWS ON THE PERFORMANCE OF GC PLUS] there is no immediately visible correlation between the volumes traded on GC Pooling and €GC Plus on the other hand. [CONFIDENTIAL INFORMATION ON THE GROWTH OF €GC PLUS AND POSSIBLE REASONS FOR THIS].[336] Another internal document of LSEG [BUSINESS SECRETS].[337]

(440) Moreover, and with respect to the Parties' argument that Banque the France is currently the only (meaningful) cash provider for €GC Plus, and overall accounts for a substantial share of €GC Plus volumes, the Commission considers the apparent continuous support of this product through the French central bank rather as a strength of €GC Plus [BUSINESS SECRETS].

(441) In addition, BrokerTec, an ATS on which €GC Plus can be traded, notes that "*LCH SA has a growing importance in the GC market, even if right now only 10-15 of the 60-65 banks active on Brokertec are able to trade it*".[338] As will be further described below, the undeniable competitive interaction between these products will likely intensify going forward. Moreover, [BUSINESS SECRETS], internal documents of LSEG confirm that a Spanish bank is at the very least interested in joining.[339] [BUSINESS SECRETS][340]

(442) That the Notifying Parties' triparty products compete is also evidenced by the results of the market investigation. For example, the vast majority of market participants mentioned €GC Plus (or the other LSEG products to a lesser extent) as the only (or at least very close) alternative to GC Pooling, while only very few referred to other bilaterally traded uncleared triparty repos,[341] and none referred to any other products. Market participants explained that these two products were alternatives because *"they are the two biggest European markets for collateral pooling and they offer almost the same types of collateral, operational standards and services,*"[342] because of a "*similar collateral pool, both traded electronically, similar clearing process*"[343] and because they are both *"cleared triparty on similar baskets*"[344]. Further, one market participant stated that *"GC Pooling and € GC Plus are clearly in competition".*[345]

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333 [BUSINESS SECRETS].
334 [BUSINESS SECRETS].
335 Replies to questionnaire Q11 "Sell-side customers", question 112.
336 [BUSINESS SECRETS].
337 LSEG's internal documents, "Lseg exco - triparty", email from [BUSINESS SECRETS], 7 May 2015, [ID 5185-35703].
338 Agreed minutes of a teleconference call with ICAP of 2 August 2016, [ID 3627].
339 [BUSINESS SECRETS].
340 [BUSINESS SECRETS].
341 Replies to questionnaire Q1 "Sell-side Customers", questions 158-159.
342 Veneto Banca, reply to questionnaire Q1 "Sell-side Customers", question 158, [ID 1674].
343 Commerzbank, reply to questionnaire Q1 "Sell-side Customers", question 158, [ID 6181].
344 Société Générale, reply to questionnaire Q1 "Sell-side Customers", question 158, [ID 2647].
345 Natixis, reply to questionnaire Q1 "Sell-side Customers", questions 163, [ID 1671].

(443) Finally, one market participant pointed to the clear existence of a competitive constraint exercised by LSEG on the incumbent (DBAG) stating with respect to the competition between the Notifying Parties' products that "*there are strong network effects that attract traders to the most liquid instrument which is currently GC pooling. However, in the long run, alternatives would be important to keep prices low*."[346]

(444) Euroclear, the CMS provider of €GC Plus, also submits that its launch was a "*direct competitive response to the GC Pooling product. Although the €GC Plus share in triparty cleared repos is currently modest, it is growing as it offers customers a credible competitive alternative."*[347]

(445) In view of the above, the Commission considers that LSEG's attempts to break into a market in which DBAG had prior to that a monopoly position, have led to the emergence of competitive constraints for DBAG that did not exist before. Those would inevitably disappear as a result of the Transaction, which would restore DBAG's monopoly.

7.3.2.2.3. The Notifying Parties' products compete despite being in different collateral pools – and absent the Transaction, T2S (and other developments) would further intensify this competition

(446) The Commission considers the fact that the Notifying Parties' products relate to different pools of collateral does not mean that they do not constrain each other. Customers regard their respective triparty products as competing products.[348] When identifying direct alternatives to €GC Plus, customers frequently identified GC Pooling as competing product because they have similar features and provide the same value proposition for customers: electronic trading, straight-through processing, ability to clear, similar baskets. ("*Same ability to clear ECB Italian eligible collateral baskets.*"[349]; "*Direct link to Centralbank. Pooled collateral. Automated straight through process*."[350]; "*they are among the more important European markets for collateral pooling and they offer almost the same types of collateral, operational standards and services.*"[351]).

(447) As for the Notifying Parties' argument, reiterated in the response to the Statement of Objections, that there is no competition between the Notifying Parties' products, because switching would entail the cost and time intensive movement of collateral from Euroclear to Eurex, the Commission acknowledges that frequent switching between the two stacks is indeed unlikely to happen given the associated burden,[352] and market participants generally indicated that they have not switched in the past.[353]

(448) The fact that the collateral pools to which the Notifying Parties' products are linked act as a limitation to daily switching is also confirmed by BrokerTec, the third party ATS on which €GC Plus can be traded, who explains that "*the choice between*

346 Agreed minutes of a teleconference call with Natixis of 12 July 2016, [ID 3691].
347 Euroclear, submission dated 4 August, pages 5-6, [ID 2294].
348 Replies to questionnaire Q1 "Sell-side Customers", questions 158-161.
349 Crédit Agricole, replies to questionnaire Q1 "Sell-side Customers", question 161, [ID 2488].
350 Unicredit, replies to questionnaire Q1 "Sell-side Customers", question 161, [ID 2411].
351 Veneto Banca, replies to questionnaire Q1 "Sell-side Customers", question 161, [ID 1674].
352 Replies to questionnaire Q1 "Sell-side Customers", question 163.
353 Replies to questionnaire Q1 "Sell-side Customers", question 162.

different tri-party repo products depends to a large extent on the ICSD used by the counterparties to a transaction. That means that investors with collateral in Clearstream would generally opt for GC pooling, whereas those with collateral in Euroclear could go for €GC Plus. Of course the collateral could be moved, but this is relatively complex (even more so as regards government bonds – every time a bond is moved, the issuer CSD would have to be notified)"[354]. Nonetheless, BrokerTec also indicates that some large customers would however have collateral in both ICSDs, and could thus more easily use both products in parallel, and hence switch also on a daily basis. The results of the market investigation indeed confirm that there appear to be some banks that are active on both.[355] [BUSINESS SECRETS][356]

(449) The Commission also acknowledges, that market participants, when asked what they would do when they could not obtain an appropriate rate on DBAG's GC pooling, answers were inconclusive, and they mentioned essentially all types of repos (and even other investment possibilities) as possible alternatives.[357] The answer of one market participant is particularly illustrative in this regard, who explained that "*alternatives for lending cash would be specific reverse repo, GC vs narrow/wide baskets, outright govt bond/bill*".[358]

(450) In view of the above and all the evidence on file, the Commission considers that not all customers using GC Pooling could indeed easily on a day-to-day basis switch between the Notifying Parties' products, as this would require having similar collateral both in Clearstream and in Euroclear, which, as explained above, and submitted by the Notifying Parties, is inefficient at this point in time.

(451) Nonetheless, the Commission considers that it would be ignoring the competitive dynamics in this market if it were to limit its assessment on the possibility and feasibility of day-to-day switching only. In the Commission's view, it also has to take into account the fact that absent the Transaction, a GC pooling customer could move its collateral from Clearstream to Euroclear and start trading €GC Plus, or at least threaten to do so, which, [BUSINESS SECRETS] constrains DBAG. Therefore, the Commission also has to take account of the systemic-type of competition between the Notifying Parties to attract customers' ATS triparty business.

(452) With every customer that €GC Plus wins, this threat and constraint becomes more effective (in particular if it were a cash-provider, which, according to the Notifying Parties, €GC Plus lacks right now), and the advantage that the DBAG/Clearstream environment enjoys in this regard vis-à-vis the Euroclear/LSEG offer shrinks.

(453) In any event, as demonstrated in the next paragraphs, absent the Transaction, switching between the Notifying Parties' products will become increasingly simple going forward, which will further intensify competition between their products, as a result of cross-system settlement becoming cheaper and faster, as explained above with respect to non-triparty repos.

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354 Agreed minutes of a teleconference call with ICAP of 2 August 2016, [ID 3627].

355 See for example Société Générale's reply to questionnaire Q11 "Sell-side Customers and issuers", question 120, [ID 4200].

356 Response to the Statement of Objections II, paragraph 131 and figure 9.

357 Replies to questionnaire Q11 "Sell-side Customers and issuers", questions 110-111.1.

358 RBC Europe, Reply to questionnaire Q11 "Sell-side Customers and issuers", question 111.1, [ID 4191].

(454) To illustrate, the Commission refers again to DBAG internal email exchange mentioned above in Section 7.3.1.2.3 [BUSINESS SECRETS][359]

(455) This exchange demonstrates that even if the Notifying Parties' claims were correct that so far the competitive constraint exercised by €GC Plus on GC Pooling were limited, it would increase going forward and be eliminated as a result of the Transaction.

(456) As a result of this development, a considerable share of market participants expect competition to intensify between the Notifying Parties' ATS traded triparty products.[360] For example, one market participant explains that "*T2S offers settlement and payment harmonization which might lead to higher competition between EuroGC+ and General Collateral Pooling"*[361] while another confirms that *"T2S will increase efficiency and thus is expected to increase trading activity in both products. This is expected to increase competition and liquidity"*.[362]

(457) In view of the above, the Commission considers that, absent the Transaction, the Notifying Parties would compete more fiercely in this market going forward. Were the Transaction to proceed, however, this competition would be eliminated and Eurex' monopoly in ATS traded CCP cleared triparty repos would be restored.

7.3.2.2.4.Central banks' activities cannot be considered as replicating the constraint the Notifying Parties exert on each other

(458) In their responses to the Decision of opening the proceedings, as well as to the Statement of objections, the Notifying Parties reiterate [DISCUSSION OF RELATION BETWEEN MONETARY POLICY AND REPO MARKETS].

(459) In the Commission's view, it cannot be disputed that the market has shrunk. [BUSINESS SECRETS][363] [364] Nor can the Commission judge if the market size will recover. However, the size of the market has no decisive bearing on the question as to whether the Notifying Parties' products compete. If anything, one would expect competition to intensify in a shrinking market, an effect that would likely be eliminated by the Transaction.

(460) The Commission also would not consider it as appropriate to see central banks through quantitative easing programs as competitors to the Notifying Parties. First, respondents to the market investigation mentioned central bank refinancing operations as a possibility to obtain funding only anecdotally. Second, while the Commission cannot predict how long the central banks including the ECB will continue its current policies, it would not be correct to qualify these temporary operations as a structural constraint. Therefore, central banks cannot be seen as being actors on the same market as the triparty products traded and cleared on the Notifying Parties' platforms.[365]

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359 [BUSINESS SECRETS].

360 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 113.

361 Unicredit, reply to questionnaire Q11 "Sell-side Customers and issuers", question 113, [ID 6073].

362 Morgan Stanley, reply to questionnaire Q11 "Sell-side Customers and issuers", questions 113, [ID 4212].

363 Response to the SO, part II, paragraph 138.

364 Response to the SO, part II, paragraph 137.

365 Replies to questionnaires Q1 "Sell-side Customers" and Q11 "Sell-side Customers and issuers".

7.3.2.2.5. Entry is unlikely and in any event not a significant competitive constraint

(461) Generally speaking, the entry of a rival CCP into the repo clearing space, as discussed above in Section 7.3.1.2.4, seems unlikely and therefore not able to constrain the Notifying Parties.

(462) This is even more so as regards ATS traded and centrally cleared triparty repos, which also require, crucially, a CMS provider that jointly develops such a product with a clearing house. According to DBAG, [TIME TO DEVELOP €GC PLUS].[366], LSEG explain in an internal document, [THAT IT TOOK SEVERAL YEARS TO DEVELOP THE €GC+ CLEARED REPO PRODUCT].[367]

(463) Therefore, the entry of a new player, which the Commission in any event could not even theoretically identify in the course of its market investigation, appears for practical purposes excluded in the medium term.

(464) Finally, the absence of countervailing entry is also evidenced by the fact that a majority of respondents to the market investigation consider that trading and/or clearing fees for ATS traded non-triparty repos might increase as a result of the Transaction.[368]

7.3.2.2.6. Conclusion

(465) In view of the foregoing, the Commission concludes that, considering the high market shares of the Notifying Parties, the elimination of DBAG's sole competitor, the likely intensification of competition that is expected to occur absent the Transaction and the lack of likely entry, the Transaction would lead to a significant impediment of effective competition through the strengthening of a dominant position on the market for ATS traded and CCP cleared triparty repos in the EEA.

8. POST-TRADE SERVICES (SETTLEMENT, CUSTODY, COLLATERAL MANAGMENT)

8.1. Introduction to settlement, custody and collateral management

(466) Settlement is the final stage of the trading life cycle, involving the actual discharge of the obligations resulting from the trade, i.e. the payment of monies and the delivery of securities.

(467) Settlement service can be provided by the relevant national or international Central Securities Depositaries ("CSDs" or "ICSDs", respectively), which have issued the security to be settled and is then referred to as primary settlement.

(468) In some cases, a settlement service is provided by intermediaries (which can be (I)CSDs or, in most cases, custodians), in which case it is referred to as secondary settlement.

(469) Settlement encompasses either (i) internalised transactions, where a transaction has taken place between two customers of the same service provider, making it possible for the transaction to be carried out in the books of that service provider, without any corresponding entries being made at CSD level; or (ii) mirror transactions by which

366 [BUSINESS SECRETS].
367 [BUSINESS SECRETS].
368 Replies to questionnaire Q1 "Sell-side Customers", question 190.2.

the service providers of each counterparty make the account entries in their customers' accounts necessary to reflect the result of the clearing and settlement carried out by the issuer CSD. Providers of settlement services will choose direct or indirect access to the issuer CSD depending on their requirements as a user, such as the volumes to be processed or the level of service they offer to their customers.

(470) Settlement services are often provided together with custody services, which refer to safe-keeping services such as the maintenance of securities accounts on behalf of investors and the processing of corporate actions like dividend and interest payments or voting rights in the case of shares.

(471) A new equity – when listed and admitted to trading – must be deposited with a CSD: the issuer CSD, where the security is physically or electronically deposited at the top tier level of accounts. Until recently, this function has usually been undertaken by the national CSD in the country under the laws of which a security was issued. This is changing under the recently adopted Central Securities Depositories Regulation ("CSDR" or "CSD Regulation")[369], which grants issuers the right to use any authorised EEA CSD, to issue their security.

(472) Similarly to settlement services, custody services can be provided to investors by the CSD where the security was issued (final custody) or by service providers other than the issuer CSD, if these maintain (directly or via other service providers) an account with the issuer CSD (intermediate custody services).

(473) Collateral management consists in managing and optimising the use of securities as collateral in different types of transactions (for example repo transactions, securities lending, derivative transactions). Margin requirements (or collateral) are normally composed of: (i) additional (initial) margin intended to provide collateral to open a position calculated by reference to the risk associated with the transaction/contract in question; and (ii) maintenance (variation) margin which represents the amount needed to collateralise the open positions at the end of the day, reflecting the changes in market prices. Where a transaction is centrally cleared by a CCP, margins are put in the margin pool of the CCP. When the transaction is bilateral, counterparty credit risk is managed between the parties through the negotiation of collateral payments. The counterparties are free to decide the amount of collateral, if any, which must be posted. The need for collateral management is triggered by the requirement to assess the value and potentially substitute the collateral on an ongoing basis. This can be done in-house or by a third party, generally an (I)CSD or a custodian.

(474) The collateral management service ("CMS") provider also referred to as triparty agent in particular in triparty repos, ensures maintenance of the value, quality and performance of the collateral, which entails the substitution of securities if so needed. In relation to triparty services, the CMS provider generally holds the collateral in a single account (that contains securities of the buyer and seller) at an ICSD or a CSD.

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[369] Regulation (EU) No 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories and amending Directives 98/26/EC and 2014/65/EU and Regulation (EU) No 236/2012 (OJ L 257/1 of 28.08.2014).

8.2. Notifying Parties' activities

(475) DBAG provides settlement and custody services through Clearstream Banking Frankfurt (referred to as Clearstream Frankfurt or CBF), a CSD, and Clearstream Banking Luxembourg (referred to as Clearstream Luxembourg or CBL), an ICSD (together "Clearstream"). Clearstream provides CMS for different types of transactions including for its own triparty repo product GC Pooling through CBF and CBL.

(476) LSEG owns Monte Titoli (Italy-based CSD) which provides settlement and custody services, as well as CMS mostly in Italy, and globeSettle, a recently established CSD and ICSD based in Luxembourg [BUSINESS SECRETS].

(477) Monte Titoli has launched its proprietary platform X-COM, a CMS for triparty repos, at the end of 2015. For the other triparty repos that are traded and / or cleared on LSEG venues, i.e. Term £GC and €GC Plus, CMS is provided by a third party provider, Euroclear Group.

8.3. Market definition

8.3.1. Notifying Parties' views

8.3.1.1. Settlement and custody

(478) As regards the relevant product market, the Notifying Parties first submit that primary and secondary settlement services are separate markets, considering that there is neither demand-side nor supply-side substitutability for those services.

(479) The Notifying Parties submit that, under CSDR, a CSD performs three core functions: (i) the initial recording of securities in a book-entry system (notary service); (ii) providing and maintaining securities accounts at the top tier level (central maintenance service); and (iii) operating a securities settlement system (settlement service). Because these functions cannot be performed by a custodian, the Notifying Parties submit that there is no competition between custodians and CSDs in respect of these core services, including primary settlement (and final custody services). More specifically, the Notifying Parties consider that primary settlement is performed by the national CSD where the relevant securities reside and, as such, the settlement of a trade can be completely implemented by the CSD, contrary to secondary settlement.

(480) As regards a potential distinction between ICSDs and CSDs, the Notifying Parties consider that, while in principle ICSDs and CSDs can offer issuer-services for the same types of securities, in practice there are some limitations to the issuer-CSD services that ICSDs can offer for specific securities in practice, for example the provision of issuer-services for company-issued equities listed in Italy. Furthermore, as a result of historic commercial considerations, CSDs and ICSDs tend to specialise in certain instrument types, for example, ICSDs are the issuer-CSD for Eurobonds and thus predominantly offer final custody and primary settlement for Eurobonds,[370] while domestic CSDs cover domestically listed equities and debt instruments. The Notifying Parties nevertheless do not propose to distinguish between services provided by CSDs and by ICSDs.

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370 Eurobonds are international bonds denominated in a different currency from that of the country in which they are issued.

(481) In contrast to primary settlement, secondary settlement is provided by intermediaries[371] that hold securities with the CSD in their name but on behalf of customers. These providers can settle in-house transactions occurring between their customers without involving the CSD where the securities reside.

(482) Second, the Notifying Parties consider that a plausible distinction can be made between (i) settlement services; and (ii) custody services, and within the latter, a further plausible sub-segmentation between final custody, provided by the (I)CSD that has issued the respective security and intermediary custody, provided by either (I)CSDs or custodians other than the issuing CSD.

(483) Third, the Notifying Parties further submit that the lack of competition between CSDs of different countries (because generally securities issued under the laws of one country reside in the CSD of that country) implies that there are different markets for primary settlement services relating to securities issued in different Member States.

(484) Fourth, the Notifying Parties do not propose to define separate markets on the basis of the type of security or transaction (for example equities, bonds, repos, etc.).

(485) As regards the geographic market definition, the Notifying Parties propose different scopes depending on the market, but consider that the Transaction does not raise competition concerns under any of the possible alternative geographic market definitions.

(486) First, as regards primary settlement, the Notifying Parties consider the relevant geographic market to be national. Despite the fact that the implementation of TARGET2-Securities ("T2S")[372] and CSDR[373] is likely to lead to increased cross-border competition among CSDs, the geographic market is currently, and will remain for the foreseeable future national and cross-border competition for issuers' business will not immediately flourish.

(487) Second, as regards secondary settlement, the Notifying Parties consider that the market is at least EEA-wide since these services can be provided by intermediaries anywhere in the world.

(488) Third, as regards intermediate custody, the Notifying Parties have submitted that the market for these services should be global in scope as this is consistent with the broad basis on which custodians can offer their services.

(489) Fourth, as regards final custody services, the Notifying Parties consider that there is to date very limited competition between different national CSDs for these services. Domestic securities tend to be issued (and therefore their physical/electronic book-entry records lie) with the domestic CSD under the laws of the country in which they were issued.

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371 Domestic CSDs, and mostly ICSDs and custodians.

372 See above Sections 7.3.1.2.3. and 7.3.2.2.3. T2S (TARGET 2-Securities) is a new European securities settlement engine which aims to offer centralised delivery-versus-payment (DvP) settlement in central bank funds across all euro-denominated securities markets.

373 CSDR grants issuers in particular the right to use any authorised EEA CSD to issue their security.

8.3.1.2. Collateral management

(490) The Notifying Parties consider that the relevant market should comprise the provision of CMS for different collateral takers (i.e. central banks, CCPs, trading counterparties, etc.) and different types of transactions (i.e. repos, bonds, equities, derivatives margins, etc.).

(491) While from a demand-side perspective, CMS may be specific and not be interchangeable with services required for different infrastructures (a CCP for example), the Notifying Parties submit that, to the extent that these services differ at the margins, CMS providers have the necessary supply-side flexibility to offer collateral management services irrespective of the collateral taker or the type of transaction. Triparty CMS agents tend to multiply the type of exposures that their clients can collateralise through the same triparty CMS and custodian (i.e., pledges with central banks, triparty repos, securities lending, derivatives margining, secured loans, secured certificates, etc.) in order to consolidate assets of the participants and to offer as many possible alternatives for trading, funding, securities financing and margining without a need to transfer the underlying assets to another custodian.

(492) The Notifying Parties submit that the geographic scope of the relevant market is global excluding the US, in view of the fact that market participants increasingly rely on CMS providers outside the EEA. Nonetheless, the Notifying Parties base their competitive analysis on an EEA wide market, submitting that defining either an EEA wide or global market, excluding the US, does not make a difference to the competitive assessment.

8.3.2. The Commission's assessment

8.3.2.1. Settlement and custody

8.3.2.1.1. Investor-facing services do not form part of the same market as issuer-facing services

(493) Issuer-facing services are provided by CSDs[374] and include issuance and notary services, which are services for issuers of securities. A new equity – when listed and admitted to trading – must be deposited with a CSD: the "issuer CSD", where the security is physically or electronically deposited for safekeeping. Until recently, this function could legally only be undertaken by the national CSD in the country under the laws of which a security was issued (listed). This is changing under the recently adopted CSD Regulation, which grants issuers the right to use any authorised EEA CSD, to issue their security.

(494) Other issuer-facing services include services such as: (a) services related to shareholders' registers; (b) supporting the processing of corporate actions, including tax, general meetings and information services; (c) new issue services, including allocation and management of ISIN codes and similar codes; (d) instruction routing and processing, fee collection and processing and related reporting.

(495) Investor-facing services include the settlement, and the provision and maintenance of securities accounts, including custody. Such investor-facing settlement and custody services can be provided by the issuer CSD (i.e. national CSDs for national securities

374 ICSDs in the case of Eurobonds. Eurobonds are international bonds denominated in a different currency from that of the country in which they are issued.

and ICSDs for Eurobonds), or by intermediaries (i.e. investor CSDs, mostly ICSDs, or custodians).

(496) In *Clearstream*,[375] the Commission considered that for customers that were intermediaries and were requiring access to the issuer CSD, indirect access is not a valid alternative, and thus distinguished between primary settlement and secondary settlement. The analysis was conducted from the point of view of intermediaries which needed access to the German CSD in order to be able to provide post-trading services in relation to German securities. Primary settlement and final custody were thus not considered substitutable with secondary settlement and intermediate custody.

(497) The Commission considered in *DBAG/NYSE Euronext* a potential distinction between primary settlement on one hand, and secondary settlement on the other hand.[376] The Commission acknowledged the existence of domestic rules in different Member States regulating services provided by national CSDs, and thus assessed the impact of the transaction on settlement services on the basis of separate markets for primary and secondary settlement. However, the Commission ultimately decided to leave the exact product market definition open since the assessment would not change under any definition.[377]

(498) The customers considered in the case at hand (contrary to *Clearstream*) are issuers on the one hand and investors on the other hand. As regards issuers, only CSDs (and ICSDs for Eurobonds) can provide custody services; the distinction primary settlement and final custody (direct access to the CSD) vs secondary settlement and intermediate custody (intermediated access to the CSD) thus does not relate to issuer-facing services. As regards investors, there is *prima facie* no reason to distinguish primary settlement and final custody from secondary settlement and intermediate custody, on the mere basis that settlement and custody services would be provided by a CSD through a direct access to the CSD or by intermediaries. Whether these services are substitutable from an investor perspective will be analysed below.

(499) Therefore, the Commission concludes that, for the purposes of this Decision, investor-facing services do not form part of the same product market as issuer-facing services. As regards issuer-facing services, the exact market definition and, in particular, the question of whether a distinction should be drawn between ICSDs for Eurobonds and CSDs can be left open for the purposes of this Decision as it does not affect the Commission's competitive assessment in relation to settlement and custody services.

8.3.2.1.2. **Issuer-facing services:** The geographic market in relation to issuer-facing services is likely to be national in scope, but the exact market definition can be left open

(500) The Commission found in *Clearstream* that securities issued in accordance with the law of a Member State are in practice kept in final custody with the respective CSD and that therefore there is practically no competition between different national CSDs for the deposit and final custody or safekeeping of securities.[378] The

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375 See Case COMP/38.096 – Clearstream, paragraph 137.

376 See Case COMP/M.6166 – DBAG / NYSE Euronext, paragraph 92.

377 See Case COMP/M.6166 – DBAG / NYSE Euronext, paragraph 94.

378 See Case COMP/38.096 – Clearstream, paragraph 197.

Commission followed the same reasoning in *DBAG/NYSE* Euronext but ultimately left the market definition open,[379] as the competitive assessment was considered to be the same regardless of the precise geographic definition of the relevant market. CSDR will facilitate cross-border issuance of securities and may lead to increased pan-European competition. However, the Commission agrees with the Notifying Parties that in the short term, the issuer-facing services will remain national in scope.

(501) In any event, the exact geographic market definition and, in particular, the question of whether the market for the provision of issuer-facing services is national in scope or broader can be left open for the purposes of this Decision as it does not affect the Commission's competitive assessment in relation to settlement and custody services.

8.3.2.1.3. **Investor-facing services:** Whether settlement and custody services form part of the same market can be left open

(502) In *Clearstream*,[380] the Commission indicated that post-trading transaction processing includes settlement but does not cover safekeeping or custody services. Nevertheless, it considered that custody is not entirely separate from settlement, as the latter only takes place in relation to those securities that are kept in custody.

(503) The market investigation shows that from the perspective of trading counterparties, settlement and custody are different services that cannot substitute for each other.[381] As analysed in *Clearstream*, custody services differ from settlement services: the need for the latter only arises where there is a securities transaction, whereas every owner of securities needs to have them physically or electronically kept in safe custody and managed or administered even in the absence of transactions. Despite the fact that custody service providers (in particular custodians) do not necessarily offer settlement themselves,[382] there is a certain degree of supply-side substitutability[383]. This is because custody services are provided on the securities received through settlement.

(504) In any event, the question of whether settlement and custody services constitute separate markets can be left open for the purposes of this Decision, as it does not affect the Commission's competitive assessment in relation to settlement and custody services.

8.3.2.1.4. **Investor-facing services:** International settlement and custody services do not form part of the same market as domestic services

(505) The Commission identified in previous cases related to custody services specifically the existence of different positioning and specialisations of custody service providers in the market (global custodians, custodians serving clients resident in specific countries, local custodians, etc.). The Commission considered on several occasions

379 See Case COMP/M.3511 – Wiener Börse / BSE / BCE / Keler / JV, and Case COMP/M.6166 – DBAG / NYSE Euronext, paragraph 134.

380 See Case COMP/38.096 – Clearstream, paragraph 137.

381 Replies to questionnaire Q1 "Sell-side Customers". Replies to questionnaire Q11 "Sell-side Customers and issuers". Agreed minutes of a teleconference call with BNY Mellon of 19 July 2016 [ID 735]. Agreed minutes of a meeting with Euroclear of 19 October 2016 [ID 5835]. Agreed minutes of a meeting with JP Morgan of 12 August 2016 [ID 3629].

382 Agreed minutes of a meeting with Euroclear of 19 October 2016, paragraph 19 [ID 5835].

383 Most providers of custody services also provide settlement services.

the following segments of intermediate custody services: (i) global custody and (ii) domestic (and sub-) custody services[384], but left the exact market definition open.

(506) In *Credit Agricole / Caisse d'Epargne / JV,*[385] the Commission looked into the possible existence of (i) a global market for global custody, (ii) an EEA-market for global custody, (iii) a market for custody services for clients resident in specific countries, and (iv) a national market for sub-custody (i.e. outsourcing of custody services with no direct link between the sub-custodian and the final customers).

(507) In *State Street Corporation/Deutsche Bank*,[386] the Commission considered a potential segmentation between (i) global custody and (ii) domestic (or sub-) custody services, where the former was defined as a service provided to investment entities which own or manage investments from a variety of international markets, and the latter would be those which are provided to institutions and/or individual clients which require only "domestic assistance".

(508) In *CDC/Banco Urquijo/JV*[387], the Commission considered (i) global custody services market, comprising services to investment institutions owning or managing securitised investments, (ii) domestic institutional custody services, comprising services destined to institutions which require only domestic services (asset managers, pension funds, broker dealers, etc.) and (iii) domestic retail custodian services, comprising custody of securities belonging to individual clients. The Commission analysed the latter two at national level but left the exact product and geographic market definition open.

(509) In the case at hand, the Notifying Parties are not as such custodians, but submit that they compete with custodians for settlement and custody services. Therefore, when analysing below the settlement and custody services, the Commission will assess whether custodians and (I)CSDs are part of the same market, in line with the Notifying Parties' submission. The results of the market investigation support the existence of different market segments.

(510) First, [SUMMARY OF DBAG INTERNAL DOCUMENTS DISTINGUISHING SEVERAL SUB-SEGMENTS OF THE MARKET].[388]

Figure 5: [SCREENSHOT FROM INTERNAL DOCUMENT ON COMPETITIVE LANDSCAPE]

(511) Second, the results of the market investigation indicate that the two ICSDs (Euroclear Bank and Clearstream Banking) and global custodians (in particular, Bank of New York Mellon ("BNYM" or "BNY Mellon") and JP Morgan) should be

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384 The Notifying Parties submit in their response to the Statement of Objections that these services were assessed in relation to asset management services in which they are not active. Nevertheless, the Commission considers the precedents cited above as indicative of the functioning of the markets for settlement and custody services, on which the Notifying Parties consider that they are in competition with custodians.

385 Case COMP/M.3781 – CREDIT AGRICOLE / CAISSE D'EPARGNE / JV, paragraph 20.

386 Case COMP/M.3027 – State Street Corporation / Deutsche Bank Global Securities, paragraph 10.

387 Case COMP/M.1979 – CDC / Banco Urquijo / JV, paragraphs 8-12.

388 DBAG's internal document, "[BUSINESS SECRETS] – Scenario Workshop", 2 December 2013, page 4, [ID 3420-48039]. DBAG's internal document, "Strategy Workshop – Update on Clearstream's Business Strategy (Supervisory Board of Deutsche Börse AG)", 20 November 2015, pages 7-8 [ID 3420-46202]

distinguished from CSDs and local custodians, because they provide similar level of services, can handle assets issued in a large number of countries and serve customers active in various countries. On the contrary, national CSDs mostly or only serve assets issued in their country, and thus do not provide the same range of services, in the same breadth of countries of issuance and do not serve the same type of customers as ICSDs and global custodians.

(512) As a consequence, large international customers with activities covering a large portfolio of assets generally use custodians or ICSDs, as explained by one market participant: "*Most of the market participants, including [X], are linked indirectly to CSDs through intermediaries (custodian banks or ICSDs, i.e. Euroclear or Clearstream). These intermediaries provide additional services compared to CSDs such as asset servicing, tax services, banking services (e.g. credit). ICSDs are a hybrid model as they provide similar services to those of CSDs and those of custodian banks*."[389] ICSDs also have a specific market positioning, as they hold the securities that custodians have on their books on behalf of other smaller custodians or customers. ICSDs thus act as service providers for smaller custodians.

(513) Some customers appear to mix the use of national CSDs for simple custody services (without the more sophisticated asset servicing offered by ICSDs or custodians) in countries where they have significant activities and use ICSDs or custodians for the rest of their activities: "*A direct link to CSDs is also possible and can make sense if the amount of business is significant. In such cases [X] can do asset servicing itself.*"[390] However, this possibility generally concerns customers which have sufficient business in the country considered and does not imply any substitutability between services provided by these different types of service providers. Switching from an ICSD or a large custodian to a CSD or local custodian might require customers to do themselves certain asset servicing previously outsourced to the custodian or ICSD In case these customers have activities in securities of various countries, it would require them to substitute one service provider (ICSD or custodian) with several national CSDs (or local custodians) which would not provide the same efficiency.

(514) Certain customers also distinguish between CSDs on the one hand, and custodians and ICSDs on the other hand because the former settle in central bank money and is thus less costly than settling in commercial bank money through custodians and ICSDs: "*cash settlement takes place in central bank money […] allowing us to optimize our group's liquidity and collateral. Settlement of repos taking place though custodians requires cash settlement to take place in commercial bank money subjecting us to funding risks and cost, usage of credit allocations of the custodians and possible collateral requirements to support the settlement volumes*."[391] This element adds to the difference in terms of services provided by ICSDs and CSDs.

(515) Therefore, the Commission concludes that, for the purposes of this Decision, ICSDs and global custodians, on the one hand, do not form part of the same product market as, on the other hand, national CSDs and other custodians for the provision of settlement and custody services.

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389 Agreed minutes of teleconference call with Goldman Sachs of 18 July 2016, paragraph 31, [ID 5428].

390 Agreed minutes of teleconference call with Goldman Sachs of 18 July 2016, paragraph 33, [ID 5428].

391 Intesa SanPaolo, reply to questionnaire Q1 "Sell-side Customers", question 182, [ID 2365].

8.3.2.1.5. **Investor-facing services:** Whether international settlement and custody services provided by ICSDs on the one hand and global custodians on the other hand form separate markets can be left open

(516) As regards a potential distinction between ICSDs and global custodians, certain customers consider that (I)CSDs provide more secure custody arrangements than custodians: *"Depository has larger oversight responsibilities for the assets held in comparison to the custodian.*"[392] According to the post-trade processing service provider Euroclear, custodians and (I)CSDs also tend to have different clients: *"The services of (I)CSDs are generally speaking rather standardised or "run of the mill", with an emphasis on automatic and straight-through processing, and simple reporting, whereas the offering of custodians is more tailor-made. As a consequence, clients of (I)CSDs tend to be sophisticated, large dealers or other large financial institutions. Custodians tend to offer additional services such as home-banking, investment advice or other services on the assets that they hold, which (I)CSDs do not.*"[393]

(517) In any event, the question of whether services provided by ICSDs and services provided by global custodians constitute separate markets can be left open for the purposes of this Decision, as it does not affect the Commission's competitive assessment in relation to settlement and custody services.

8.3.2.1.6. **Investor-facing services:** The market for international settlement and custody services for fixed income form a separate market

(518) The results of the market investigation provided indications that the markets for settlement and custody could be split by type of assets. From a demand-side perspective, settlement for fixed income transactions and custody for fixed income securities are not substitutable with settlement for equities transactions and custody of equities. In addition, the market structure for settlement and custody services appears to differ between fixed income (bonds and repos) and equities. ICSDs are particularly strong with respect to fixed income business, whereas CSDs and custodian banks specialise in settlement and custody of equity-related transactions.

(519) BNY Mellon explains that "*the two (I) CSDs are typically better connected to the fixed income desks of sell-side dealers due to their specialization in European fixed income securities and their connectivity to the European Central Bank.*"[394] Euroclear also explains that "*The entities providing post-clearing services differ across asset classes. Equities are mostly safekept and settled by national issuer CSDs and regional or global custodians.*" while "*Government bonds and corporate bonds are initially issued in national CSDs, but the most popular and liquid of these are typically also held and settled at the level of the two ICSDs where large clients pool their assets and post-trading activity, along with the Eurobonds for which EB and CBL act as issuer CSD(s). It is therefore the ICSDs that perform most of the safekeeping, asset servicing and other ancillary services for high-quality fixed income securities for large financial intermediaries, and also the settlement of*

392 Mediobanca, reply to questionnaire Q1 "Sell-side Customers", question 182, [ID 6006].
393 Agreed minutes of a meeting with Euroclear of 19 October 2016, paragraph 20, [ID 5835].
394 BNY Mellon, responses to additional questions received on 22 August 2016, question 4, [ID 3573].

derivative and repo transactions where such securities are required either as collateral or as margin."[395]

(520) By way of illustration, [BUSINESS SECRETS] of the repos and bonds transactions cleared on LCH Ltd are settled in Euroclear Bank [BUSINESS SECRETS] and Clearstream Banking [BUSINESS SECRETS]. This figure reaches [BUSINESS SECRETS] when considering clearing members common to LCH.Clearnet and Eurex (i.e. large customers). Likewise, around [BUSINESS SECRETS] of the bond and repo transactions cleared on Eurex by clearing members common to LCH.Clearnet and Eurex are settled in Euroclear Bank and Clearstream Banking (bonds: [BUSINESS SECRETS] and [BUSINESS SECRETS], repos: [BUSINESS SECRETS] and [BUSINESS SECRETS]). This figure reaches [BUSINESS SECRETS] and [BUSINESS SECRETS] when considering clearing members common to LCH.Clearnet and Eurex.[396] On the contrary, as regards equities, less than [BUSINESS SECRETS] of equities transactions cleared on LCH Ltd and [BUSINESS SECRETS] of equities transactions cleared on Eurex are settled in Euroclear Bank and Clearstream Banking; the [BUSINESS SECRETS] majority being thus settled in national CSDs.[397]

(521) This distinction is also identified in the Notifying Parties' internal documents. One internal document of DBAG states for example that "[BUSINESS SECRETS]".[398]

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395 Euroclear, submission "CRA Report" dated 20 June 2016, page 14, [ID 2293].
The Notifying Parties indicate in their reply to the Statement of Objections (Part II), that only around half of the respondents to the questionnaire Q1 "Sell-side Customers", question 20 (on settlement, custody and CMS) and question 180 (on CMS) provided indications that providers of custody, settlement or collateral management services have certain specialisation by asset classes, which cannot be considered as providing a conclusive outcome, the Commission itself having considered in another instance where the response outcome was split in half that it cannot be considered a conclusive outcome (referring to paragraph 695 of the Statement of Objections). The Notifying Parties also consider that respondents to questionnaire Q11 "Sell-side Customers", question 120 did not make an appreciable differentiation by asset classes, despite the Commission's specific request to do so, if relevant, and refer to general statements of competitors which indicate that they can provide settlement and custody services for all types of asset classes.
First, the Commission considers on the contrary that the fact that a significant portion of customers spontaneously mention this specialisation in response to relatively open questions, is already a strong indication that different providers specialise by asset classes. Indeed, these responses reflect the Commission's assessment that the different types of providers are not necessarily excluded from given segments, but may only have limited positions in these segments.
As regards the conclusiveness of mixed responses, the Commission actually considered in the instance the Notifying Parties refer to that the question was not conclusive on its own but considering all evidence together led the Commission to conclude that cleared and uncleared repos were not part of the same market. Similarly here, these replies to questionnaire Q1 "Sell-side Customers", question 20 (on settlement, custody and CMS) and question 180 (on CMS) were corroborated by responses from other market participants (such as Euroclear, BNY Mellon), settlement figures from the Notifying Parties' clearing houses and the Notifying Parties' internal documents.
Second, while the Notifying Parties underline that the latter question (question 180) only refers to CMS and not to settlement and custody, market position in settlement, custody or CMS has a bearing on the position in the other services, because a number of customers buy them together.

396 The ratio is much smaller for repos cleared on Eurex and settled in Euroclear as Eurex is particularly strong in triparty repos for which the collateral management service provider has to be Clearstream.

397 Notifying Parties' response to RFI 30 of 5 December 2016 received on 12 December 2016, Annexes I and II.

398 DBAG's internal document, response to RFI 21, Question 40 "Update on Clearstream core strategic initiatives" of 21 March 2014, page 15 [LL_Gen_115].

(522) Finally, the Notifying Parties themselves in the Form CO indicate: "*Over time, the ICSDs have built up a strong franchise on fixed income assets due to their primary role as "issuer-CSDs" for Eurobonds and the progressive extension of their networks of sub-custodians towards other European and non-European domestic CSDs for fixed income securities. Both, Euroclear and CBL, the two ICSDs, have fixed income securities as the vast majority of their assets under custody (i.e. equities account for less than 10% of assets under custody at CBL, the tri-party CMS agent.) By contrast, the two global custodians, JPM and BNYM, have developed superior asset servicing capabilities and larger networks of sub-depositories for equities.*"

(523) Therefore, the Commission concludes that for the purposes of this Decision, and similarly to the other levels of the value chain, a distinction should be drawn between settlement and custody services related to fixed income and settlement and custody services related to equities.

8.3.2.1.7. **Investor-facing services:** The question of whether settlement for cleared fixed income transactions and settlement for uncleared fixed income transactions are separate markets can be left open

(524) As regards a potential distinction between cleared transactions and uncleared transactions, there appears to be limitations for custodians to provide settlement and thus custody services on the same terms as (I)CSDs. This is because settlement and custody service providers used by CCPs, including the Notifying Parties' CCPs, are CSDs or ICSDs. According to Euroclear, there are three main reasons for this: "*(i) For risk and asset-protection-related reasons, the CCP will want to hold securities through an (I)CSD and not through a custodian which is usually a higher-risk entity; (ii) For reasons of risk and asset protection, under Art 47.3 EMIR the CCP must use a securities settlement system (which is basically an (I)CSD) for margining purposes, if an (I)CSD is available. If it is not, they must use another low-risk option as described in EMIR; (iii) Even in the absence of the above considerations, we understand that commercially it might be difficult for a CCP to require its members to use a particular custodian. It would be perceived as favouring one specific custodian over (I)CSDs which primary role is to hold securities and which are thus perceived as more natural or legitimate and therefore 'neutral' entities for providing custody service*."[399] This therefore limits the ability of custodians to compete for settlement and custody services related to cleared transactions. One global custodian also explains that they generally do not provide settlement services in relation to cleared transactions.[400] The fact that custodians only settle uncleared transactions is confirmed by the Notifying Parties in their response to the Statement of Objections (Part II, paragraph 261). This means that there is at best one-way supply-side substitutability (from cleared to uncleared), thus custodians would not be able to constrain the merged entity for services related to cleared transactions.

(525) The Notifying Parties submit that the Statement of Objections is based on an unduly narrow market definition which ignores the fact that settlement and custody services can be provided on the basis of feeds of either cleared or uncleared trades, as well as on the basis of feeds from repos and bonds but also equity transactions, and that in this context, the input from LCH.Clearnet to Euroclear Bank's services is modest.

399 Agreed minutes of a meeting with Euroclear of 19 October 2016, [ID 5853].

400 Agreed minutes of a meeting with JP Morgan of 12 August 2016.[ID 3629].

They also consider that pricing is typically the same for both sources of transaction flow, and that uncleared transaction feeds are not less attractive for ICSDs than cleared transactions.

(526) The Notifying Parties however ignore the fact that settlement and custody services for cleared transactions are not substitutable with services for uncleared transactions from a demand-perspective. Likewise, for bonds and repos transactions as opposed to equity transactions. From a supply-side perspective, the fact that custodians do not provide services for cleared transactions, that ICSDs are the main service providers for fixed income transaction settlement while custodians are the main players in equity settlement transactions shows that it is not possible for a service provider to easily switch and expand from one segment to the other. According to the Commission guidelines on market definition, the different segments of a product can be grouped together, provided that most of the suppliers are able to offer and sell the various products immediately and without significant increases of costs. Supply-side substitutability should not entail any significant investments, strategic decisions or time delays, which would be the case for custodians to deal with cleared transactions and for CSDs to expand into fixed income transactions.[401] This is among others due to strong network effects, which make that settling a given type of asset class in the place where most other customers (including CCPs for cleared transactions) more efficient as is explained in detail in Section 8.4.4.2.1.

(527) In any event, the question of whether settlement and custody services related to cleared transactions and settlement and custody services related to uncleared transactions constitute separate markets can be left open for the purposes of this Decision as it does not affect the Commission's competitive assessment in relation to settlement and custody services.

8.3.2.1.8. **Investor-facing services**: Geographic market definition

(528) In *DBAG/NYSE Euronext*, the Commission left open the exact geographic market definition in relation to (secondary) settlement as it did not have an impact on the competitive assessment.[402]

(529) Global custodians and ICSDs are able to serve international customers in relation to a large variety of assets. For this purposes, they need to have the capabilities to serve securities issued in the various EEA countries, and thus to know and apply the specificities of national laws.[403]

(530) Therefore, the Commission concludes, for the purposes of this Decision, that ICSDs and global custodians compete for servicing European securities at least at EEA level.

8.3.2.1.9. Conclusion on investor-facing services

(531) In view of the foregoing, for the purposes of this Decision, the Commission considers that the relevant market in relation to settlement and custody services for investors is the market for international settlement and custody services provided by

401 Commission guidelines on market definition, paragraphs 21-23.

402 See Case COMP/M.6166 – DBAG / NYSE Euronext, paragraph 97.

403 Agreed minutes of a meeting with Euroclear of 19 October 2016, [ID 5835].

ICSDs and global custodians in relation to EEA fixed income securities at least at EEA-level. .

(532) The question of whether a distinction should be drawn between services provided by global custodians and services provided by ICSDs can be left open for the purposes of this Decision, as it does not affect the Commission's competitive assessment in relation to settlement and custody services. In any event, for completeness, these differences will be taken into account in the competitive assessment.

8.3.2.1.10. Conclusion on issuer-facing services

(533) For completeness, the Commission considers that issuer-facing services provided by CSDs and issuer-facing services provided ICSDs are likely to constitute separate markets, this question can be left open for the purposes of this Decision, as it does not affect the Commission's competitive assessment in relation to settlement and custody services.

8.3.2.2. Collateral management

(534) In its previous decision on *DBAG/NYSE Euronext*,[404] the Commission considered that collateral management services are provided independently of other post-trading services, and should therefore be regarded as a separate market. The Commission further contemplated whether collateral management services or CMS should be distinguished according to the specific infrastructure for which collateral needs to be provided, i.e. each CCP (that is to say each collateral pool). While CMS depend on the provision of specific transaction feeds, this was considered not to be decisive for the definition of the relevant market and accordingly, the precise market definition was left open.[405] As regards the geographic scope of the market, the Commission contemplated both an EEA wide as well as a global market, but left the market definition open.

(535) It appears from the results of the market investigation that the ICSDs are particularly strong with respect to fixed income business, whereas custodian banks specialise in equities-related collateral management.[406] One customer explains for example that "*The main CMS providers in the fixed-income (corporate and sovereign bonds) field are Euroclear and Clearstream. There is strong competition between those two providers. They have historically been the "home" for fixed income product triparty business, and others triparty providers have not made much inroads to date.*", while "*The main collateral management services providers in the equities field are BNY Mellon and JP Morgan, whereas Clearstream only has a small equity activity. The reason for their strong position as regards equities lies in their superior capabilities in this regard as compared to others.*"[407] In addition, JP Morgan and BNY Mellon are active to a certain extent in collateral management for repos for example, but only for uncleared transactions.[408]

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404 Case COMP/M.6166 – DBAG / NYSE Euronext, paragraph 201.

405 Case COMP/M.6166 – DBAG / NYSE Euronext, paragraph 207.

406 Replies to questionnaire Q1 "Sell-side Customers", questions 20 and 180. Replies to questionnaire Q11 "Sell-side Customers and issuers", question 122.

407 Agreed minutes of teleconference call with Barclays of 10 August 2016, paragraphs 12 and 14, [ID 3343].

408 Agreed minutes of teleconference call with JP Morgan of 12 August 2016, paragraph 12, [ID 3629].

(536) BNY Mellon and Euroclear explain that custodian banks could not provide CMS services with respect to cleared transactions, indicating that regulation (Article 47.3 of EMIR[409]) would require, or at least favour, CCPs to hold collateral in CSDs.[410] Article 47.3 of EMIR provides that it is for the CCP to decide where collateral it requests should be held. It also provides that collateral should be held in (I)CSDs or equivalent highly secured arrangements. As CCPs would likely favour arrangements considered the most secure, i.e. ICSDs or CSDs, Euroclear and Clearstream are best placed to provide collateral management for securities used in cleared transactions (derivatives, repos, etc.).[411] This was also mentioned by the Notifying Parties in the Form CO which indicate that "*all tri-party CMS agents offer a comprehensive portfolio of services. However, there are two exceptions to this rule: (a) CCP Margining in Europe due to EMIR requirements must be done through a SSS/CSD, therefore European CCPs do not accept margin collateral through BNYM and JPM tri-party CMS services, but exclusively through (I)CSDs. (b) In the Eurozone and due to ECB-requirements, the ECB and all related Eurozone National Central Banks only accept to receive EUR collateral through SSS in the Eurozone. BNYM and JPM are therefore not eligible as collateral depository. National Central Banks only use tri-party agents which are at the same time SSSs, such as Euroclear, Clearstream, Monte Titoli, Iberclear.*"[412]

(537) The distinction between collateral management for cleared transactions vs uncleared transactions is also evidenced by the fact that certain large customers (such as Natixis, Commerzbank or Bank of America Merrill Lynch) indicate managing their collateral in-house in case of uncleared transactions contrary to cleared transactions, in particular for repo transactions.[413]

(538) Similarly to settlement and custody services, ICSDs and global custodians appear to serve different categories of clients than CSDs and local custodians in relation to collateral management.

(539) Competition exists between CMS providers in order to attract customers.

(540) Therefore, the Commission considers that, for the purposes of this Decision, a separate market for CMS should be considered. The question of whether CMS are specific to given financial instruments and the question of whether in relation to some instruments such as derivatives CMS are specific to the connected infrastructure, can be left open for the purposes of this Decision, as it does not affect the Commission's assessment in relation to collateral management.

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409 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.

410 Agreed minutes of a teleconference call with BNY Mellon of 19 July 2016 [ID 735]. Agreed minutes of a meeting with Euroclear of 19 October 2016, [ID 5835].

411 BNY Mellon documentation on EMIR 47.3; Agreed minutes of teleconference call with BNY Mellon of 19 July 2016, paragraphs 13 and 27, [ID 3725].

412 Form CO, paragraph 2702.

413 Replies to questionnaire Q1 "Sell-side Customers", questions 171.2 and 171.3.

8.3.2.3. Geographic market definition

(541) As for the geographic scope of the market, respondents to the market investigation generally indicated that they rely on CMS providers with activities in the EEA.[414] In addition, their ability to be competitive is also based on the efficiencies they provide to customers. More specifically, it is more efficient for customers to trade with counterparties using the same service provider in order to avoid moving securities from a service provider to another, which means that they cannot easily switch from a CMS provider active in the EEA to a CMS provider which would be active in other world regions. Transactions can indeed be settled quickly and at lower cost if a sufficient number of customers use the same service provider.

(542) Therefore, the Commission concludes, for the purposes of this Decision, that CMS providers compete at EEA level.

8.3.2.4. Conclusion on relevant market

(543) In view of the foregoing, the Commission considers that, for the purposes of this Decision, the relevant market in relation to collateral management is the EEA market for CMS. The question of whether the market for CMS should be further segmented on the basis of a potential distinction between international providers (ICSDs and global custodians) vs domestic providers (CSDs and local custodians), a potential distinction between collateral management services for cleared transactions vs collateral management services for uncleared transactions, and a potential distinction between collateral management of fixed income vs collateral management of equities can be left open for the purposes of this Decision, as it does not affect the Commission's competitive assessment in relation to CMS.

8.4. Competitive assessment

(544) In this section, the Commission will only assess the impact of the Transaction on (i) international settlement and custody for fixed income provided by ICSDs and global custodians, and (ii) collateral management, because these are the only post-trade services, for which it concludes that the Transaction would lead to a significant impediment to effective competition.

8.4.1. Foreclosure of post-trade service providers, and in particular Clearstream's closest competitor Euroclear

(545) In the Statement of Objections, the Commission preliminarily identified two competition issues arising from the vertical link between DBAG's activities (Eurex) and LSEG's activities (LCH.Clearnet in particular) in clearing of bonds and clearing of ATS traded and CCP cleared non triparty and triparty repos and two downstream markets where DBAG's Clearstream is active. On the one hand, concerns were raised in relation to international settlement and custody services for fixed income products, and on the other hand, in relation to collateral management activities.

(546) Euroclear, which is DBAG's main competitor in the area of settlement, custody and collateral management, has raised concerns that the Transaction may lead to the merged entity foreclosing it from the market.

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414 Replies to questionnaire Q1 "Sell-side Customers", question 129. Replies to questionnaire Q11 "Sell-side Customers and issuers", question 116.

(547) Following the opening of the procedure, two meetings between Euroclear and the Commission took place in order for the Commission to refine its understanding of Euroclear's concern, which is summarised in the following paragraphs.

(548) The Commission has analysed the complaint of Euroclear, and considers that the Transaction would ultimately significantly weaken it as a significant competitive force closely competing with Clearstream, specifically in relation to international settlement and custody for EEA fixed income instruments, and as a consequence, in the market for collateral management in the EEA. As analysed in Sections 6.3 and 7.3, the merged entity would be able to exercise a significant market power on the upstream markets for clearing of bonds, ATS traded and CCP cleared triparty repos and ATS traded and CCP cleared non-triparty repos. As a result, together with the weakening of Euroclear on these markets, and the absence of other credible competitors able to exercise an effective competitive constraint on the merged entity, the Commission considers that the Transaction would lead to a significant impediment to effective competition on the market for international services for settlement and custody in relation to fixed income and on the market for collateral management to the detriment of customers. As set out below, the Commission considers that such harm would manifest itself through degraded service efficiency, a reduction in the quality of services and cost increases in particular in relation to international services for settlement and custody in relation to fixed income instruments, as well as collateral management services, to the detriment of customers.

8.4.2. *Euroclear's concern*

(549) Euroclear claims that it is one of the two (principal) ICSDs in Europe, the other being Clearstream.[415] Euroclear provides services that can be broadly categorised as follows: settlement, custody/safekeeping (asset protection) and CMS.

(550) Euroclear submits that Euroclear and Clearstream are geared towards large, international dealer banks, who wish to have one provider that keeps all or most of their (fixed income) securities. They are both able to service securities from various countries, contrary to national CSDs. Smaller companies (focused on national markets) on the contrary tend to use the national CSD for their national activities and an agent or custodians in case they trade securities of other countries.

(551) In Euroclear's view, one of the key differences between them is that Clearstream is vertically integrated, i.e. also offers trading and clearing services, whereas Euroclear is not. Clearstream's vertical integration entails that customers trading on its platforms are (with only limited exceptions) obliged to use Clearstream for settlement.

(552) Specifically, Euroclear is concerned that the combination of DBAG's Eurex and Clearstream with LSEG's LCH.Clearnet would provide ability and incentives for the merged entity to divert to Clearstream trade flows cleared by LCH.Clearnet (primarily repo transactions) and currently settled by Euroclear after the merger. This diversion of trade feeds would lead to increased costs for Euroclear's customers due in particular to higher settlement costs. In addition, Euroclear claims that LCH.Clearnet will have the ability and incentive to require customers to put

415 [BUSINESS SECRETS].

collateral currently deposited at Euroclear in Clearstream. Euroclear alleges that in addition to raising customers' costs and Euroclear's costs, such a foreclosure strategy might lead to a "tipping" of the market in DBAG's favour even if only a partial foreclosure strategy were applied due to network effects and economies of consolidation on the client side.

(553) Following the integration of LCH.Clearnet into a combined group, Euroclear expects that the Notifying Parties would have the ability and incentive to divert the transaction feeds that Euroclear currently receives from LCH.Clearnet to Clearstream in respect of settlement of CCP-cleared repo and equity trades. The impact would be more particularly significant in the repo market where Eurex and LCH.Clearnet are the only CCPs and because repo transactions are settlement-intensive. Similarly, LCH.Clearnet would require margin, in particular for OTC interest rate swaps and listed derivatives, to be posted in Clearstream.

(554) For customers having their securities in Euroclear, a diversion of transaction feeds would increase the instances in which transactions entail external or cross-system settlement (i.e. where the two parties to a trade have not appointed the same settlement and custody service provider and the traded security has to "cross" between two different systems, see detailed description in Section 8.4.4.2.1.) which is by definition more costly. This in turn would make them move their securities to Clearstream, and most likely all their securities as customers tend to single-home or at least consolidate most of their securities with one service provider. Due to network effects (i.e. lower cost to transact with customers having the same settlement, custody and collateral management service provider), other customers would likely follow.

(555) As a result, Euroclear considers that it would be a much weakened competitive force and that it could not continue to offer the same price and services to its customers as it does today.

(556) This is first because according to Euroclear, the Transaction would lead to increased costs for customers. Clients would experience reduced settlement efficiency, as cross-system settlement is more costly than internal settlement and does not occur real-time. Euroclear indicates that it currently charges € 0.50 on average per internal instruction and € 1.5 on average for cross-system instruction between Euroclear Bank and Clearstream Banking, which reflects the cost difference on the side of the ICSD. Cross-system settlement also leads to a lower rate of instructions fulfilled on contractual settlement date (94% between Euroclear's and Clearstream's ICSDs as opposed to 99% for internal settlement) and a higher rate of failed settlement (8-10% as opposed to 3%) which leads for customers to an opportunity cost of not using the asset in other activities and to late settlement penalties imposed in the context of CSD Regulation. Cross-system instructions are only sent for settlement if Euroclear Bank client has sufficient cash or credit. This is in contrast to internal instructions which are executed in real time. There is an incremental cost to the client to secure this cash or intra-day credit: as the liquid assets need to be mobilised and reserved, the client has an opportunity cost of not being able to use these assets elsewhere (as collateral or in the securities lending program).

(557) Second, Euroclear's decreased revenues would have to sustain high fixed costs common to the industry.

(558) Third, Euroclear submits that it would face an increased cost due to the need to expand its credit line to accommodate the increase in cross-system settlement volumes.

(559) Ultimately, this would reduce the competitive constraint on Clearstream which then could increase prices for the customers it has won over.

(560) In Euroclear's view, the open access obligations of the CSDR and T2S project do not solve this concern. First, there is no legal requirement for CCPs to offer their customers a choice between different CSDs in which to deposit margins transferred to the CCP. Second, the CSDR provides a conditional right of access to a transaction feed, and it is by no means certain if a CCP unwilling to grant access could be forced to do so, and if so, how quickly. In addition, at the moment of submission, the exact conditions to refuse access were not yet defined, as the RTSs were not adopted yet.[416] As regards T2S, its scope will not cover certain transactions (i.e. only eligible euro-denominated securities that can be settled in central bank money). According to Euroclear, T2S will not be fully operational in the near future, the full benefits of T2S not being expected until after 2018.

8.4.3. Notifying Parties' views

(561) According to the Notifying Parties, the merged entity will not have the ability to foreclose Euroclear from the settlement, custody and collateral management markets.

(562) The Notifying Parties first submit that Euroclear is not solely dependent on trade feeds from LCH.Clearnet in order to provide settlement and custody services, and that this is thus impossible to argue that Euroclear would be foreclosed from access to an indispensable input. Second, for assets for which Euroclear is the issuer CSD, there could be no foreclosure in any event, since Euroclear is the primary settlement location for such securities. Third, equity, bond, repos and derivatives trades cleared by rival CCPs and / or OTC trades will continue to provide significant sources of transaction feeds to Euroclear.

(563) The Notifying Parties further submit that the merged entity will not have the ability to foreclose Euroclear from the collateral management market due to the relatively small amount of collateral posted to the Notifying Parties' CCPs.

(564) In relation to both custody and collateral management, the Notifying Parties also submit in their response to the Decision opening the proceedings that customers generally are "multi-homing" (i.e. maintain securities both in Clearstream and Euroclear) and have substantial accounts both at Euroclear and Clearstream for sound risk management, asset diversification, price comparison and to allow for a better position in fee negotiations.

(565) According to the Notifying Parties, the merged entity would not have the incentive to foreclose Euroclear either. First, the Notifying Parties consider that trading and clearing volume would divert to third party trading venues if customers were forced

[416] The Commission adopted the RTS on authorisation, supervisory and operational requirements for central securities depositories on 11 November 2016 specifying the conditions to refuse access in Article 89 therein. See Commission Delegated Regulation (EU) 2017/392 of 11 November 2016 supplementing Regulation (EU) No 909/2014 of the European Parliament and of the Council with regard to regulatory technical standards on authorisation, supervisory and operational requirements for central securities depositories (OJ L 65, 10.3.2017, p. 48–115).

to settle at Clearstream. Second, the absence of an incentive for the merged entity to foreclose Euroclear is also demonstrated by the fact that DBAG allows settlement in Euroclear for certain trades that are cleared in Eurex (namely Irish Stock Exchange's trade flows cleared at Eurex, and certain trades cleared at Eurex Bonds and Eurex Repos for which the Notifying Parties however submitted in the response to the Decision opening the proceedings that the exact split across the different CSDs was not available). Third, LCH.Clearnet would harm its commercial reputation by not complying with its open access policy and expose itself to retaliation from customers in all areas of LSEG's activities.

(566) Moreover, the Notifying Parties submit that a foreclosure strategy would be prevented by the open access regulations in the CSDR.

(567) Finally, the Notifying Parties submit that there would be no appreciable impact on competition even in the event of a foreclosure strategy. First, they submit that fees for final custody, which would be unaffected by a foreclosure, account for the largest part of Euroclear's revenues. Similarly and second, the merged entity could only try to replace Euroclear as secondary settlement location, since the primary settlement location is not determined by the trading venue or the clearing house but by the issuer of each instrument. Third, Euroclear accounts for the bulk of equity trades originating from LSEG trading/clearing venues which are settled in a third party CSD; a perfect foreclosure strategy would merely replace one monopolist with another or increase bundle to bundle competition (EuroCCP and SIX together with Euroclear on the one hand, LSE, Eurex and LCH, together with Clearstream on the other hand). Fourth, while the Notifying Parties recognise the existence of network effects and economies of scale, they consider that Euroclear will retain a significant volume of assets under custody and very substantial trade feeds and that a marginal shift of settlement and custody activity is unlikely to make Euroclear exit the market, as Clearstream has always been smaller than Euroclear and has remained on the market.

8.4.4. *Commission's assessment*

(568) The Commission's analysis in this section is structured as follows.

- Section 8.4.4.1 considers the analytical framework applicable to vertical relationships.
- Section 8.4.4.2.1 explains that the merged entity would have the ability to divert cleared fixed income transaction feeds to Clearstream, because i) cleared repo transaction feeds are important inputs for international settlement and custody services in relation to fixed income, ii) the merged entity would have the ability to divert cleared fixed income settlement feeds to Clearstream, and to introduce cross-system settlement for settlement taking place at competitors, which is more costly and less efficient for customers than internal settlement.
- Section 8.4.4.2.2 explains that the merged entity would have the incentive to foreclose access to important inputs for settlement and custody services for EEA fixed income provided by ICSDs and global custodians, because diverting cleared repo transaction feeds i) would degrade the service quality and cost level of competitors, ii) will increase its revenues downstream without harming its revenues upstream.

- Section 8.4.4.2.3 shows that the merger would impede effective competition in the markets for settlement and custody for fixed income provided by ICSDs and global custodians.
- Section 8.4.4.2.4 explains that neither T2S nor the CSDR would prevent the harm that would result from the Transaction.
- Section 8.4.4.3.1 explains that the merged entity would have the ability to foreclose access to important inputs for collateral management, because i) cleared repo transaction feeds are an important input for collateral management, ii) CCPs can determine where collateral/margin is to be deposited.
- Section 8.4.4.3.2 explains that the merged entity would have the incentive to foreclose access to important inputs for collateral management
- Section 8.4.4.3.3 shows that the merger would lead to a significant impediment to effective competition in the markets for collateral management

8.4.4.1. Applicable legal framework regarding vertical foreclosure

(569) The Commission's Guidelines on the assessment of non-horizontal mergers set out the framework of analysis in the context of vertical mergers: "*A merger is said to result in foreclosure where actual or potential rivals' access to supplies or markets is hampered or eliminated as a result of the merger, thereby reducing these companies' ability and/or incentive to compete.*" The Guidelines describe the potential negative effects of foreclosure on the process of competition: "*Such foreclosure may discourage entry or expansion of rivals or encourage their exit. Foreclosure thus can be found even if the foreclosed rivals are not forced to exit the market: It is sufficient that the rivals are disadvantaged and consequently led to compete less effectively.*", and the ultimate negative effect on customers: "*Such foreclosure is regarded as anti-competitive where the merging companies — and, possibly, some of its competitors as well — are as a result able to profitably increase the price charged to consumers.*"

(570) Two forms of foreclosure can arise: restriction of access to an important input (input foreclosure) or restriction of access to a sufficient customer base (customer foreclosure).

(571) In the case at hand, the Notifying Parties are active in several clearing markets, in particular in the markets for clearing of repos and of bonds, but also clearing for equities and various categories of derivatives (among others ETD interest rate derivatives and OTC interest rate derivatives). Transaction feeds provided by CCPs to CSDs and ICSDs (and potentially custodians) are used as input in order to provide settlement and custody services, as well as collateral management services.

(572) In addition, CCPs provide collateral feeds to CSD/ICSDs through margin requirements in various types of transactions and in particular in derivative and repo transactions.

8.4.4.2. Assessment related to the market for international settlement and custody services in relation to fixed income

8.4.4.2.1. The merged entity would have the ability to divert cleared fixed income transaction feeds to Clearstream

8.4.4.2.1.1. Cleared repo transaction feeds are important inputs for international settlement and custody services in relation to fixed income

(573) In order to analyse a potential input foreclosure, once the downstream markets concerned are identified, it should be analysed whether the input at stake is an important input,[417] such that a restriction of access or increased prices can have a detrimental effect on the ability of downstream companies to compete. In the case at hand, the question is to identify the input that is used by competitors of the Notifying Parties in order to provide international settlement and custody services for fixed income.

(574) From a general point of view, CSDs, ICSDs and custodians provide settlement and custody services on the basis of (i) the duty given by customers to (electronically) hold assets in custody and provide asset servicing and (ii) transaction feeds they receive either (a) from customers directly (for uncleared transactions) or (b) from CCPs in case of cleared transactions.[418]

(575) More specifically, on the market for international settlement and custody services related to fixed income, ICSDs and global custodians provide settlement and custody services on the basis of fixed income transaction feeds received from CCPs.

(576) As explained in Section 7.2.2.3.2, cleared repo transactions are particularly used by large banks or dealers that engage in many, often short term, repo transactions and gain significant benefits from using a CCP. Because of the higher frequency and the particularly short duration of these transactions, the settlement efficiency is particularly important for customers using cleared repo transactions. The ability to influence settlement efficiency for cleared repo transactions can thus have a significant impact for customers and in turn on the ability of settlement service providers to compete.

(577) In addition, large customers also engage in uncleared transactions with non-dealer customers and try to aggregate their securities with one service provider for a more efficient handling of their securities. The decision of cleared repo customers

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417 Guidelines on the assessment of non-horizontal mergers under the Council regulation on the control of concentrations between undertakings, OJ C 265, 18 October 2008, p.6 ("Non-horizontal Merger Guidelines"), paragraph 34.

418 According to the data submitted by the Notifying Parties, cleared non-triparty repo transactions represented around [30-40%] (i.e. EUR [BUSINESS SECRETS] notional outstanding volumes) in 2015 out of the total of non-triparty repos including uncleared transactions (EUR [BUSINESS SECRETS]). With regard to non-triparty repo transactions, cleared transactions represented around [20-30%] (i.e. EUR [BUSINESS SECRETS] notional outstanding volumes) in 2015 out of the total of non-triparty repos including uncleared transactions (EUR [BUSINESS SECRETS]). With regard to bond transactions, cleared transactions represented around [10-20%] (i.e. EUR [BUSINESS SECRETS] notional outstanding volumes) in 2015 out of the total of non-triparty repos including uncleared transactions. (Source: Form CO, Annexes M.7995_DBAG_LSEG_RFI_10_Annex_06_Market share data for Section 6B-8B - Cash Bonds - FBD_6B-8B_024 and M.7995_DBAG_LSEG_RFI_10_Annex _07_Market share data for Section 6C-8C - Repos - FBD_6C-8C_026).

regarding their location for settlement of cleared repos is thus likely to have an impact on their uncleared repo transactions as well as their counterparties. Indeed, it is generally beneficial for customers to trade with counterparties that have the same settlement and custody service provider for a better efficiency. Cleared repo transaction feeds are thus more important than the mere share they represent in the total repo market.

(578) It should also be noted that CCPs are not one customer out of many for settlement and custody services, but have a central role in the transaction processes. They are indeed the focal point of all trading counterparties willing to benefit from CCP clearing advantages and their decisions can have a much more significant impact on the market than any customer.

(579) The Notifying Parties submit that the Statement of Objections is based on an unduly narrow market definition which ignores the fact that settlement and custody services (as well as CMS) can be provided on the basis of feeds of either cleared or uncleared trades, as well as on the basis of feeds from repos and bonds but also equity transactions, and that in this context, the input from LCH.Clearnet to Euroclear Bank's services is modest.

(580) More specifically, the Notifying Parties claim that the importance of cleared repo transaction feeds is overstated and that it should not constitute an important input for downstream customers, because cleared repo transaction feeds represent approximately 30% of outstanding repos by value in the EEA and for a minority of repo trade feeds settled at Euroclear Bank (less than 25%).

(581) The Notifying Parties in addition submit that the significance of LCH.Clearnet's specific trade feeds is overstated in the Statement of Objections, because there is no reason to believe that LCH.Clearnet's feeds are critical to the provision of settlement, custody and collateral management by Euroclear Bank, considering that the feeds that Euroclear Bank obtains from uncleared trades account for the majority (75%-100%) of trade feeds settled at Euroclear Bank. According to the Notifying Parties, LCH.Clearnet is just one of many other counterparties in repo trades. The loss of LCH.Clearnet's trade feeds would thus not materially impair Euroclear Bank's offer.

(582) The Commission has however defined a market for settlement and custody for fixed income transactions provided by ICSDs and large custodians, and left open whether services for cleared and uncleared transactions are part of the same market. Indeed, the Commission considers that cleared repo transactions are an important input for the downstream market irrespective of the conclusion on this point.

(583) In addition, settlement and custody services related to bonds and repos transactions are not substitutable with services related to equity transactions, as explained in Section 8.3.2.1.6 above. Therefore, if a service provider receives bond or repo transaction feeds in order to provide settlement and custody services, it cannot fulfil the same customer demand by replacing it by an equity transaction feed. In addition, contrary to the Parties claim, it is not immediate for a settlement and custody service provider for equities to easily expand in fixed income. [BUSINESS SECRETS].

(584) The Commission also considers, as explained above, that the fact that cleared repos and bonds transactions count for a minority of the total repos and bonds transactions does not represent their actual importance in the provision of international settlement and custody services for fixed income, due to their potential impact on uncleared

repos and bonds transactions, and on the choice of settlement and custody location of smaller customers.

(585) As regards the importance of LCH.Clearnet's feeds, as explained above, LCH.Clearnet has a central position on the market because of its role as a CCP. First, a CCP concentrates inter-dealer trades. By having this focal position for large customers, decisions taken by a CCP (for example as to where to maintain or open accounts) can have an impact on all its counterparties. An impact on large customers' decisions which are the main users of cleared repo transactions, in chain, can also impact decision-making of smaller customers. In addition, cleared repo transactions are often short term and frequent transactions, and are thus particularly important for dealer banks. These transactions can be used for example to avoid having a short position at the end of the day, and thus avoid bearing the cost of such short position: avoiding failed or delayed settlement is thus particularly important for such type of transactions. The fact that customers try to single-home their securities also implies that LCH.Clearnet can impact behaviour of customers beyond cleared transactions. CCPs cannot therefore be considered as "just one of many other counterparties in repo trades".

(586) Therefore, the Commission concludes that cleared fixed income (in particular repo) transaction feeds are an important input for the supply of international custody and settlement in relation to fixed income.

8.4.4.2.1.2. The merged entity would have the ability to divert cleared fixed income settlement feeds to Clearstream and to introduce cross-system settlement for settlement taking place at competitors, which is more costly and less efficient for customers than internal settlement

(587) As described above, in Sections 6.2 and 7.2.2, in the upstream markets (CCP clearing of bonds, ATS traded and cleared non-triparty repos and ATS traded and cleared triparty repos), the merged entity would have *de facto* monopolies, and thus market power on these markets.

(588) In the downstream market (international settlement and custody services for fixed income), the merged entity would own Clearstream Banking, which is together with Euroclear Bank one of the only two ICSDs in the EEA.[419] The other players on the market are global custodians, in particular JP Morgan and BNY Mellon.

(589) The merged entity's CCPs provide cleared fixed income feeds to third parties. This is in particular the case for LCH Ltd, while Eurex does not provide the possibility to settle outside Clearstream (triparty repos) or provide very limited volumes to third parties ([BUSINESS SECRETS] of Eurex' bonds and triparty repos volumes are settled at Euroclear). LCH SA and CC&G also very much operate in closed silos in cooperation with national CSDs for specific bonds (French, Spanish and Italian fixed income).[420]

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419 LSEG also owns the ICSD globeSettle but it is a very small player at the moment.

420 Notifying Parties' response to RFI 12 of 9 August 2016 received on 1 September 2016, Annex 1a Additional Market Structure Data:
- as regards bonds and non-triparty repos, LCH Ltd provides [BUSINESS SECRETS] of its feeds to Euroclear, [BUSINESS SECRETS] to Clearstream's ICSD and [BUSINESS SECRETS] to Clearstream's national CSD; LCH SA provides feeds to LSEG's Monte Titoli and Euroclear; CC&G only provides feeds to Monte Titoli;

(590) The principal element of a foreclosure strategy of the merged entity resides in its ability to divert cleared fixed income transaction feeds[421] to Clearstream. CCPs have indeed a key role in deciding where a given transaction is settled, because a bond used in a repo transaction has to pass by the CCP's account held by the provider the CCP has appointed for this service. The bond is taken from the account of the first counterparty, deposited to the CCP account, then moved to the account of the second counterparty. Each of these three counterparties can appoint its own service provider. However, the fact that the CCP does not use the same service provider as its trading counterparties has a direct bearing on the settlement efficiency and cost. We thus describe in more detail in the following paragraphs how this "cross-system" settlement occurs in practice and their implications, and in a second step, the importance of the CCP's role in the settlement process.

(591) Settlement can occur in two ways: if both counterparties to a trade appointed the same settlement and custody service provider (i.e. custodian, ICSD, or CSD) at which the type of security at stake should be held, settlement occurs internally, within the books of the same provider (this is referred to as "internal settlement"). As a result, even if that CSD is not the issuer CSD, and even though the security that is traded changes owners, the change in ownership is only registered in the books of that CSD, ICSD or custodian. The process is accordingly simple and cheap.

(592) If both counterparties do not have an account with the same provider or have not appointed the same custody service provider for the type of security involved in the transaction, in contrast, the settlement instructions have to cross different (settlement) systems; this is referred to as cross-system settlement or external settlement. This can occur for example because one of them does not have an account with the same (I)CSD or custodian as the other party or because for a given type of security, they do not have the same service provider. Two or more systems need to send settlement instructions, which imply both higher fees and delays[422].

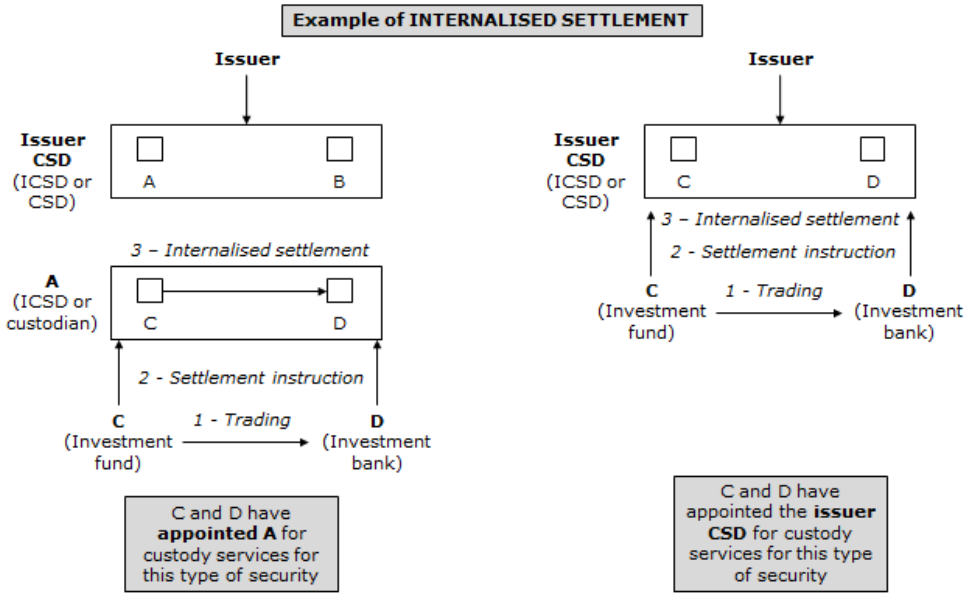
- as regards triparty repos, settlement and collateral management services are provided by one service provider only: Clearstream for Eurex product (GC Pooling), Euroclear for LCH.Clearnet products (Term £ GC and € GC Plus) and Monte Titoli for CC&G product (X-COM).

The Notifying Parties in their response to the Statement of Objections claim that the Statement of Objections does not consistently distinguish between CSDs and ICSDs, referring the paragraph citing the figures mentioned above for example. This is a misrepresentation of the Statement of Objections' arguments as shown by this paragraph, which simply indicates that CCPs are linked to several (I)CSDs, including national CSDs. This has no bearing on the fact that ICSDs and CSDs are not part of the same market, as explained in Section 8.3. on market definition.

421 In this context, the Commission notes that in the response to the Decision opening the proceedings, the Notifying Parties have in particular focused on the alleged inability of the combined entity to foreclose Euroclear from settlement instructions pertaining to equities trades. The Commission however did not consider a potential foreclosure in relation to equities in the Statement of Objections, as most of these securities appear to be held to a large extent either with custodians or in national CSDs, as explained in Section 8.3.2.1.6.

422 Agreed minutes of a meeting with Euroclear on 19 October 2016, [ID 5835].

Figure 6: Difference between internal and cross-system settlement



Source: Commission's illustration.

(593) Market participants identified the operational risks (such as failed settlement), time delays (as cross-system settlement requires more instruction exchanges across systems, does not necessarily occur real-time and may be subject to different cut-off times after which settlement between two systems cannot occur) and additional costs resulting from external settlement as a significant disadvantage of external settlement as compared to internal settlement.[423] One market participant explains for example that "*generally speaking, in addition to the additional costs related to external settlement, there is a higher degree of operational risk in moving the securities from another settlement system in time*".[424]

(594) Several reports of the European Central Bank underline the importance of same-day settlement procedures in particular in relation to the repo market (*"The European repo market is evolving towards more transactions with same-day settlement. One of the main drivers for same-day settlement is treasury management, which increasingly relies on DVP processes. The increased use of CCP clearing and related fulfilment of margin requirements also requires efficient same-day procedures.*"[425]) and the impact of cross-system settlement on the usability of the assets which in turn has an impact on the opportunity cost for customers (*"Usability of assets is constrained if securities cannot be transferred swiftly between different accounts at (I)CSDs due to inefficiencies of settlement arrangements. […] some inefficiencies still exist due to interconnections on a cross-border/cross-system basis, which reduce the speed of settlement, or usability of (I) CSD links*."[426]). Given - as explained in Sections 7.2.2.2 and 7.2.2.3 - the short hold time of repos in ATS traded and CCP cleared repo transactions and the fact that these transactions are used by

423 Replies to questionnaire Q11 "Sell-side Customers and issuers", questions 131 and 131.1.

424 Banca IMI, reply to questionnaire Q11 "Sell-side Customers and issuers", question 131.2., [ID4620].

425 European Central Bank, "I*mprovements to commercial bank money (CoBM) settlement arrangements for collateral operations*", July 2014, page 6.

426 European Central Bank, "*Collateral eligibility and availability*", July 2014, page 16.

frequent users, the risk of settlement delay and failure is thus particularly problematic for such transactions.

(595) It follows from the above that, should LCH.Clearnet have the ability to increase cross-system settlements, it would in turn have the ability to increase settlement costs for Euroclear's customers. This holds true irrespective of the exact market definition in relation to settlement and custody, since by increasing the cost of the securities inflow, the merged entity has the ability to increase the costs or degrade the service level at which competitors can hold these securities (i.e. custody services).

(596) The following paragraphs will analyse the ability of the CCP to introduce cross-system settlement and more generally divert settlement feeds, and the impact it can have on the choice of settlement and custody locations by customers.

(597) The CCP, as one of the counterparties to the trade, can decide to hold accounts at specific service providers. CCPs can decide to open, maintain or close accounts with specific (I)CSDs and custodians. [BUSINESS SECRETS][427]

(598) As one of the counterparties to the trade, it can also decide to settle its "leg" of given transactions at specific service providers. Securities must thus pass by the account of the CCP before being delivered to the receiving counterparty, and provides the CCP with a central role in the settlement process: "*By way of background, it should be noted that, for cleared repo trades, the CCP itself is a party in the settlement process, as the transfer of securities from seller to buyer must pass through an account held by the CCP in a CSD (and, therefore, the transfer is not direct between the CSD accounts or intermediary custodian accounts of the seller and buyer). This fact gives the CCP a critical influence over the settlement venue.*"[428] A CCP can thus introduce cross-system settlement for its trading counterparties.

(599) Internal documents of LSEG also confirm the important or even decisive role of CCPs in the choice of the venue where transactions are settled. [BUSINESS SECRETS][429] [BUSINESS SECRETS][430].

(600) Also, [BUSINESS SECRETS]. This again shows that CCPs have a key role in shaping the post-trade processing landscape by choosing with which service provider they decide to be linked.

(601) In any event, contrary to the Notifying Parties' claim, the fact that customers could still have the possibility to choose where to settle their transaction leg does not prevent CCPs from having an impact on the settlement location customers would choose. The merged entity's CCPs would indeed still be able to decide where securities have to be deposited for its settlement leg (i.e. the CCP, as one trading counterparty, also provides or receives a security that has to be deposited in a settlement service provider), which would have an impact on the costs to be paid by its counterparty to the trade and the risk of delay and failed settlement, and would thus influence customers' choice of settlement service provider.

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427 Notifying Parties' response to RFI 24 of 9 November 2016 received on 15 November 2016, question 22, paragraph 73.

428 Paris Europlace, reply to questionnaire Q1"Sell-side Customers", question 183, [ID 1727].

429 LSEG's internal document [BUSINESS SECRETS] [ID 3549-11144].

430 LSEG's internal document [BUSINESS SECRETS] [ID 3549-11144].

(602) The results of the market investigation support the fact that the CCP can decide not only on the location of its settlement leg and introduce cross-system settlement but can decide more generally where settlement has to occur; the current functioning of triparty repos where services are provided by a given CCP together with a given ICSD is an example of this, but responses to the market investigation go beyond triparty repos: "*The CCP decides formally and practically about the settlement venue.*"[431]; "*for any CCP-Cleared instrument, be it an equity transaction, a bond transaction, a repo transaction, a securities lending transaction or the physical delivery of a derivatives transaction – it is the CCP that determines which settlement locations have to be used.*"[432] CCPs are thus perceived as having a decisive role in the settlement location choice by market participants.

(603) Beyond the ability to induce cross-system settlement by diverting its settlement leg, the diversion of transaction feeds is further facilitated because customers do not necessarily express a preference as to where their transactions should be settled when they have several settlement service providers or track where their numerous transactions are settled.[433] CCPs have powers of attorney from their customers. By this mean they can access the accounts held by customers at (I)CSDs or custodians,[434] and decide at which (I)CSD a transaction is settled.

(604) In any event, even if customers were to monitor where transactions should be settled, the CCP would still have the ability to decide where their settlement leg should take place, as explained above.

(605) [BUSINESS SECRETS]"[435]

(606) The Notifying Parties submitted in their response to the Decision opening of the proceedings that the merged entity could not foreclose Euroclear as regards those securities for which Euroclear is the issuing CSD (i.e. primary settlement). The Commission however does not consider this argument relevant in relation to fixed income in particular, since, as explained above, there is demonstrably competition between Euroclear's and Clearstream's services. In addition, Euroclear and Clearstream compete in relation to the same type of underlyings (for example both settle transactions cleared by LCH Ltd related to German fixed income, Austrian fixed income, Irish fixed income, etc.), which means that the usual (national) issuing location of fixed income securities of a given nationality is not relevant.

(607) The Notifying Parties also consider in their response to the Statement of Objections that even if cleared repo transaction feeds were an important input, the merged entity would not have the ability to foreclose access to these inputs. They reiterate that CCPs do not dictate the settlement location. In particular (i) LCH.Clearnet's clearing members would still be able to settle cleared non-triparty repo trades with Euroclear Bank and (ii) the Notifying Parties' CCPs have no plans (nor incentives) to close their settlement leg at Euroclear Bank. However, as explained above, the fact that members can in theory choose their settlement location has no bearing on the fact

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431 Unicredit, reply to questionnaire Q1"Sell-side Customers", question 183, [ID 2411].

432 Bank of New York Mellon, reply to questionnaire Q11 "Sell-side Customers and issuers", question 128, [ID 5132].

433 Replies to questionnaire Q11 "Sell-side Customers and issuers", questions 136 and 129.

434 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 128.

435 [BUSINESS SECRETS].

that CCPs choose its own settlement location and induce additional costs for customers. The Notifying Parties indicate themselves in the response to the Statement of Objections that settlement takes place on a default basis with a view to minimise cross-system settlement, *unless customers express a preference*. In any event, the Commission considers that cross-system settlement minimisation depends on the location chosen by the CCP for its settlement leg. By being the central point for transactions involving large banks, because settling at the same place as other trading counterparties is more efficient (network effects) and because customers tend to aggregate their assets with one settlement and custody service provider (as will be analysed in more detail in Section 8.4.4.2.2.1 below**)**, the ability to influence the settlement location of cleared repo transactions has a much more significant impact than the mere share such transactions appear to represent within the total number of fixed income transactions. CCPs in practice can thus significantly influence if not decide where settlement should occur.

(608) The Commission therefore considers that the merged entity would have the ability to divert cleared fixed income settlement feeds to Clearstream, which in turn would lead to increased costs and degraded service for competitors.

(609) The Notifying Parties submit in addition that, even if the Notifying Parties' CCPs chose Clearstream Banking for their settlement leg, customers would not have an incentive to switch to Clearstream Banking, because switching of settlement locations is inconsistent with current market behaviour. According to the Notifying Parties, post-Transaction, LCH.Clearnet's customers would thus have no incentive to switch their cleared non-triparty repos settlement location, and the merged entity will be constrained by strong customers.

(610) The Notifying Parties explain in particular that [BUSINESS SECRETS] of the trades of Clearstream customers cleared at LCH.Clearnet give rise to cross-system settlements, which has not prompted customers to switch to Euroclear Bank. According to the Notifying Parties' estimations provided in the response to the Statement of Objections, should LCH.Clearnet decide to settle in Clearstream, Euroclear's customers would have a probability of [BUSINESS SECRETS] instead of [BUSINESS SECRETS] pre-merger to incur external settlement on all their trades (including cleared and uncleared).

(611) The Commission considers that the proportion of cross-system settlements occurring in relation to trades of Clearstream customers cleared at LCH.Clearnet should not necessarily be considered as a reference point, as certain fixed income transactions cannot be executed elsewhere than on DBAG (for example German bonds currently traded by the German Finance Agency are only traded on DBAG) and certain customers might choose Clearstream for specific reasons (such as local German customers) for example, inducing cross-system settlements that customers cannot avoid.

(612) In addition, should LCH.Clearnet decide to divert transaction feeds to Euroclear, 100% of the cleared trades currently settled at Euroclear would be impacted (which are not comparable with the [BUSINESS SECRETS] of trades cleared at LCH.Clearnet currently incurred by Clearstream customers). The fact that currently customers do not switch to Euroclear Bank, even though they could avoid external

settlement by switching at least their non-triparty repos to Euroclear Bank, and that Euroclear's customers might incur [BUSINESS SECRETS] of cross-system settlement on average for all their trades,[436] does not undermine the fact that the merged entity will have the ability to induce additional costs for its competitors. As will be explained in Section 8.4.4.2.2.1. below, it is actually likely that a non-negligible part of the customers would switch part or their whole fixed income portfolio to Clearstream, likely inducing others to switch as well.

(613) The Notifying Parties also claim that the Commission did not consider the specific value that Euroclear can offer to customers, for example through its CSD CREST for UK gilts. However, the Notifying Parties picked a specific example, for which there is at the moment relatively limited competition between Euroclear and Clearstream, while there are numerous other fixed income products (in particular euro-denominated ones such as German, Austrian, Portuguese, Spanish, Finnish, Dutch fixed income) for which they more closely compete.

(614) None of the above bring new or compelling arguments that would allow the Commission to dismiss its concerns regarding the ability of the merged entity to foreclose access to important inputs for international settlement and custody services related to fixed income.

8.4.4.2.2. The merged entity would have the incentive to foreclose access to important inputs for settlement and custody services for EEA fixed income provided by ICSDs and global custodians

8.4.4.2.2.1. The merged entity would have the incentive to divert cleared fixed income transaction feeds, which would degrade the service quality and cost level of competitors

(615) The diversion of clearing feeds to Clearstream would lead to increased operational costs for current Euroclear customers that clear with the Notifying Parties' CCPs, as cross-system settlement, as described above, is more costly and less efficient than internal settlement within the same (I)CSD/custodian.[437] While the exact amount of cost and inefficiencies that can be created by LCH.Clearnet's feeds diversion is impossible to fully quantify as it depends on the portfolio and trading strategies and usual counterparties of each customer, there is clear evidence of the fact that additional costs would arise as a result of such action: the additional cost due to internal settlement vs external settlement was clearly identified by customers in the market estimation and the cost differential was estimated by Euroclear on the ICSD

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436 The methodology used by the Notifying Parties is contestable. First, it assumes for uncleared transactions that the probability of making a cross-system settlement for Euroclear customers is equal to the proportion of all uncleared trades currently settled at Clearstream Luxembourg, while this probability depends on the volumes currently settled at Clearstream and Euroclear and the ability to find or choose counterparties which have the same service provider to allow a more efficient settlement. Second, the fact that half of the settlements of cleared trades would no longer take place at Euroclear Bank, while the other half would relate to Euroclear customers' leg and thus would remain with Euroclear, misrepresents the post-Transaction situation, as all cleared trades would lead to cross-system settlements for Euroclear customers. These calculations are in addition a static view which do not take into account potential switches of customers to Clearstream.

437 European Central Bank, "Collateral eligibility and availability", July 2014: "*some inefficiencies still exist due to interconnections on a cross-border/cross-system basis, which reduce the speed of settlement, or usability of (I)CSD links.*"

side at € 0.50 (internal settlement) vs € 1.50 (external settlement) per transaction which can impact millions of repo cleared transactions.[438] Cross-system settlement in addition leads to a higher rate of failed transactions (i.e. securities are not delivered on time and thus the transaction fails). This issue was also identified by customers and estimated by Euroclear at 94% (external settlement) instead of 99% (internal settlement).[439]

(616) As a consequence, in order to avoid cross-system settlement, a number of customers will likely switch to Euroclear's direct competitor, Clearstream. For example, in response to the question as to how they would react if LCH.Clearnet would require settlement into Clearstream, one customer indicates that it would "*match LCH.Clearnet preference and look for another custodian*"[440]; another explains that "*[X] would not appreciate it but [X] would have to accept it*"[441]. This means that a number of customers would switch to Clearstream as a consequence.

(617) All the customers that would remain with Euroclear would however be subject to cross-system settlement, should LCH.Clearnet divert its transaction leg to Clearstream. Therefore, irrespective of the number of securities and the number of customers moving to Clearstream, any customer not moving to Clearstream would face degraded conditions and would be worse off. Euroclear's ability to compete would thus be reduced.

(618) This effect is all the more likely for settlement intensive business. As explained in detail in Sections 7.2.2 and 8.4.4.2.1.1 above, essentially cleared repo transactions are based on HQLA (i.e. primarily highly rated and highly liquid government bonds and Eurobonds) and have a very short duration. Moreover, it is precisely the types of clients that the Notifying Parties compete for – large, international banks and dealers – that trade the most repos and use CCP clearing. Ownership for the bonds underlying these repos thus changes very frequently, and accordingly, the higher cost and implementation risk pertaining to external settlement could be a particularly important driver for a customer's choice to relocate its portfolio.[442]

(619) Moreover, and more generally, settlement is characterised by strong network effects and economies of scale, as recognised by the Notifying Parties in their response to the Decision opening the proceedings.[443] These network effects stem from the fact that it is more efficient to trade with customers having the same settlement service provider in order to maximise the number of internal settlements. While pre-Transaction, customers within Clearstream could have access to internal settlement by trading among themselves and customers within Euroclear could also benefit from efficient settlement, customers of Euroclear would not be able to have such efficient settlement.

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438 While these fees may not necessarily fully reflect the cost difference between cross-system settlement and internal settlement for Euroclear, the market investigation clearly identified differences in terms of operational efficiency and thus costs for customers between cross-system and internal settlement.

439 Euroclear, submission "CRA report" dated 20 June 2016, page 39.

440 BBVA, reply to questionnaire Q11 "Sell-side Customers and issuers", question 136.1, [ID 4823].

441 Crédit Agricole, reply to questionnaire Q11 "Sell-side Customers and issuers", question 136.1, [ID 4546].

442 See above Sections 7.2.2.2.2. and 7.2.2.3.2. on repos .

443 Notifying Parties' response to the Decision opening the proceedings of 28 September 2016, paragraph 1188.

(620) The Commission acknowledges that Euroclear has a larger fixed income pool than Clearstream currently which might limit the movement of certain customers to Clearstream. However, the fact that certain customers indicated in the market investigation that they would be willing to move in case the CCP prefers to change settlement location shows that network effects are not necessarily the only factor customers consider in deciding which settlement location to choose.

(621) The fact that customers also tend to consolidate as much as possible their assets in a limited number of (I)CSDs and custodians might also be a factor that incentive the merged entity to enter into a foreclosure strategy.[444] This tendency allows customers to easily and efficiently mobilise their assets for a given activity in the different transactions they are involved in. Should customers move certain assets used for cleared transactions to Clearstream, they are likely to move a much larger volume in order to efficiently settle their transactions and optimise the usability of their securities.

(622) The fact that customers would tend to move all or most of their assets when deciding to move a portion is also evidenced by internal documents of the Notifying Parties. [BUSINESS SECRETS][445] In that context, the Commission notes, as indicated above, that the Notifying Parties argument put forward in the response to the Decision opening the proceedings, namely that most large clients are multi-homing, is contradicted by both a subsequent response of the Notifying Parties to a request for information[446] as well as the results of the market investigation.[447] Customers to the contrary tend to consolidate their assets, at least by business line or by type of underlyings, in one place.[448] One large international bank for example explained that "*our CSD also hold securities we use for other purposes than CCP Repo. The benefit of having all at the same CSD is settlement and operational efficiency*".[449]

(623) Therefore, even an initial diversion of only a moderate number of trades, may lead other trades and securities to follow, as a custodian explains for example in relation to Eurex Repo GC Pooling that "*if one of our clients wants to participate in that market then part (if not all) of the securities we hold on its behalf would have to be transferred to Clearstream Banking*"[450].

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444 Replies to questionnaire Q11 "Sell-side customers", questions 131 and 133.

445 [BUSINESS SECRETS].

446 In the response of 15 November 2016 to a request for information dated 9 November 2016, the Notifying Parties explain that "*Due to the fact that consolidation of activity and assets in one location offers clear efficiency benefits for market participants (e.g. operational risk, settlement netting, collateral optimisation etc.) market participants will typically try to maintain a single collateral account for the same activity.* [BUSINESS SECRETS]*"*. In response to the Decision opening the proceedings of 28 September 2016, the Notifying Parties submitted that *"the analysis ignores an important aspect of customer behaviour. Currently, market participants are multi-homing […] Clearstream expects that all large customers […] usually have an account at both Clearstream and Euroclear"* (see paragraphs 1175-1176).

447 Replies to questionnaire Q11 "Sell-side customers", question 117. See also Euroclear, submission "CRA Report" dated 20 June 2016, page 26, [ID 2293].

448 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 117.

449 Morgan Stanley, reply to questionnaire Q11 "Sell-side Customers and issuers", question 117, [ID 4212].

450 Bank of New York Mellon, reply to questionnaire Q11 "Sell-side Customers and issuers", question 116, [ID 5132].

(624) Irrespective of the exact number of customers which will move and the exact number of assets such customers would initially move, the merged entity will be able to increase settlement costs for Euroclear's customers staying at Euroclear. This will put an upward pressure on prices that Clearstream can follow. In addition, due to network effects between customers and of economies of scale and scope for each individual customer, an initial movement of some assets by some customers will increase the likelihood of these customers moving a large share of their assets to Clearstream and other customers to move to Clearstream.

(625) The Notifying Parties submit in their response to the Statement of Objections that Euroclear's customers will have an incentive to stay with Euroclear, as Euroclear's ability to offer settlement and custody for cleared repo trades and the quality of its offer cannot deteriorate as a result of any foreclosure, even if cross-system costs increase. The market would not "tip" to Clearstream even if only a partial foreclosure strategy were applied, due to network effects and economies of consolidation.

(626) However, although Euroclear might continue to benefit from network and consolidation effects for non-triparty repos and bonds (Clearstream being the market leader for triparty repos), the Notifying Parties do not take into account the benefits that customers would have consolidating all their fixed income business including triparty repos at Clearstream (which enjoys a larger size than Euroclear in this area). Also, the fact that various initiatives are launched to compete even in case network effects exist (cf. competition between €GC Plus and GC Pooling, new ventures launched by several market participants in the interest rate derivatives, etc.) shows that market participants consider that network effects can be overcome. In any event, the assessment of the potential foreclosure of Euroclear should not be based on whether the market would in all likelihood fully tip on the basis of an increased cross-system settlement, but whether the merged entity would have the ability and incentive to increase the costs of using competitors and / or degrade their service, and as a consequence impede their ability to compete such as to have a significant effect on competition.

(627) The merged entity would thus have the incentive to divert cleared fixed income transaction feeds, as it would increase the cost level of competitors, degrade their service quality and prevent them from serving the whole portfolio of customers which is often required by customers.

8.4.4.2.2.2. The merged entity would have the incentive to divert cleared fixed income transaction feeds to Clearstream, as it would increase its revenues

(628) The merger will lead to *de facto* monopolies in the markets for clearing of repos and bonds. Customers requiring clearing services would have no choice but to clear at Eurex or LCH. The merged entity would thus not risk losing profit on the upstream market.

(629) Internal documents of DBAG also indicate that it would have the incentive to divert settlement flows from Euroclear to Clearstream, for example by making Clearstream the default location of its CCPs. Already pre-Transaction, DBAG was indeed considering diverting UK securities through CBL and all euro denominated securities through T2S by adding a settlement and safekeeping venue to the LSE-LCH.Clearnet domestic trading chain: *"The default settlement location for LCH.Clearnet is Euroclear UK for domestic and Euroclear Bank for international securities. LSE and LCH.Clearnet would make Clearstream a settlement location and change the default international flow from Euroclear Bank to Clearstream. The main external*

dependencies would be to convince issuers and investors to use the new service, as the choice is with them to remain in Euroclear UK or Euroclear Bank, or move to a new offering." While DBAG indicates that "*In the past [they] were not able to convince LSE and LCH.Clearnet to make CBL a settlement location*",[451] the incentives of these entities by being part of the same group as Clearstream and all the vertically integrated subsidiaries would change after the Transaction. Indeed, by introducing Clearstream as a settlement location for LCH.Clearnet's transaction flow pre-Transaction, LSE and LCH.Clearnet would have risked losing market shares to DBAG's competing venues at trading and clearing level.

(630) Post-Transaction however, there is no risk for the merged entity to lose business at clearing level, and only the perspective to gain business from Euroclear in the downstream market, as the merged entity's CCPs will face no alternative in relation to CCP clearing of fixed income (triparty repos, non-triparty repos, bonds). In this regard, one customer fears that "*the actual availability of alternative service providers in clearing and settlement services, availability driven by critical mass and favorable business cases, could result [in] allowing major player to direct the flow through their own entities.*"[452]

(631) The Notifying Parties cite in their response to the Statement of Objections the following document's extract "[BUSINESS SECRETS]" to support the fact that Clearstream was only considered as one alternative and that customers would still be able to choose. However, the Commission considers that pre-merger LCH.Clearnet had the incentive to leave choice to customers which might not be the case post-Transaction, once LCH.Clearnet and Clearstream are part of the same group. Second, the choice is always on one side of the transaction: the CCP can always decide to favour a settlement and custody service provider, which has de facto an impact on the costs and quality of service received by the trading counterparty.

(632) The fact that DBAG currently has an account at Euroclear for certain of its activities is not indicative of a potential lack of incentive to close it or to favour Clearstream after the Transaction. The exceptions to the vertical silo structure of DBAG pertain to products where DBAG's market share is currently relatively small, such as for example the ATS trading and clearing of non-triparty repos. Euroclear considers that "*This willingness to settle in EB is however 'opportunistic': ECAG wishes to compete against LSE's CCPs for this type of business [special fixed income repo], for customers who prefer to hold their assets in EB.*"[453] Eurex has indeed small clearing volumes in this market currently and is competing with LCH.Clearnet, the market leader and only alternative. Where DBAG's market share is large, for example in ATS traded and CCP cleared triparty repos, settlement in Clearstream is mandatory. Euroclear considers that the interest in having an account in Euroclear post-Transaction and depart from DBAG's vertical silo structure may thus disappear: "*Post-merger however, competition between ECAG and LSE's CCPs for this repo business will be eliminated and allowing settlement in EB will no longer be in the interests of the merged entity – as a monopoly in the clearing of repos, the merged entity can dictate where settlement takes place. This illustrates that access to*

451]DBAG's internal document, "[BUSINESS SECRETS] Revenue Synergies", March 2016, page 1, [ID 3420-33391].

452 Intesa SanPaolo, reply to questionnaire Q1 "Sell-side Customers", question 133, [ID 2365].

453 Euroclear's response to RFI of 4 November 2016 received on 17 November 2016, question 8 [ID 5832].

settlement streams is provided for strategic reasons […]. That is, the repo CCPs are currently in competition with each other and for this reason have no incentives to disallow settlement where their clients find it most beneficial to themselves. But this incentive will no longer apply if CCPs face no competition."[454]

(633) According to the Notifying Parties in their response to the Statement of Objections, the merged entity would equally have no incentive to foreclose access to such inputs. The merged entity would be deterred by the risk of loss of revenues upstream as a result of customers switching to uncleared trades. Most customers would not switch to Clearstream for their settlements, and so, contrary to the scenario hypothesised in the Statement of Objections, there would be no prospect of significant gains in custody and CMS resulting from engaging in a foreclosure strategy.

(634) As explained in detail in Section 7.2.2 (repos) and 6.2 (bonds), the Commission considers to the contrary that customers would not switch to uncleared trades for ATS traded and CCP cleared non-triparty repos, ATS traded and CCP cleared triparty repos, and cleared bonds. In addition, as explained in Section 8.4.4.2.1.1, cleared repo transactions are particularly important inputs, because of the specific types of repo transactions that are cleared (inter-dealer transactions, short term repos), the particular role and size of the CCP, and the fact that a diversion of cleared transactions can have a direct impact on the settlement location of uncleared transactions.

(635) [BUSINESS SECRETS] The Notifying Parties might not necessarily have to enter into unlawful strategies in engaging in such foreclosure strategies, as suggested by the Notifying Parties.

(636) The Commission therefore considers that the merged entity would have the incentive to divert cleared fixed income transaction feeds to Clearstream, as its *de facto monopoly* positions on the upstream markets would allow it to increase its revenues on the downstream market without facing revenues upstream.

(637) All the above leads to high incentives for DBAG to engage into a foreclosure strategy, as it can only gain part or all of the assets of customers, while competitors' settlement costs – and as a consequence custody costs (as well as collateral management costs as will be explained in Section 8.4.4.3 below) –, as soon as customers move part or all of their assets to Clearstream – will in any event appear higher than pre-merger and competitors' ability to compete will be reduced.

8.4.4.2.3. The merger would impede effective competition in the market for international settlement and custody for fixed income provided by ICSDs and global custodians

(638) The Commission guidelines on the assessment of non-horizontal mergers indicate that "*significant harm to effective competition normally requires that the foreclosed firms play a sufficiently important role in the competitive process on the downstream market*"[455]. They also indicate that "*for input foreclosure to lead to consumer harm, it is not necessary that the merged firm's rivals are forced to exit the market*".[456] Input foreclosure thus leads to competition concerns in case the merger reduces the

454 Euroclear's response to RFI of 4 November 2016 received on 17 November 2016, question 8 [ID 5832].

455 Non-horizontal Merger Guidelines, paragraph 48.

456 Non-horizontal Merger Guidelines, paragraph 31.

ability of rivals to compete in the downstream market and raises barriers to entry to potential competitors.[457]

(639) First, by increasing the number of cross-system settlements for customers of Euroclear, Clearstream will *de facto* increase costs and degrade the quality of service for Euroclear's customers. Should customers decide to move part of their assets to Clearstream (for example those used for cleared fixed income transactions), the lack of access to the merged entity's transaction feeds will prevent competitors to provide single-homing for the fixed income's portfolio of customers.[458] As will be explained below, fixed income used in repo transactions can also be used as collateral in other transactions which is an additional incentive for customers to move all their portfolio and be able to mobilise optimally their fixed income assets. Customers would thus unlikely move just part of their assets. Second, Euroclear has an important role in the competitive process, by being a very close competitor to Clearstream. The two ICSDs are the only ICSDs in the EEA. They target the same type of customers, i.e. large international customers which want to have a one-stop-shop service provider for all their European activities in a given business line (for example fixed income), e.g. "[BUSINESS SECRETS]")[459]. Smaller customers on the contrary use national CSDs for their domestic market and custodians for their international activities (if any), as custodians provide additional, more tailor-made services that are not necessarily required by large institutions.[460]

(640) Both offer similar services, as highlighted by several customers in the market investigation (*"Broadly speaking, Euroclear and Clearstream offer the same range of ICSD services and collateral management services*."[461]; "*Euroclear and Clearstream provide similar services"*[462]). Both Euroclear and Clearstream are particularly well positioning in serving certain types of assets (fixed income in particular). They are subject to the same regulatory environment in comparison to custodians which allows them to provide more services (for example hold collateral of CCPs).

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457 Non-horizontal Merger Guidelines, paragraphs 47-49.

458 The Notifying Parties in their response to the Statement of Objections claim that the fact that customers tend to single-home shows that cleared and uncleared transaction feeds should be part of the same market, likewise for trades of different asset classes. The Commission considers however that single-homing shows that customers derive benefits from consolidating their trades with one or a limited number of service providers, generally for a given type of securities. This is thus not in itself a sufficient indication for considering a single market for settlement and custody services overall. In addition, cleared fixed income transaction feeds are considered important inputs for settlement and custody for fixed income, which is a different question from defining the upstream market. The Commission in any event considered a market for international settlement and custody services for fixed income, without distinguishing settlement of cleared transactions vs settlement of uncleared transactions.

459 [BUSINESS SECRETS].

460 Agreed minutes of a meeting with Euroclear of 24 November 2016, [ID 5771].

461 Bank of America Merrill Lynch, reply to questionnaire Q11 "Sell-side customers and issuers", question 119, [ID 6053].

462 Banca Sella Holding S.P.A., reply to questionnaire Q11 "Sell-side customers and issuers", question 119, [ID 4158].

(641) Internal documents of DBAG also show that Euroclear is its main competitor; [BUSINESS SECRETS]"[463]

(642) The two companies in addition compete fiercely on price, and on non-price elements such as innovative services and products.[464] Euroclear and Clearstream have for example launched directly competing innovations (for example cleared triparty repos: GCPooling for DBAG and €GC Plus for Euroclear together with LCH).

(643) The competitive pressure exercised by Clearstream and Euroclear pre-merger will not be replaced by global custodians. While JP Morgan and BNY Mellon, the two largest global custodians, also offer custody services for large customers in many countries, they are not significantly active in fixed income. As submitted by the Notifying Parties, ICSDs compete in particular for the HQLA portfolios, comprising mostly government bonds, of large clients, whereas custodians have their stronghold in equities.[465] One market participant explained that "*[…] sovereign debt [is] pooled in the ICSDs in order to create maximum economies of scale in terms of assets available for collateralisation, repo and/or securities lending.*"[466]

(644) In addition, there would be high barriers to expansion for global custodians. One customer explains for example the advantage for customers to hold fixed income in an ICSD: "[there is] *a significant concentration of bonds, mainly Govies, on Clearstream Banking Luxembourg's platform. The decision to hold the Govies with Clearstream is driv[en] by the presence of large number of counterparties on the same settlement system hence leveraging the possibility of efficient and low cost settlement processing while mitigating operational risk.*"[467] Should a customer move to a custodian, it would not benefit from the fact that a large number of customers use the same service providers as they can benefit either with Clearstream or with Euroclear today, including for uncleared transactions.

(645) In addition, JP Morgan and BNY Mellon would not be in a position to have better access to cleared repo transaction feeds, as the merged entity will also have the same ability and incentive to restrict their access to transaction feeds. [BUSINESS SECRETS][468] While ICSDs directly receive transaction feeds and collateral deposits from CCPs, custodians primarily receive feeds from bilateral transactions, which allow Euroclear and Clearstream to be better placed to offer custody services to customers for fixed income securities used in relation to cleared transactions, and are in practice able to provide services for the whole fixed income portfolio of customers.

(646) Custodians also appear to be less involved in settlement, and thus to depend on (I)CSDs: "*[C]ompared with (I)CSDs, custodians perform much less internal settlement (i.e. between their own accounts). This is because the case where a global*

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463 DBAG's internal document, "Strategy Workshop – Update on Clearstream's Business Strategy", 20 November 2015, page 9, [ID 3420-46202].

464 Euroclear, submissions " CRA Report" dated 20 June 2016, [ID 2293] and [ID 3162] and Euroclear's response to RFI 2 of 25 November 2016 received on 1 December 2016, [ID 5911].

465 BNY Mellon, responses to additional questions received on 22 August 2016, question 4, [ID 3573]. Euroclear, submission "CRA Report" dated 20 June 2016, page 14, [ID 2293]. [BUSINESS SECRETS].

466 BNP Paribas, reply to questionnaire Q11 "Sell-side Customers and issuers", question 116.2, [ID 5646].

467 Banca IMI, reply to questionnaire 11 "Sell-side customers", question 123, [ID 4620].

468 Notifying Parties' response to Commission's RFI 30 of 5 December 2016 received on 12 December 2016 (email).

custodian has two parties to a trade on their system is less frequent, and some custodians have decided, even when it happens, to still 'externalize' the settlement with an investor or issuer CSD"[469].

(647) The fact that Euroclear group (as a whole) is larger than Clearstream group (as a whole) is not indicative of the competitive pressure they currently exercise on each other and which would be lost through the merger. When arguing in the response to the Decision opening the proceedings that Euroclear is currently much larger than Clearstream, the Notifying Parties do not distinguish between the different activities of both groups (CSD/ICSD, different categories of assets, etc.). While single-homing might occur across asset classes, benefits of single-homing (such as settlement netting) requires the aggregation of securities of a given asset class, such as fixed income securities. As analysed in Sections 6 (bonds), 7 (repos) and 8.3.2.1.6, a distinction should thus be drawn between activities in fixed income and equities at trading, clearing and post-trade levels. In addition, a distinction should be drawn between activities which entail home-bias (i.e. services - primarily through CSDs - provided to local customers which only trade securities of a given nationality) and activities targeting international customers (such as ICSD services and potentially the direct links such customers have to CSD services), as analysed in Section 8.3.2.1.4. As Euroclear group owns several national CSDs (CSDs of France, Belgium and Netherlands on a single platform, Euroclear Finland, Euroclear Sweden and Euroclear UK & Ireland (EUI)), considering all the revenues of these CSDs blurs the relative strength of Euroclear vs Clearstream in relation to services for international customers. The overall size of both groups is thus not the relevant benchmark.

(648) The document "[BUSINESS SECRETS]"[470], [BUSINESS SECRETS]. Another document indicates that "[BUSINESS SECRETS]".[471]

(649) In their response to the Statement of Objections, the Notifying Parties distinguish between CSD's and ICSD's activities, and estimate that the current difference in size between Clearstream Banking and Euroclear Bank remains significant, with Euroclear having more than 2/3 of the activities shared by both ICSDs. In any event, the fact that Euroclear might benefit from network effects arising from its larger size pre-Transaction does not undermine the fact that the merged entity would have the ability and incentive to reduce competitors' ability to compete, even if it might be insufficient to fully exclude them from the market, as explained at the beginning of this section. All of them will be disadvantaged, by being foreclosed from cleared repo transaction feeds (fully or partially).

(650) In addition, the Notifying Parties consider that the Statement of Objections fails to acknowledge that (i) currently, most of the repo trades are settled by Euroclear Bank, the majority of which are uncleared; (ii) in the context of strong network effects whereby customers aim to maximise internal settlements, Euroclear Bank has a significant competitive advantage relative to Clearstream Banking; and (iii) as a result, diverting LCH.Clearnet's repo feeds to Clearstream Banking – if at all feasible – is unlikely to have any material impact on the offer of Euroclear Bank relative to Clearstream Banking. Euroclear Bank would continue to have a

469 Agreed minutes of a meeting with Euroclear of 19 October 2016, paragraph 19, [ID 5835].
470 [BUSINESS SECRETS].
471 [BUSINESS SECRETS].

significant advantage in terms of network effects, having a share estimated by the Notifying Parties at [70-80%] even in an artificially narrow EEA-wide market for settlement of bonds and repos by ICSDs.[472] According to the Notifying Parties in their response to the Statement of Objections, a diversion of LCH.Clearnet's repo feeds would not in any case impede competition between Clearstream and Euroclear. There would be no cost increase at Euroclear if cleared repos were fully diverted to Clearstream, because cleared repos amount only to a relatively small share of Euroclear's total business. According to the Notifying Parties, their analysis of market share data and the relative importance of LCH.Clearnet's trade feeds and uncleared feeds for Euroclear's business show that a diversion of LCH.Clearnet's trade feeds would not result in average Euroclear customers clearing (non-triparty or triparty) repo trades with LCH.Clearnet to switch to Clearstream.

(651) As explained above, the Commission however considers that cleared repo trades are of particular importance for international settlement and custody services for fixed income by being often used for short-term dealer-to-dealer transactions. The mere volumes of cleared repo transactions settled at Euroclear thus do not properly represent their importance. In addition, in its quality of CCP, LCH.Clearnet cannot be considered as one of many other counterparties in repo trades, but has a central role in the repo market, being the focal point in case of cleared transactions, and in particular for transactions involving large counterparties which are significant users of CCP services. Finally, the fact that Euroclear Bank currently has larger market shares than Clearstream Banking and benefits from network effects will not prevent negative effects on competition post-Transaction.

(652) The Notifying Parties also consider that Euroclear would be able to mitigate any effect of the alleged foreclosure strategy: Euroclear could in particular decrease the external settlement fee they charge to customers in order to compensate the increased settlement cost and inefficiencies customers would face as a consequence of the additional external settlement that might arise from a potential foreclosure attempt. However, by focusing on the fees, the Notifying Parties do not take into account all the costs arising from external settlement, including for example settlement delay or failed settlement (the existence of which is confirmed by the Notifying Parties). [BUSINESS SECRETS], while Euroclear indicated that this project was part of broader negotiations, including access for Euroclear entities to Eurex trades, that are captive within DBAG.[473] The full context of the overall ongoing negotiations between both groups might thus be considered. In any event, the existence of inefficiencies arising from cross-system settlement was clearly identified in the market investigation, including in ECB studies, and the ability of the merged entity's CCPs to degrade the access to settlement feeds to competitors was also supported by the Commission's market investigation (see Section 8.4.4.2.1).

(653) The Commission considers that there would be no market player able to replace the competitive pressure exercised by Euroclear on Clearstream.

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472 This figure does not only take into account euro denominated fixed income securities for which there are balance sheet netting that incentivises customers to aggregate euro denominated fixed income securities together, but also other currencies. As Euroclear is particularly present in GBP, Euroclear's market share estimated by the Notifying Parties can be considered as the upper relevant bound.

473 Euroclear's response to Commission's RFI of 4 November 2016 received on 17 November 2016, question 8, [ID 5832].

(654) The Notifying Parties argue that market participants would have the choice between a value chain with Euroclear at the bottom (via EuroCCP and SIX which are interoperable with LCH.Clearnet) and a value chain with Clearstream at the bottom (by assumption via LSE, LCH.Clearnet). This is however not the case for repos and more generally fixed income transactions where there is no CCP alternative to those of the Notifying Parties. Customers would thus have no choice but using the merged entity's CCPs and thus be dependent on the CCPs' decisions in relation to settlement and custody services.

(655) The merger would also raise barriers to entry to potential competitors. The Commission's Non-horizontal Merger Guidelines indicate that "*Effective competition on the downstream market may be significantly impeded by raising barriers to entry, in particular if input foreclosure would entail for such potential competitors the need to enter at both the downstream and the upstream level in order to compete effectively on either market*".[474]

(656) Should a new player want to directly compete in the market for international settlement and custody services for fixed income by creating a new ICSD, it would face high barriers to entry. Entry in the ICSD space is already very difficult, as demonstrated by several failed entry attempts in the last few years. BNY Mellon tried to launch its own (I)CSD, but closed it. DBAG commented in internal documents on BNY Mellon's attempt to enter the market: "[BUSINESS SECRETS]"[475]

(657) LSEG itself has been trying to launch its own (I)CSD, globeSettle, [BUSINESS SECRETS]. As indicated in the Notifying Parties' internal documents, JP Morgan and LSEG (though Monte Titoli) were supposed to launch a *"new Luxembourg CSD which would build on the infrastructure and expertise of [Monte Titoli] and connect to T2S through Italian CSD"*.[476] In relation to globeSettle's launch, DBAG's documents indicate: "*This brings me to the second challenger, the LSE. In the last year, the LSE has also established a new CSD in Luxembourg, GlobeSettle.* [BUSINESS SECRETS][477] [BUSINESS SECRETS][478]

(658) DBAG also mentions the attempt of the Swiss SIX: [DBAG'S INTERNAL ASSESSMENT OF SIX'S ACTIVITIES]."[479] As evidenced by this quote, DBAG does not expect T2S to be sufficient to remove the high barriers to entry in international custody services for fixed income and compete with Clearstream's and Euroclear's ICSDs.

(659) Post-Transaction there would be no other credible competitor active in the downstream markets, who, as the merged entity, is also vertically integrated, since Euroclear, as well as BNY Mellon and JP Morgan are not active in settlement of cleared transactions irrespective of the assets or transactions concerned. Such a situation is likely to raise further already elevated barriers to entry on the market for

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474 Non-horizontal Merger Guidelines, paragraph 49.

475 DBAG's internal document, [BUSINESS SECRETS], 20 November 2015, pages 7-8 [ID 3420-46202].

476 DBAG's internal document, [BUSINESS SECRETS], 2 December 2013, page 6. [ID 3420-48039].

477 DBAG's internal document, [BUSINESS SECRETS], 20 November 2015, pages 7-8 [ID 3420-46202].

478 DBAG's internal document, [BUSINESS SECRETS], 2 December 2013, page 6. [ID 3420-48039].

479 DBAG's internal document, [BUSINESS SECRETS], 20 November 2015, page 9 [ID 3420-46202].

settlement for fixed income transactions and as a consequence on the market for custody of fixed income and in turn the market for collateral management.

(660) A number of market participants underline the risks of foreclosure arising from the merger and the impact on competition ultimately.[480] The concerns raised corroborate the conclusions of the Commission: they come from the increased concentration at clearing level which will impact the ability of downstream competitors to compete. One customer considers for example that "*As the 'new company' would have a very strong market share not only as CCP but also regarding settlement […] [it] hopes that they will be forced to run at least three different companies (ATS, CCP and CSD) which should all have an open architecture by granting access also to other service providers.*"[481] This would be even more the case in view of the increased importance of clearing.

(661) The foreclosure strategy that the merged entity would have the ability and incentive to put in place would furthermore run counter to the objectives of CSDR and of T2S which aim at promoting competition at settlement level. The Commission's guidelines indicate in this regard that "[t]*he concern of raising entry barriers is particularly relevant in those industries that are opening up to competition or are expected to do so in the foreseeable future.*"[482] It specifies that "[i]*t is important that regulatory measures aimed at opening a market are not rendered ineffective through vertically-related incumbent companies merging and thereby closing off the market, or eliminating each other as potential entrants.*"[483]

(662) By impeding competition in the settlement and custody market before T2S is fully operational, the Transaction might also jeopardise the objective of T2S which is to reduce the costs of cross-border settlement (i.e. settlement of securities issued in a given country into CSDs of another country) and thus also favour competition at settlement level. DBAG indeed has the intention to [BUSINESS SECRETS] provide customers with a single pool of securities which would not face any cross-system settlement anymore. Only Euroclear would have this ability as well. [EVIDENCE BASED ON INTERNAL DOCUMENTS, CONTAINING BUSINESS SECRETS]"[484] This shows how close competitors Euroclear and Clearstream are, and how they are expected to compete post-T2S full implementation. [BUSINESS SECRETS] Euroclear (which owns several national CSDs and an ICSD), [BUSINESS SECRETS] might have already enjoyed certain scale and network advantages. Despite this, the two ICSDs can today compete for the whole set of fixed income (cleared and uncleared, different nationalities) when they have access to CCPs' transaction feeds. However, the market is unlikely to remain as competitive post-Transaction.

(663) T2S may thus lead Clearstream and Euroclear to compete even more directly, provided that Euroclear does not face additional costs induced by the dominant position of the merged entity at clearing level before T2S effects can arise. As new entrants are relatively unlikely in the ICSD in the short term, competition between

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480 Replies to questionnaire Q1 "Sell-side Customers", question 133.

481 Unicredit, reply to questionnaire Q1 "Sell-side Customers", question 191, [ID 2411].

482 Non-horizontal Merger Guidelines, paragraph 49.

483 Non-horizontal Merger Guidelines, footnote 8.

484 DBAG's internal document, [BUSINESS SECRETS], 20 November 2015, Page 15-16 [ID 3420-46202].

the two ICSDs is expected to be strengthened. Internal documents of the Notifying Parties also show that Clearstream and Euroclear are best placed to compete post-T2S implementation, both through their ICSDs and CSDs.[485] The picture below clearly shows that Euroclear is considered as its main competitor by Clearstream in the future T2S world.[486] One customer explains that it expects "*T2S [to] reinforce ICSDs that can now access to all domestic markets from one single entry point.*"[487]

Figure 7: [SCREENSHOT FROM INTERNAL DOCUMENT DISCUSSING CLEARSTREM'S POSITIONING

(664) The Notifying Parties also submit that engaging in a foreclosure strategy would damage their reputation and result in retaliation from large customers in all its other activities. However, the foreclosure mechanism does not require the merged entity to oblige customers to move their securities to Clearstream. [BUSINESS SECRETS]. By increasing the settlement costs for customers, the merged entity will however create a disincentive to stay with Euroclear. This may not be sufficiently high to make all customers move but will necessarily lead to an increase in settlement cost and service quality delivered by Euroclear (and any other competitor willing to enter the market and compete for the whole fixed income portfolio of customers, in particular the high quality assets re-used in various transactions) and lead to a partial foreclosure of these competitors, impeding their ability to compete.

(665) However, even large customers appear to be unable to impose their wills on significant infrastructure providers like DBAG. Customers (among others large broker-dealers such as Barclays, Société Générale, Bank of America Merrill Lynch) consistently underline in the market investigation the lack of open access and interoperability of Eurex (for example in the context of equities clearing) as one of DBAG's main weaknesses and complain about the high fees paid to DBAG compared to open / interoperable services providers.[488] Morgan Stanley indicates for example that "[s]*o far, [DBAG, the German infrastructure operator] has been most resistant to allowing interoperability in its infrastructure*".[489] Another large customer underlines the unwillingness of DBAG to follow customers' requirements: "*DBAG are vertically siloed and have not until now been amenable to interoperability discussions. Their service offering is functional but not open to innovation or value added service*."[490] However, they have not been able to oblige DBAG to open its vertical silo. The ability of the Notifying Parties to resist to customers' demand is unlikely to diminish with the Transaction.

(666) In addition, the Notifying Parties argue that the Commission relies on a narrow selection of evidence, i.e. Euroclear's submissions and those of a select number of companies, primarily French companies, which are allegedly unsubstantiated.

(667) The Commission acknowledges that factual evidence on the functioning of the market provided in Euroclear's submissions has been used by the Commission in its assessment. The Commission tested in its market investigation the key elements

485 DBAG's internal document, [BUSINESS SECRETS], 2 December 2013, pages 8-9, [ID 3420-48039].
486 DBAG's internal document, [BUSINESS SECRETS], 2 December 2013 pages 8, [ID 3420-48039].
487 Crédit Agricole, reply to questionnaire Q11 "Sell-side customers", question 125, [ID 4546].
488 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 72.
489 Morgan Stanley, reply to questionnaire Q1 "Sell-side Customers", question 133, [ID 3184].
490 Crédit Suisse, reply to questionnaire Q11 "Sell-side Customers and issuers", question 141 [ID 6078].

underpinning the concerns of Euroclear and necessary to demonstrate the ability, incentive and effect of the potential foreclosure by the merged entity's CCPs.[491] The Commission exercised in its final assessment its own judgement, as can be demonstrated by the fact that not all the claims submitted by Euroclear have been considered relevant by the Commission. Regarding the fact that French companies were particularly complaining and used in the Commission's assessment, this is factually wrong and cannot be reconciled with the responses received. The Notifying Parties might refer to the response of the association Paris Europlace, but there are a number of other companies which consider that the effect of a foreclosure would be harmful for their business, for example TD Bank (Canada), Danske Bank (Denmark), Deutsche Bank AG (Germany), Bank of America Merrill Lynch (United Kingdom), Jefferies International Limited - (United Kingdom).[492]

(668) In this context, the Commission does not accept the argument of the Notifying Parties, that LCH.Clearnet is [BUSINESS SECRETS]. First, there are no indications that it could not simply use Clearstream for these purposes going forward. Second, [BUSINESS SECRETS], it would hardly seem conceivable that Euroclear would refuse selling its services simply because it has been foreclosed from other parts of the business.

(669) In view of the foregoing, the Commission concludes that the Transaction would lead to a significant impediment of effective competition by providing the merged entity with the ability and the incentive to foreclose its competitors from the market for international settlement and custody services for fixed income.

8.4.4.2.4. Neither T2S nor the CSDR would prevent the harm that would result from the Transaction

(670) The new rule of open access of the CSD Regulation and the introduction of T2S are unlikely to prevent any foreclosure in the downstream market for international settlement and custody for fixed income (and the downstream market for collateral management, see below Section 8.4.4.3.3.).

(671) Article 53 of CSDR provides that "*A CCP and a trading venue shall provide transaction feeds on a non-discriminatory and transparent basis to a CSD upon request by the CSD and may charge a reasonable commercial fee for such transaction feeds to the requesting CSD on a cost-plus basis, unless otherwise agreed by both parties.*" Recital (59) provides for certain conditions under which access can be denied and could be used by the merged entity to refuse access to transaction feeds: "*Such access may be refused only where it threatens the smooth and orderly functioning of the financial markets or causes systemic risk and may not be denied on the grounds of loss of market share.*" The RTS on authorisation, supervisory and operational requirements for central securities depositories specifies further the conditions for refusal of access in Article 89.[493]

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491 See in particular questions 116 to 138 of questionnaire Q11 "Sell-side customers and issuers".

492 See replies to questionnaire Q11 "Sell-side customers and issuers", question 137.

493 The Commission adopted the RTS on authorisation, supervisory and operational requirements for central securities depositories on 11 November 2016 specifying the conditions to refuse access in Article 89 therein. See Commission Delegated Regulation (EU) 2017/392 of 11 November 2016 supplementing Regulation (EU) No 909/2014 of the European Parliament and of the Council with

(672) While this RTS still awaited publication in the Official Journal while the Commission was conducting its market investigation, it would appear that even if the merged entity were not able to deny access, it would still have the ability to implement the foreclosure strategy outlined above. The CSDR does not oblige for example a CCP to have accounts in all (I)CSDs. The merged entity could decide to close its account with Euroclear; customers would still be able to have their accounts with Euroclear, but securities would have to cross between Clearstream's and Euroclear's systems. Thereby, it would simply increase cross-system settlement events. Even if the merged entity were not to close its accounts in Euroclear, the CSDR does not prevent a CCP to decide where transactions between itself and trading counterparties shall be settled. The merged entity would thus also have the ability to induce additional costs for Euroclear's customers through additional cross-system settlements. It should also be noted that while CSDR requires CCPs to provide transaction feeds to CSDs, it does not require CCPs to provide feeds to custodians. Finally, as regards collateral management (which will be analysed in Section 8.4.4.3), this service is not covered by open access requirements in existing regulation.

(673) As for TARGET2-Securities ("T2S"), this is a project launched in 2008 by the European Central Bank in order to remove barriers and eliminate differences between domestic and cross-border/cross-system settlement by offering a single market infrastructure solution for the Eurozone. The T2S Framework Agreement was signed by 24 CSDs, which will migrate to the T2S platform in five waves between June 2015 and September 2017.[494]

(674) However, ICSDs will not be part of T2S, therefore cross-system settlement will still continue to occur. As indicated above, ICSDs provide a different value proposition for customers than national CSDs: they offer, inter alia asset servicing for assets issued in several countries. Such services require knowledge of the national regulation (for example as regards tax), experience, size and brand recognition. It is thus highly unlikely that customers would switch to several national CSDs, simply because settlement between national CSDs is facilitated by T2S. The ability for the merged entity to divert transactions feeds to its own CSDs and ICSD is likely to remain intact after the full migration of CSDs on T2S.

(675) Furthermore, T2S only covers euro-denominated securities that are considered eligible by the ECB and will thus not address potential foreclosure for Eurobonds and securities in other currencies. By way of background, according to DBAG's internal documents, the total Eurobonds market size is significant, as it amounts to EUR 10 trillion in outstanding debt (EUR 6 trillion for euro denominated securities), out of which [50-60%] of euro denominated securities reside with Clearstream's ICSD.[495] In addition, Euroclear and Clearstream are expected to continue to compete particularly closely after the full implementation of T2S, as they already have international capabilities to serve international clients and securities. While the

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regard to regulatory technical standards on authorisation, supervisory and operational requirements for central securities depositories (OJ L 65, 10.3.2017, p. 48–115).

494 For the time being, Denmark is the only non-euro area country which will make its currency available for settlement on T2S (scheduled for 2018).

495 DBAG's internal document, response to RFI 21, Q40 "Update on Clearstream core strategic initiatives" of 21 March 2014, page 15 [LL_Gen_115].

Notifying Parties argue that Euroclear is much larger in settlement, custody and collateral management than Clearstream, in the space of securities covered by T2S, Clearstream is of comparable size, if not larger than Euroclear, with [40-50%] of the securities concerned according to its own internal documents.[496]

(676) In addition, the effective implementation of T2S may take more time than the simple migration of the CSDs to the platform which was planned to end by September 2017. The last migration waves may also encounter some operational delays, as faced by Euroclear and Monte Titoli.[497] In addition, according to Euroclear, the risks, and therefore costs, associated with cross-CSD settlement are also likely to remain in the short term, pending the full implementation of the T2S platform and until the insolvency procedures between countries in Europe are harmonised.

(677) In view of the foregoing, the Commission considers that neither T2S nor the CSDR would prevent the harm that would to result from the Transaction.

8.4.4.2.5. Conclusion

(678) In view of the foregoing, the Commission concludes that the Transaction would lead to a significant impediment of effective competition in the markets for settlement and custody services provided in relation to fixed income by ICSDs and global custodians. This is because, in view of the Notifying Parties' *de facto* monopoly in the market for ATS traded and CCP cleared non-triparty repo clearing, the market for ATS traded and CCP cleared triparty repo clearing and to a lesser extent, the market for CCP clearing of bonds, the merged entity would have the ability and incentive to partially foreclose competitors, and more particularly its closest competitor Euroclear, by diverting cleared repo transaction feeds to Clearstream, which would prevent competitors from being able to effectively compete. Euroclear being Clearstream's closest competitor and only other ICSD, it has a specific role in the competitive process taking place in the relevant markets. The foreclosure of Euroclear in particular but also other competitors (which already today generally do not receive settlement feeds from CCPs and are less active than the two ICSDs in relation to fixed income) would thus have a significant impact on competition on the relevant markets.

8.4.4.3. Assessment related to the market for collateral management

8.4.4.3.1. The merged entity would have the ability to foreclose access to important inputs for collateral management

8.4.4.3.1.1. Cleared repo transaction feeds are an important input for collateral management

(679) From a general point of view, CSDs, ICSDs and custodians provide collateral management on the basis of the duty given by customers to manage the assets they (electronically) hold in custody (and receive through transaction settlement). It is

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496 DBAG's internal document, [BUSINESS SECRET], 20 November 2015, page 9 [ID 3420-46202]. [BUSINESS SECRETS] However, the Notifying Parties indicated to be unable to provide market shares for settlement in T2S (response to RFI 21, question 39), for bond settlement overall (see for example RFI 10, question 26) and for global custody services (see for example RFI 21, question 38). The Notifying Parties indicated in response to RFI 10, question 26 that they have a combined market share of [30-40%] for primary settlement of bonds.

497 Article of efinancial news "*Euroclear to miss planned T2S entry"*, dated 30 October 2015 and consulted on 5 December 2016.

also possible for customers to appoint a different service provider for custody services and for collateral management services. In such case, the CMS provider needs to have access to assets held in custody at a third party.[498]

(680) The assets used in ATS traded CCP cleared repo transactions are high quality liquid assets, i.e. assets that are highly demanded and have a high recognised value on the market (for example German government bonds). These assets are the ones generally accepted by all CCPs as collateral in all types of transactions and including in derivative transactions which are collateral intensive ("*CCPs generally accept central government securities as collateral in repo operations, while some CCPs (such as Eurex and soon also LCH.Clearnet SA) also accept a broader set of eligible collateral and correspondingly wider array of haircuts also applies.*"[499]). Assets of lower quality can either not be accepted by CCPs (i.e. not eligible as collateral) or require to post additional margin to cover the additional risk taken by the CCP, and are thus more costly for customers.

(681) The ability for CMS providers to have access to cleared repo feeds is therefore important for the management of collateral (in relation to all types of transactions, including derivatives).

(682) The Notifying Parties submit that the Statement of Objections is based on an unduly narrow market definition which ignores the fact that CMS can be provided on the basis of feeds of either cleared or uncleared trades, as well as on the basis of feeds from repos and bonds but also equity transactions, and that in this context, the input from LCH.Clearnet to Euroclear Bank's services is modest.

(683) However, the Commission considers that the specific type of assets used in cleared repo transactions (government bonds that are HQLA) are particularly important to compete in the market for collateral management services. Their importance cannot be only evaluated on the basis of the volumes of feeds they represent. As regards the market definition, the Commission left open whether the market for collateral management services should be narrower, as it considers that the Transaction raises competition issues irrespective of the exact market definition. In addition, CCPs have a central role in relation to collateral management, as manager of counterparty risk, they decide where the collateral they request should be deposited. CCPs therefore cannot just be considered as one out of many counterparties.

(684) According to the Notifying Parties, the Statement of Objections also fails to address the differing significance of triparty and non-triparty repo transaction feeds to CMS, with only triparty repo feeds being a direct input for CMS and the proportion of triparty repo trade feeds provided by LCH.Clearnet to Euroclear Bank being de minimis.

(685) Contrary to the Notifying Parties' claim, while CMS is indeed embedded into triparty repo transactions, fixed income securities used in non-triparty repo transactions can be used and are used as collateral in various types of transactions including triparty repos, derivatives, etc. It is thus not correct to consider that only triparty repo feeds are an input for CMS.

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498 Agreed non-confidential minutes of a teleconference call with BNY Mellon of 19 July 2016, paragraph 14, [ID 3725]

499 European Central Bank, "*Collateral eligibility and availability*", page 24.

(686) The Commission thus concludes that cleared fixed income (in particular repo) transaction feeds are an important input for the provision of collateral management services in the EEA.

(687) (I)CSDs and custodians provide custody services on the stock of securities they receive through settlement feeds. Customers also generally receive collateral management services from the same provider as the one providing settlement and custody services.[500] Therefore, the fact that the merged entity will have the ability to foreclose access to cleared fixed income transaction feeds, as explained in Section 8.4.4.2.1. will lead the merged entity to have the ability to foreclose access to an important input for the provision of collateral management.

(688) The fact that competing CMS providers would have no or reduced access to cleared repo transaction feeds will prevent them from effectively competing for CMS provided to large customers for which Euroclear and Clearstream in particular are close competitors.

8.4.4.3.1.2. CCPs can also determine where collateral/margin is to be deposited

(689) In addition to having a determining role in the settlement process, CCPs decide where collateral (also called margin) should be put for transactions they clear.

(690) Article 47(3) of EMIR stipulates that "*Financial instruments posted as margins or as default fund contributions shall, where available, be deposited with operators of securities settlement systems that ensure the full protection of those financial instruments. Alternatively, other highly secure arrangements with authorised financial institutions may be used*." This article indicates that CCPs have the ability to decide where collateral should be held, providing a choice between securities settlement system operated by a CSD or other highly secure arrangements with authorised financial institutions. Those "highly secured arrangements for the deposit of financial instruments" or "maintaining cash" are further defined in Articles 44-45 of the Commission Delegated Regulation[501] and include, among others, an authorised credit institution as defined under Directive 2006/48/EC (i.e. including custodians holding banking licences). The European Securities and Markets Authority's ("ESMA") Q&A document on EMIR[502] dated 6 June 2016 provided further clarification of these requirements, in particular as regards the question as to where to deposit financial instruments in case operators of securities settlement systems that ensure the full protection of those financial instruments would be unavailable.

(691) This lack of choice at clearing level and the impact on the downstream markets is also underlined by BNY Mellon that explains that: *"The particular concerns that the proposed transaction raise relate to the combined importance of the CCPs in the merged group, to the current operation of a vertical silo by some entities of the merged group, and to the very limited number of locations at which Eurex Clearing currently holds collateral.*"[503]

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500 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 120.

501 Commission Delegated Regulation (EU) No 153/2013 of 19 December 2012 supplementing Regulation (EU) No 648/2012 of the European Parliament and of the Council with regard to regulatory technical standards on requirements for central counterparties.

502 Questions and Answers on Implementation of the Regulation (EU) No 648/2012 on OTC derivatives, central counterparties and trade repositories (EMIR).

503 Bank of New York Mellon, reply to questionnaire Q1 "Sell-side Customers", question 191, [ID 1730].

(692) It follows from the above that the merged entity (and in particular LCH.Clearnet, since Eurex' collateral is deposited at Clearstream) would have the ability to require customers to deposit collateral currently posted at Euroclear and other CSDs/custodians to Clearstream. Since customers tend to trade to the extent possible with counterparties that have the same collateral management provider as they have (one explains for example that it "*Reduces settlement risks, reduces (normally) settlement costs and settlement times (e.g.: pls. see aim to T2S)*"[504]), the merged entity will have the ability to foreclose access to collateral related to repo transactions, and thus to important inputs for the provision of collateral management more generally. By being a central counterparty (and not one out of many counterparties), the decision of the CCP in this regard would have a direct impact on the decision of customers as to where they hold their assets under custody, and thus on the ability of other competitors to compete.

(693) In light of the above, the Commission considers that the merged entity would have the ability to foreclose access to important inputs for collateral management.

8.4.4.3.2. The merged entity would have the incentive to foreclose access to important inputs for collateral management

(694) The location where collateral required by CCPs has to be posted and the location where settlement and custody should occur are closely related, as explained by the global custodian, BNY Mellon: "*The decision by a CCP as to where it receives collateral affects market participants because they need to provide the collateral to the CCP. A market participant can hold a particular securities position in only one location at any one moment in time, so that if a market participant is obliged to hold a securities location in one location in order for it to be available as collateral for a CCP, this affects the location of that securities position for custody and for settlement purposes, and for the purposes of providing collateral to other market participants (when that securities position is used to collateralize exposures relating to other types of trading activity with other parties).*"[505] The merged entity will thus have the incentive to foreclose access to cleared repo transaction feeds and to require collateral to be deposited at Clearstream, because it is likely to increase its market share in collateral management further.

(695) In addition, the fact that custody and collateral management are characterised by economies of scale for customers will increase the incentive of the merged entity to foreclose access to important inputs, as customers will more likely move to Clearstream even if initially only a few decide to do so. Customers indeed generally try to aggregate assets, or at least asset classes that can be used in given types of transactions, with a limited number of (I)CSDs or custodians.[506]

(696) First, this reduces operational risks and costs associated with cross-system settlement and failed transactions, as described in Section 8.4.4.2.1.2. above.

(697) Second, it allows better availability of assets used as collateral, as it allows not to move collateral from one custody system to another when collateral should be used. The global custodian JP Morgan explains that "*The core business model lies within*

504 DZ Bank AG, reply to questionnaire Q1 "Sell-side Customers", question 174, [ID 1656].

505 Bank of New York Mellon, reply to questionnaire Q1 "Sell-side Customers", question 191, [ID 1730].

506 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 117.

the mobilisation of collateral and its optimal allocation for its clients."[507] Customers in the market investigation also underline the importance of centralising collateral: "*It is important for collateral centralization and optimization of operational processes (we have less movements to manage, thus the costs and operational risk diminish).*"[508]; "*flows and processes already in place with a specific CMS provider are just making a choice prevailing in order to exploit scale effects.*"[509] This is particularly important for short-term repo transactions which are used by banks for financing purposes at the end of the day. Fully aggregating assets for a given business at one place may not always be possible, as certain CCPs such as Eurex for example require collateral to be posted in their system. Customers which do not have chosen Clearstream as their main custody/CMS provider but still want to benefit from the liquidity DBAG enjoys in certain markets can decide to keep some assets in Clearstream.

(698) This is also evidenced by the model of the global custodian Bank of New York Mellon: when it uses an intermediary in order to serve a given customer, it generally aggregates a given type of assets in the accounts of a given sub-custodian or ICSD, which facilitates and render more efficient its access ("*Our standard model, both as a custodian and as a triparty agent, is that we hold securities issued in a specific issuer CSD either on accounts with that issuer CSD or on accounts with a sub-custodian that in turn holds accounts with that issuer CSD. With respect to international securities (i.e. securities for which Clearstream Banking Luxembourg and Euroclear Bank act jointly as issuer CSDs), and as a matter of standard practice, we hold securities on behalf of any one individual client with only one of the two ICSDs.*")[510] This consolidation driver is also supported by explanations provided by the Notifying Parties in the Form CO, which indicate that assets used for collateral management can be used in various types of transactions: "*For Clearstream, tri-party CMS is generally a standalone service and not limited to specific uses (such as repos or margin posting for derivatives). Standard umbrella collateral management service agreements ("CMSA") support all services (securities lending, pledges with central banks, tri-party repos, collateralisation for loans, margin collateral, secured certificates).*"[511]

(699) Therefore, because customers tend to aggregate collateral in one place and to trade with customers that have the same collateral management, the foreclosure strategy described above is likely to be beneficial for Clearstream, and thus provide Clearstream with the incentive to enter into a foreclosure strategy. BNY Mellon (global custodian) which competes in relation to collateral for uncleared transactions and is primarily active in relation to equities transactions fears that "*the merged entity could limit the ability of BNY Mellon to provide collateral management to securities held in the merged entity's CSDs*".[512] This is because the CCP can choose where collateral should be put and can thus induce additional "*transaction costs and risks through external settlement or complexity*" for customers.[513] BNY Mellon also

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507 Agreed minutes of teleconference call with JP Morgan of 12 August 2016, paragraph 3, [ID 3629].
508 Société Générale, reply to questionnaire Q1 "Sell-side Customers", question 174, [ID 2647].
509 Intesa SanPaolo, replies to questionnaire Q1 "Sell-side Customers", question 179, [ID 2365].
510 Bank of New York Mellon, Q11 "Sell-side Customers and issuers", question 116.1, [ID 5132].
511 Form CO, paragraph 2690.
512 Agreed minutes of a teleconference call with BNY Mellon of 19 July 2016, paragraph 21, [ID 3725].
513 Agreed minutes of a teleconference call with BNY Mellon of 19 July 2016, paragraph 24, [ID 3725].

underlines the importance for customers to minimise the fragmentation of their collateral, the complexity of its management and the number of service providers involved: "*[c]ustomers choose the collateral service provider on the basis of price and its ability to mobilise collateral in every direction (i.e. with any CCP or counterparty requiring margin for repo or derivative trades).*"[514] These different elements are likely to lead the merged entity to have incentives to foreclose access to important inputs for the provision of collateral management services.

(700) The incentive to foreclose competing CMS providers is true for all cleared repo transactions, but can also have a particular impact on the CMS for ATS traded CCP cleared triparty repo transactions where settlement and collateral management are directly linked. [BUSINESS SECRETS]. However, post-Transaction, the merged entity is unlikely to have the same incentives, as the lack of support or development to €GC Plus would benefit DBAG, as the market leader in the ATS traded and CCP cleared triparty repo market.

(701) In view of the foregoing, the Commission therefore considers that the merged entity would have the incentive to foreclose access to important inputs for collateral management.

8.4.4.3.3. The Transaction would lead to a significant impediment to effective competition in the markets for collateral management

(702) Similarly to settlement and custody services (see Section 8.4.4.2.3.), Clearstream and Euroclear are particularly close competitors. This is also supported by the market investigation, as illustrated by BNY Mellon for example: "*The main providers of collateral management services in Europe are JP Morgan, BNY Mellon, Clearstream Banking Luxembourg and Euroclear Bank.*"[515]

(703) The ability of custodians to compete relies on their ability to provide custody services for the largest amount of securities and to mobilise collateral in a maximum of transactions (either by category: equity transactions, i.e. equity and equities lending transactions; fixed income transactions, i.e. repos and bonds; derivatives, or for all types of transactions).[516] The fact that neither Euroclear nor any other player would be able to effectively compete in the market for international settlement and custody services for fixed income will have a direct effect on their ability to have access to important inputs for providing collateral management, and thus on their ability to compete in the market for collateral management, in particular for large customers for which Clearstream, Euroclear and the global custodians compete more particularly. In addition, the fact that large customers in particular would switch part or all of their collateral management portfolio to Clearstream is likely to have an impact on smaller customers which benefit from network effects with these large customers and thus on the market for collateral management overall.

(704) In addition, global custodians already today face limitations in their ability to serve customers and compete efficiently with Euroclear and Clearstream, as they generally do not provide collateral management in relation to cleared transactions, as explained

514 Agreed minutes of a teleconference call with BNY Mellon of 19 July 2016, paragraph 24, [ID 3725].

515 Agreed minutes of a teleconference call with BNY Mellon of 19 July 2016, paragraph 12, [ID 3725].

516 Agreed minutes of a teleconference call with BNY Mellon of 19 July 2016, paragraph 24, [ID 3725]. Agreed minutes of a teleconference call with JP Morgan of 12 August 2016, paragraph 13, [ID 3635].

for example by BNY Mellon: "*BNY Mellon offers similar collateral management services to, for example, Clearstream Bank Luxembourg. However, in Europe, BNY Mellon is restricted to provide CMS only for uncleared transaction types such as OTC repos, securities lending, initial margin for un-cleared derivatives instruments*".[517]

(705) The fact that CCPs can decide where collateral should be put and that LSEG's clearing houses will have incentive to use Clearstream as in-house provider, will also further impede effective competition in collateral management, as Euroclear is, in combination with LCH.Clearnet, the only alternative to Eurex/Clearstream for the provision of collateral management for cleared repo transactions and thus the only player which can allow efficient use of collateral used by customers in all types of transactions (global custodians not being active in relation to cleared transactions). One customer indicates for example in this regard that, in case cleared repo trades settled in Euroclear were settled in Clearstream that "[it] *would remove our possibility to move our activity from Clearstream to Euroclear in the future*".[518]

(706) The fact that both Euroclear and Clearstream have a much larger collateral pool than the collateral they receive from CCPs, as argued by the Notifying Parties, does not take account of the importance of cleared repo transactions, in particular the fact that they involve dealers and large banks, as well as high quality liquid assets which are particularly important for collateral management, as they are accepted by all CCPs in various types of transactions.

(707) In addition, the Notifying Parties indicate in their response to the Decision opening the proceedings that LCH.Clearnet's triparty repo business is very small compared to Euroclear's CMS asset pool. Considering LCH.Clearnet's triparty repo business only excludes the cleared non-triparty repos transaction feeds, which also provide inputs for the provision of collateral management and does not take into account the fact that fixed income assets used in cleared repo transactions are particularly important for the provision of CMS in general. The size of LCH.Clearnet's triparty repo business in comparison with Euroclear's CMS asset pool is thus not representative of the importance of cleared repo transactions for the provision of CMS. The Notifying Parties also do not appear to make a distinction between asset that are under management of Euroclear or other competitors and assets effectively used as collateral in different transactions.

(708) In light of the above, the Commission therefore considers that the merger would lead to a significant impediment to effective competition in the market for collateral management services.

8.4.4.3.4. Conclusion

(709) In view of the foregoing, the Commission concludes that the Transaction would lead to a significant impediment of effective competition in the market for CMS. This is because, in view of the Notifying Parties' *de facto* monopoly in the market for ATS traded and CCP cleared triparty repo clearing, in the market for ATS traded and CCP cleared triparty repo clearing and, to a lesser extent, in the market for CCP clearing

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517 Agreed minutes of a teleconference call with BNY Mellon of 19 July 2016, paragraph 13, [ID 3725].

518 Crédit Agricole, reply to questionnaire Q11 "Sell-side Customers and issuers", question 137.1, [ID 4546].

of bonds, the merged entity would have the ability and incentive to foreclose competitors, and more particularly its closest competitor Euroclear, by diverting cleared repo transaction feeds and requiring customers to post collateral at Clearstream, which would prevent competitors from being able to effectively compete in the market. Euroclear being Clearstream's closest competitor and only other ICSD, it has a specific role in the competitive process taking place in the relevant markets. The foreclosure of Euroclear in particular but also other competitors (which already today generally do not hold collateral received by CCPs and are less active than the two ICSDs in relation to CMS related to fixed income) would thus have a significant impact on competition on the relevant markets.

9. FINANCIAL DERIVATIVES

9.1. Introduction to financial derivatives and Notifying Parties' activities

(710) In its decision in *DBAG/NYSE Euronext*, the Commission identified separate markets for derivatives according to the underlying asset class, distinguishing between interest rates derivatives,[519] single equity derivatives,[520] and equity index derivatives.[521]

(711) In addition, in the same decision, the Commission also distinguished derivatives according to the execution mode, separating exchange traded derivatives (ETDs) predominantly in the form of futures and options and derivatives traded OTC often in the form of swaps.[522] This distinction had been reconsidered in *Intercontinental Exchange/NYSE Euronext*[523] but was ultimately left open in this case.

(712) Finally the Commission has previously considered a possible distinction between different types of contracts but left this question finally open. Within exchange traded contracts this related specifically to futures and options.[524]

(713) The market definition stemming from these past decisions is not contested by the Notifying Parties in this case.[525]

9.1.1. Regulatory background

(714) As indicated in Section 5.2.3. of this Decision, the regulatory background is an important backdrop to the assessment of the effects of this case. Specifically, open access provisions in the Directive on Markets in Financial Instruments repealing Directive 2004/39/EC ("MiFID II")[526] and the Regulation on Markets in Financial Instruments ("MiFIR"),[527] which aim at mitigating some of the obstacles resulting from the network effects discussed in Section 5.2.1. above and further promote competition between exchanges are particularly relevant in the area of derivatives.

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519 See Case COMP/M.6166 - DBAG / NYSE Euronext, paragraph 401 et seq.
520 See Case COMP/M.6166 - DBAG / NYSE Euronext, paragraph 420 et seq.
521 See Case COMP/M.6166 - DBAG / NYSE Euronext, paragraph 427 et seq.
522 See Case COMP/M.6166 – DBAG / NYSE Euronext, paragraph 260 et seq.
523 See Case COMP/M.6879 – Intercontinental Exchange / NYSE Euronext, paragraph 72.
524 See Case COMP/M.6116 – DBAG / NYSE Euronext, paragraph 442.
525 Form CO (updated version of 26 August 2016), paragraph 2802.
526 Directive 2014/65/EU on markets in financial instruments (OJ L 173, 12.6.2014).
527 Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012, (OJ L 173, 12.6.2014, p. 84).

(715) The rules pertaining to open access with regard to exchange traded derivatives are Articles 35 and 36 of MIFIR, dealing with access to CCPs by trading venues and access to trading venues by CCPs respectively. These rules are further specified in regulatory technical standards (RTS). The two relevant RTSs for the access regime are RTS 15 dealing with access to trading venues and to CCPs[528] and RTS 16 dealing with access to benchmarks.[529]

(716) Access can be of two kinds: access of one or more trading venues to a CCP and access of multiple CCPs to a trading venue.

(717) A regime that guarantees access to a CCP by multiple trading venues is designed to allow competing trading venues to benefit from the netting efficiencies of the host CCP the same way as the incumbent trading venue. In such a system the competing trading venue can list a contract identical to the one traded on the incumbent venue and traders would be able to open a position on one trading venue and close it out on the other given that all such contracts are cleared at the same clearing house.

(718) Access to a trading venue by one or multiple CCPs gives them the possibility to compete with the CCP of the incumbent exchange without having to overcome the network and scale effects resulting from the incumbent's liquidity advantage. The implementation of these rules will make it more difficult for trading venues to exclude competing CCPs from accessing their trade feeds. This can be an important step to foster competition between CCPs.

(719) According to the Horizontal Merger Guidelines, in assessing the competitive effects of a merger, the Commission may in some circumstances take account of future changes to the market that can be reasonably predicted.[530] In this context it has to be taken into account that MiFID II and MiFIR were adopted by the European Parliament on 15 April 2014, by the Council of the European Union on 13 May 2014 and published in the EU Official Journal on 12 June 2014. There is therefore no uncertainty about the general shape of the regulation, even if application of the open access regime is not yet fully effective. The applicability of MIFID II and MIFIR was postponed by one year compared to the original timetable from January 2017 to January 2018. In addition, based on Article 54 of MIFIR, CCPs and trading venues may submit an application to their competent regulators for permission to avail themselves of a transitory regime that can last up to an additional thirty months. Therefore, depending on the decision of the relevant national regulators, which have certain discretion on the matter, the rules on access will be applicable at latest in July 2020.

(720) While the absence of administrative and industry practice makes it difficult to predict accurately how the rules will be applied in practice, the upcoming regulation is an important step towards more competitive clearing markets in Europe and is likely to reshape the current functioning of the markets.

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528 Commission delegated regulation of 24 June 2016 supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards on clearing access in respect of trading venues and central counterparties (not yet published in the official journal).

529 Commission delegated regulation of 2 June 2016 supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council on markets in financial instruments with regard to regulatory technical standards on access in respect of benchmarks (OJ L 313, 19.11.2016, p. 6–10).

530 Horizontal Merger Guidelines, paragraph 9.

9.1.2. Notifying Parties' activities

(721) In the area of financial derivatives, DBAG is active mainly through Eurex,[531] a global trading venue based in Germany and Switzerland offering trading of futures and options based on various underlying asset classes.

(722) As regards clearing, Eurex Clearing provides CCP services for exchange-traded derivatives executed on the Eurex Exchange (including off-order book trades) in a vertically integrated structure as well as clearing of OTC traded instruments.

(723) LSEG offers trading services for derivatives on the LSE Derivatives Market (LSE DM). This trading venue offers trading of derivatives on interest rates, single stock equity and indices as well as depository receipts. It also offers trading of derivatives listed on Oslo Børs.

(724) Through its Italian operations of Borsa Italiana, LSEG operates the Italian Derivatives Market (IDEM) offering on-book trading and trade entry services for off-book trading on a portfolio of Italian and other European equity and related index derivatives.

(725) LSEG is active in the clearing of derivatives through LCH.Clearnet. It is particularly strong in clearing of OTC traded IR derivatives via its SwapClear service. Clearing of FX derivatives is offered via ForexClear, and Credit Default Swaps ("CDS") via CDSClear.

(726) LCH.Clearnet also provides merchant clearing services to non-vertically integrated trading venues, namely Euronext, Nasdaq's NLX,[532] and Oslo Børs. In Italy, LSEG operates Cassa di Compensazione e Garanzia ("CC&G") which provides clearing of derivatives contracts traded on IDEM.

9.2. Market definition

9.2.1. General criteria

(727) In line with its previous decisions, the Commission considers that derivatives contracts can be distinguished based on underlying asset classes, execution environment, and types of contracts. These general criteria considered in the relevant case law are first introduced, before the relevant product markets in this case are discussed in detail, namely trading and clearing of exchange traded interest rate derivatives, clearing of OTC traded interest rate derivatives, and trading and clearing of single stock equity derivatives.

9.2.1.1. Distinction based on underlying asset class

(728) Based on the type of the underlying variable or asset, derivatives can be categorised into equity derivatives (single stock or index based), interest rate derivatives, currency derivatives, different types of commodity derivatives, credit derivatives, and foreign exchange (FX) derivatives.

(729) In its previous decisions the Commission concluded that in relation to exchange traded derivatives, different asset classes belong to different markets. This conclusion was based on the fact that from a demand-side perspective, the different

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531 Eurex operates the derivatives exchange Eurex Deutschland and it holds all of the shares in Eurex Clearing AG ("Eurex Clearing"), which is the clearing-house within DBAG.

532 Nasdaq publically announced to close trading on NLX as of 28 April 2017.

types of risks associated with the different asset classes are not substitutable in a meaningful way.[533] For instance, an exposure to foreign exchange risk cannot be hedged with an interest rate derivative or a single stock equity derivative contract.

(730) This finding is further supported by supply-side considerations. Although any exchange or clearing house could start offering products belonging to an asset class it does not currently offer, it is unlikely to be able to do this with the immediacy required for supply-side substitution. First, in a new asset class the regulatory approvals take much more time than within the asset class where the exchange is already present. Second, establishing a clearing framework for a new asset class takes much more time than doing so for an additional instrument belonging to an asset class the provider is already active in. For example, in a new asset class the exchange does not have the underlying historical data that is necessary for risk management and has to obtain such data from another source. Devising a risk model, testing it and adapting the risk management systems take also take more time in a new asset class than in the asset class the exchange has already significant expertise in. Third, given that in a new asset class the exchange cannot offer margin offsets, the launch of the product inevitably results in a weaker constraint on competitors than a product launch within the same asset class.

(731) Therefore, for the purposes of this Decision, the Commission considers that the relevant derivatives markets should be defined along the underlying asset class.

9.2.1.2. Role of the execution environment

(732) In the decision *DBAG/NYSE Euronext* the Commission concluded that exchange-traded derivatives and derivatives traded OTC constitute separate product markets in view of their different characteristics, complementary nature and lack of substitutability except for a small portion of ETD-lookalikes.[534]

(733) While exchange traded derivatives (mainly futures and options) are only available in predefined bundles of trading and clearing, OTC traded derivatives are characterised by an unbundled offering. Indeed, OTC derivatives can be traded either on electronic OTC platforms, or purely bi-laterally and they can be cleared or not.

(734) The post-crisis regulatory initiatives have introduced significant changes with regard to the way OTC derivatives are transacted. Namely, EMIR[535] prescribes that standardised and relatively liquid OTC derivatives must be centrally cleared.[536] The mandating of CCP clearing is usually referred to as the clearing obligation. MiFID

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533 See Case COMP/M.6166 - DBAG / NYSE Euronext, paragraph 396.

534 See Case COMP/M.6166 - DBAG / NYSE Euronext, paragraph 367.

535 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.

536 Clearing obligations currently exist in the EU for interest rate derivatives (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 and Commission Delegated Regulation (EU) 2016/1178 of 10 June 2016 supplementing Regulation (EU) No 648/2012 of the European Parliament and of the Council with regard to regulatory technical standards on the clearing obligation) and index credit default swaps (Commission Delegated Regulation (EU) 2016/592 of 1 March 2016 supplementing Regulation (EU) No 648/2012 of the European Parliament and of the Council with regard to regulatory technical standards on the clearing obligation).

II[537] and MiFIR[538] further provide that certain centrally cleared derivatives must be traded on organised trading platforms with pre-trade and post-trade transparency. The obligation to trade these derivatives on transparent trading platforms is referred to as the trading obligation. The clearing and trading obligations will be gradually phased in through delegated acts in the coming years. These delegated acts specify the entry into force of the trading and the clearing obligation for the different types of derivatives and different types of counterparties.[539] In anticipation of the regulatory reforms the majority of OTC derivatives are by now centrally cleared.

(735) In its previous decisions, the Commission considered that, contrary to ETD derivatives where products are always traded in bundles including trading and clearing, OTC derivatives are different. Specifically, in *Deutsche Börse / NYSE Euronext* the Commission found that a separate market could exist for the provision of clearing services for third party platforms, including OTC platforms.[540] This consideration was also recalled in *Intercontinental Exchange Group / NYSE Euronext*, without, however, a definitive conclusion.[541]

(736) This is based on the fact that contrary to the exchange-traded derivatives model, in the current model of OTC trading, OTC trading venues are connected to several CCPs; counterparties often have a separate relationship with the CCP (and choice thereof) independently of the execution mechanism (trading platform or voice). The Commission therefore concludes, for the purposes of this Decision, that clearing and trading services for OTC interest rate derivatives are provided separately and form separate markets.

(737) Therefore, for the purposes of this Decision, the Commission considers that the relevant derivatives markets should be defined along the execution environment.

9.2.1.3. Types of derivatives contracts

(738) The three main types of derivatives contracts are options, futures/forwards and swaps. Options may be traded OTC or on-exchange.

(739) An option is a contract between two counterparties under which one counterparty (the option buyer) acquires the right (against the payment of a premium), but not the obligation, to buy from, or sell to, the other counterparty (the option seller) a specific amount of the underlying asset at a specific "strike price" on or before a specified date.

(740) A future/forward is a contract between two counterparties under which one party, the seller, agrees to sell to the other counterparty (the buyer) a specified amount of the

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537 Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (recast), OJ L 173, 12.6.2014 p. 349.

538 Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012, OJ L 173, 12.6.2014 p. 84.

539 For interest rate derivatives the relevant delegated acts are Commission Delegated Regulation (EU) 2015/2205, OJ L 314, 1.12.2015, p. 13, and Regulation (EU) 2016/1178, OJ L 195, 20.7.2016, p. 3; for credit default swaps (CDS) the relevant delegated act is Commission Delegated Regulation (EU) 2016/592, OJ L 103, 19.4.2016, p. 5. These delegated acts are based on EMIR.

540 See Case COMP/M.6166 – DBAG / NYSE Euronext, footnote 117.

541 See Case COMP/M.6873 – Intercontinental Exchange / NYSE Euronext, paragraph 16.

underlying asset (or its cash equivalent) at a specified future date at a price agreed at the time of the conclusion of the contract. The difference between a future and forward is that futures are traded on organised exchanges whereas forwards are privately negotiated.

(741) A swap is an agreement between two counterparties to exchange a sequence of cash flows over a period of time. These cash flows could for example be tied to the value of fixed or floating interest rates (IRS) or to the value of foreign currencies (FX swaps).[542] Swaps are typically OTC traded instruments.[543]

(742) In the *DBAG / NYSE Euronext* decision, the Commission concluded that swaps do not belong to the same product market as options and futures.[544] This was based on the different characteristics of the instruments, the different purposes they are used for, and the different execution environments. In this case, the market investigation did not reveal any reason to challenge this conclusion.

(743) Therefore, for the purposes of this Decision, the Commission considers that a separate relevant market for swaps exists. The question of whether options and futures should be considered separately can be left open for the purposes of this Decision as it does not affect the Commission's competitive assessment.

9.2.2. Exchange traded interest rate derivatives

(744) Exchange traded interest rate derivatives encompass futures and options based on either short term money market rates like Euribor (STIR derivatives) or capital markets usually built on sovereign bonds like Bund or Bobl (LTIR derivatives). In the decision *Deutsche Börse / NYSE Euronext*, the Commission noted that in spite of an uncontested distinction between these two far ends of the yield curve, there is still a continuum of maturities along the interest rate yield curve for which a clear delineating criterion would be difficult to define.[545] The Commission therefore considered that a split along the nature of the interest rate underlying and their place on the yield curve might not fully reflect the reality in these markets; however, the Commission finally left the question of a possible distinction along these lines open.[546]

(745) The Notifying Parties use the capital markets (LTIR) vs. money market (STIR) distinction for the calculation of market shares[547] but do not claim these two segments should be analysed as separate markets.[548] In any event, the exact product market definition in interest rate derivatives can also be left open in the present case as it does not change the competitive assessment.

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542 Two other types of swaps are credit default swaps and total return swaps.

543 The Commission also notes that there is a development bringing standardised swaps with a Market Agreed Coupon ("MAC") and standardised International Monetary Market ("IMM") dates on exchange.

544 See Case COMP M.6166 - DBAG / NYSE Euronext, paragraph 443.

545 See Case COMP M.6166 - DBAG / NYSE Euronext, paragraph 409 et seq.

546 See Case COMP M.6166 - DBAG / NYSE Euronext, paragraph 419.

547 Form CO, Annex LL_6D-8D_074 "Annex 8 Methodology for calculation of ETD market Shares", page 10.

548 LSEG's internal document "Investment and Shareholders Agreement", Annexure B "Initial Business Plan and Budget" (FBD_6D-8D_062), page 164 et seq., [ID 584-178]). Internal document suggests that other delineations, in this case based on duration are also common.

(746) Therefore, for the purposes of this Decision, the question of whether the market for trading and clearing of European interest rate derivatives should be further sub-segmented into STIR and LTIR can be left open as it does not affect the Commission's competitive assessment in relation to interest rate derivatives.

9.2.3. Clearing of interest rate derivatives traded OTC

(747) OTC derivatives are derivatives that are traded away from exchange and include interest rate derivatives (IRD), credit derivatives, foreign exchange (FX) derivatives, equity derivatives and commodity derivatives. IRD make up 82% of the outstanding notional amount of OTC derivatives, while FX derivatives, credit derivatives[549] and equity derivatives make up 14%, 3%, and 1% of total outstanding notional respectively.[550] IRD include interest rate swaps (IRS), forward rate agreements and overnight index swaps. By far the most commonly traded IRD is IRS, which makes up nearly three quarters of IRD outstanding notional amount as at 1H of 2015.[551]

(748) As regards distinguishing separate markets according to asset classes (interest rate derivatives, credit derivatives etc.), the above conclusion[552] also applies to OTC derivatives, given that the different types of risks are not interchangeable irrespective of the execution environment. From a demand-side perspective, clearing an interest rate derivative product cannot be substituted with the clearing of a credit derivative. The clearing of different classes of OTC derivatives is to be distinguished by asset class from a demand perspective.

(749) As to the supply-side substitutability, CCPs that clear derivatives in one asset class are likely to have or build capabilities to offer clearing of another asset class building on their existing workflows. At the same time, there are several hurdles that make it difficult for a CCP to move rapidly into another asset classes, such as obtaining regulatory approvals, devising a risk model, obtaining the underlying data for risk management, and building out the right connectivity. All of this takes more time in a new asset class than doing the same in respect of different products within the same asset class. This is also evidenced by the fact that different players control margin pools of different OTC derivatives: ICE holds CDS while LCH.Clearnet holds IRS. Due to these factors, the Commission considers that, for the purposes of this Decision, the relevant market in relation to OTC clearing should be subdivided according to asset classes.

(750) Therefore, for the purposes of this Decision, the Commission considers that the relevant product market is the market for CCP clearing of interest rate derivatives traded OTC.

9.2.4. Single stock equity derivatives

(751) Equity derivatives are contracts that derive their value from price movement of underlying equity stocks (i.e. shares). These types of instruments are used by market participants to reallocate the risk of price changes due to market movements of the underlying equities. Exchange-traded equity derivatives are always cleared by a central counter party ("CCP") which is pre-selected by the trading venue so that

549 Predominantly in the form of Credit Default Swaps (CDS).
550 Form CO (updated version of 26 August 2016), figure D.5.
551 Form CO (updated version of 26 August 2016), paragraph 2883.
552 See above Section 9.2.1.1.

traders can only chose a fixed bundle containing both services.[553] In general, exchange traded equity derivatives can be distinguished by the type of instrument and the type of underlying. With regards to the relevant instrument, a differentiation between options and futures can be considered.

(752) Exchange traded single stock equity futures and options are comparable instruments. While options confer a right to buy (or sell) an underlying at the prearranged price on the fixed date, futures do not confer a right of choice, leading to a linear pay-off structure. Both types of instruments can be financially or physically settled. For futures, the physical settlement is not typical because traders tend to close out positions before expiry date.

(753) Considering the type of underlying, a basic distinction can be made between index based products that are linked to a number of equities and single stock equity derivatives, deriving their value from the price movement of one specific underlying stock. For the case at hand, only single stock equity derivatives are relevant.

(754) In its previous decision, the Commission also considered that single stock derivatives could be subdivided according to the individual stock or comprise a wider set of stocks up to a level of single stock derivatives based on any European underlying.

(755) The results of the market investigation further confirmed that single stock equity derivatives on specific national underlyings cannot be directly substituted with other instruments from a buy-side perspective. Such a stock-specific market could be supported by responses to the market investigation from the buy-side which state that "*single stocks derivatives are more efficient ways to get exposure to an issuer compared to cash equities*".[554] In addition, one market participant specified that: "*Because our investment strategy is "fundamental" (i.e. we examine for each company its financial statements, health, competitors and markets looking at historical and present data to make financial forecasts), our investment decisions are company specific.*"[555] This indicates a separate market of single stock equity derivatives which would be significantly smaller than one market comprising all EEA underlyings.

(756) However, the Commission has already considered in *DBAG / NYSE Euronext*, that a market definition on a "per contract" basis would be inappropriate, given that customers implement trading strategies[556] and do not only invest in only one single contract[557] but ultimately left this question open.[558] The market investigation in this case showed a mixed result as regards the scope of such trading strategies. Some market participants consider a specifically national strategy, that could be seen as an indication for "home bias"; in this particular case an Italian focus: "*Basically (and mainly), our strategies are implemented by looking at the single stock derivatives level quoted on the Italian market.*"[559] Such a view would be further supported by respondents that could not identify any instruments traded on exchange that could be

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553 See Case COMP/M.6166 - DBAG / NYSE Euronext, paragraph 243.

554 Eurizon Capital, reply to questionnaire Q13 "Buy-side customers", question 111.1, [ID 5252].

555 Lone Pine Capital, reply to questionnaire Q13 "Buy-side customers", question 111.1, [ID 5393].

556 See Case COMP/M.6166 - DBAG / NYSE Euronext, paragraph 422.

557 See Case COMP M.6166 - DBAG / NYSE Euronext, paragraph 399.

558 See Case COMP M.6166 - DBAG / NYSE Euronext, paragraph 426.

559 Veneto Banca, reply to questionnaire Q13 "Buy-side customers", question 111.1, [ID 4774].

used as substitutes for single stock equity derivatives on Italian underlyings.[560] One participants summarised that *"non-linear or forward risk on Italian single stocks can only be mitigated via Italian single stock equity derivatives*".[561]

(757) The restriction of investment strategies to single stock equity derivatives based on underlyings from just one country is however not a commonly shared view of all buy-side market participants. Rather, other criteria like specific industry sector or larger regional criteria including EEA-wide focus have also been considered by some respondents from the buy side.[562]

(758) From a sell-side perspective, results were also mixed, giving strong indications for markets based on national underlyings but also mentioning a range of other criteria, including a common market for any EEA based single stock equity.[563]

(759) The same holds true for the supply-side, where some exchanges (typically the historic national incumbents) tend to serve national clients while pan-European players focus on more international investors. However, the clear delineation between both groups is not clear cut.

(760) Therefore, for the purposes of this Decision, the Commission considers that the relevant product market is the market for trading and clearing of single stock equity derivatives. The question of whether the market should be further segmented based on the nationality of the underlying can be left open for the purposes of this Decision as it does not affect the Commission's competitive assessment in relation to single stock equity derivatives.

9.2.5. Geographic market definitions

9.2.5.1. Trading and clearing of exchange traded interest rate derivatives

(761) As regards all types of exchange traded derivatives discussed above, the geographic scope of the relevant markets is likely to be at least EEA-wide. This is in line with the relevant precedents,[564] as well as the Notifying Parties' submission.

9.2.5.2. CCP clearing of OTC interest rate derivatives

(762) The Commission has not in the past considered geographic market definition for clearing of OTC derivatives.

(763) The Notifying Parties submit that the relevant geographic market should encompass all CCPs authorised to provide OTC clearing services worldwide. This is based on the claim that the demand-side of the market consist of major financial institutions with a global presence and are clearing members at multiple venues. In addition, regulatory aspects are harmonised based on equivalence.

(764) Within the EEA competition takes place within the same regulatory framework, under similar conditions and irrespective of the location of the CCP within the EEA. On the one hand, certain large CCPs, like LCH.Clearnet, clear trades across several

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560 Replies to questionnaire Q3 "Derivatives Customers", question 18.4; one anonymous Bank was the only exception mentioning ADRs as a potential substitute for selective underlyings.

561 Commerzbank AG, reply to questionnaire Q3 "Derivatives Customers", question 18.4, [ID 1970].

562 Replies to questionnaire Q13 "Buy-side Customers", question 111.

563 Replies to questionnaire Q11 "Sell-side Customers", questions 191 and 192.

564 See Case COMP/M.6166 - DBAG / NYSE Euronext and Case COMP/M.6873 - Intercontinental Exchange / NYSE Euronext.

regions. In addition, a number of third country CCPs have been recognized as authorised CCPs to provide clearing services to users in the EU under the equivalence regime.[565]

(765) However, third country CCPs (even those under the equivalent regime) often have a different geographic focus and not all customers in the EEA consider them as viable alternatives to which they could switch within a short time. In this regard, the market investigation produced a nuanced picture. While one large international bank stated that "*Nationality is not a factor*" for the selection of a CCP,[566] other respondents mentioned regulatory differences as relevant aspects for the selection of a CCP for IRS clearing. One bank also responded to prefer "*to have the CCPs and counterparties under the same regulatory regime for the time being*" but considered "*investigating other possibilities in the future*".[567]

(766) Also some buy-side participants stated to prefer "*to benefit from similar regulatory and risk environment*" or to stay to one regulatory environment because some their clients "*prefer not to take cross border risk*".[568] The Notifying Parties' claim that large institutions are typically members to several clearing venues could also be seen as an indicator for the fact that several clearing houses in different jurisdictions are not substitutable, otherwise the incentive for multiple memberships should be significantly reduced.

(767) On the other hand, the results to the market investigation also reveal that market participants at least monitor the development of other CCPs outside Europe, namely CME.[569]

(768) Therefore, the Commission considers that, for the purposes of this Decision, the relevant geographic market for CCP clearing services for OTC traded interest rate derivatives is at least EEA-wide in scope.

9.2.5.3. Trading and clearing of single stock equity derivatives

(769) Concerning Exchange traded European single stock equity options and futures the decision *DBAG/NYSE Euronext* concluded that customers of European exchanges are located around the world. However it also considered that from the supply-side European exchanges tend to be better placed to offer derivatives contracts based on European single stocks.[570] In sum, the Commission left the precise geographic market definition open.

(770) The evidence gathered in the case at hand does not provide anything which would require a change of the market definition. From a demand-side, both clients with a slightly more local investment focus coexist with truly global investors. The same holds true for the sell-side, where banks and dealer with some kind of national focus compete with large international players.

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565 Equivalence decisions are taken by the Commission under article 26 (5) EMIR. The current list of third country CCPs recognised to offer services in the EU under the equivalence regime can be found online under https://www.esma.europa.eu/sites/default/files/library/third-country_ccps_recognised_under_emir.pdf .

566 State Street, reply to questionnaire Q12 "Buy side customers L", question 117, [ID 5249].

567 Danske Bank, reply to questionnaire Q12 "Buy side customers L", question 117, [ID 4761].

568 BlackRock, reply to questionnaire Q12 "Buy side customers L", question 117, [ID 5404].

569 Replies to questionnaire Q11 "Sell-side Customers and issuers", question 184.1.

570 See Case COMP/M.6166 - DBAG / NYSE Euronext, paragraph 459.

(771) Therefore, for the purposes of this Decision, the market for single stock equity derivatives is at least EEA-wide in scope.

9.3. Competitive assessment

9.3.1. Exchange-traded interest rate derivatives

9.3.1.1. Market structure and the main players

(772) In the area of EUR-denominated exchange-traded interest rate derivatives, there are two main players, Eurex and ICE.

(773) In an overall market for exchange-traded interest rate derivatives (comprising both LTIR and STIR), Eurex holds a market share of [50-60%] in terms of the number of contracts traded. ICE is the second-largest player with [40-50%] of the market in contracts traded.[571]

(774) In a possible segmentation between long- and short-term interest rate derivatives,[572] Eurex and ICE are the respective market leaders on the two sides of this divide. In the LTIR derivatives market, Eurex has in excess of [90-100%] of the market in LTIR derivatives with its flagship Bund, Bobl and Schatz products.[573] In the EUR-based STIR market, the situation is reverse: ICE holds in excess of [90-100%] of the market with CurveGlobal and Eurex both having minimal volumes.[574]

(775) Remaining competitors in the market previously included NLX, who used to trade both LTIR and STIR, but recently exited the market.[575] Moreover, there is the recent entrant CurveGlobal, who offers for trading both LTIR and STIR.

(776) CurveGlobal is a joint venture between LSEG, CBOE and seven dealer banks, namely Bank of America Merrill Lynch, Barclays, BNP Paribas, Citigroup, Goldman Sachs, J.P. Morgan and Société Générale. The shareholder structure is indicated in Table 3 below.[576] CurveGlobal was launched in October 2016[577] and currently offers for trading (and clearing) the equivalents to the flagship interest rate futures of ICE (STIR futures, namely Short Sterling, and EURIBOR and LTIR Gilts futures) and Eurex (namely LTIR futures, such as Bund, Bobl and Schatz futures).

(777) CurveGlobal employs LSEG's LSE DM trading infrastructure. [BUSINESS SECRETS].[578] Moreover, CurveGlobal's futures are cleared by LCH Ltd.

Table 3: [CURVE GLOBAL'S SHAREHODLER STRUCTURE]

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571 Consolidated Form CO. Table D.15; the remaining [0-5%] belong to Nasdaq OMX.

572 Based on the Notifying Parties proposition to count "capital market" classified underlyings as LTIR and "money market" based instruments as STIR, following the FIA classification (LL_6D-8D_074, page 10).

573 Consolidated Form CO. Table D.17.

574 Consolidated Form CO. Table D.16.

575 See the report by Reuters http://www reuters.com/article/us-nasdaq-results-idUSKBN15F1CR

576 LSEG's internal documents, "LSE plc board paper – Curve", 25 January 2016, (Attachment to AUT-00004649 msg), page 4, [ID 913-215].

577 See LSEG internal document, AUT-00461131 msg.

578 CurveGlobal has a total workforce of [10-20] full time equivalent ("FTE") employees in 2016, according to the figures in the business plan (LSEG's internal document "Investment and Shareholders Agreement", Annexure B "Initial Business Plan and Budget" (FBD_6D-8D_062), page 167).

9.3.1.2. Commission's preliminary view in the Statement of Objections

(778) In the Statement of Objections, the Commission took the preliminary view that the Transaction would lead to a significant impediment of effective competition in the market for exchange-traded derivatives by likely eliminating CurveGlobal, a particularly well-placed competitor to challenge Eurex's strong position in LTIR derivatives. The Statement of Objections considered that CurveGlobal – despite being a recent entrant with a very small current presence – would be a particularly well-placed competitor to challenge Eurex's strong position in LTIR derivatives. Two of the main reasons for the Commission to reach this preliminary view were that CurveGlobal could attract customers by offering significant cross-margining benefits between exchange-traded and OTC-traded interest rate derivatives and that CurveGlobal benefitted from dealer support.

9.3.1.3. Notifying Parties' view

(779) In their response to the Statement of Objections, the Notifying Parties main arguments evolved about the allegedly overstated importance of CurveGlobal as a competitive constraint on Eurex.

(780) The Notifying Parties in particular contested the Commission's view that cross margining is a key factor in the competition between CurveGlobal and Eurex, which makes CurveGlobal a uniquely placed to challenge Eurex' position. To underpin [THE PARTIES VIEW IN RELATION TO] cross-margining [NOT BEING A RELEVANT COMPETITION FACTOR UNDER CURRENT MARKET CONDITIONS IN THE CONTEXT OF THE EXISTING REGULATORY FRAMEWORK], the Notifying Parties submitted [ADDITIONAL QUANTIFICATION OF POTENTIAL BENEFITS].[579] These studies aim to demonstrate that cross-margining has limited competitive relevance in the market under consideration [BUSINESS SECRETS].

(781) As regards differentiating factors other than cross-margining, the Notifying Parties consider that the other attributes of CurveGlobal which the Statement of Objections lists (dealer support, market maker support, low explicit fees, and access to the platform, i.e. membership base and connectivity) are not unique characteristics. Such factors are either easily replicable or are actually offered by other market participants. Specifically, the Notifying Parties consider that dealer support is not a decisive competitive advantage, and in any case not unique to CurveGlobal, since dealers can decide to support other platforms as well. The same applies to market maker support, which is simply the result of the incentives offered to specialized market maker firms. These incentive schemes can be replicated by any other platform and, in themselves, are insufficient to move liquidity, which is demonstrated by the example of NLX. The Notifying Parties point out that NLX's temporary success in winning minor market shares was the result of its generous incentive scheme, which resulted in market maker trades with the sole purpose of receiving cash incentives, but failed to attract any real liquidity.

(782) In summary, the Notifying Parties consider that the Commission's characterization of CurveGlobal as being uniquely placed to challenge Eurex position is inconsistent with the reality of competition in this market. CurveGlobal, according to the

Notifying Parties, is neither a unique competitor, nor does it place a strong constraint on Eurex.

(783) The Notifying Parties also argued that the Statement of Objections significantly underestimates the value proposition of ICE and thus the constraint that it exercises on Eurex. In addition, according to the Notifying Parties CME is also at least as well-placed (if not better-placed) than CurveGlobal as an alternative to Eurex.

9.3.1.4. The Commission's assessment

(784) The Commission has carefully considered the Notifying Parties' arguments and the evidence presented in their response to the Statement of Objections, including the [QUANTITATIVE ANALYSES PROVIDED IN RELATION TO CROSS-MARGINING].[580]

(785) However, the question of whether the Transaction gives rise to a significant impediment of effective competition in the market for trading and clearing of exchange-traded interest rate derivatives can be left open for the purposes of this Decision, as the overall assessment of the case would not change. This is because, as explained in Section 11, the remedies submitted by the Notifying Parties are insufficient to solve competition concerns in the markets for CCP clearing of bonds, for ATS traded and CCP cleared triparty repos, ATS traded and CCP cleared non-triparty repos, as well as on the markets for settlement and custody services in relation to fixed income provided by ICSDs and large custodians and for collateral management.

9.3.2. Clearing of interest rate derivatives traded OTC

9.3.2.1. Market structure

(786) LSEG is present in the market through LCH.Clearnet's SwapClear service and DBAG is active in OTC IRD clearing via Eurex's OTC clearing service, Eurex OTC Clear.

(787) LSEG is currently the market leader in clearing of OTC IRD clearing through LCH.Clearnet (SwapClear), while DBAG launched EurexOTC Clear in late 2012 as a direct competitor. As of April 2016 the open interest (in EUR trillion) on the different CCPs that clear OTC IRD was as follows.[581]

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580 Notifying Parties' response to the Statement of Objections I, Annex B1 [BUSINESS SECRETS] and Annex B2 [BUSINESS SECRETS]).

581 Form CO, Annex D.57 (LL_6D-8D_055).

Table 4: Open interest across OTC IRD clearing houses (in EUR trillion)

	All IRDs	**EUR IRDs**
LCH	[BUSINESS SECRETS]	[BUSINESS SECRETS]
CME (CME US)	[BUSINESS SECRETS]	[BUSINESS SECRETS]
JSCC	[BUSINESS SECRETS]	[BUSINESS SECRETS]
EurexOTC Clear	[BUSINESS SECRETS]	[BUSINESS SECRETS]
Nasdaq OMX	[BUSINESS SECRETS]	[BUSINESS SECRETS]
SGX	[BUSINESS SECRETS]	[BUSINESS SECRETS]

Source: Form CO, Annex D.57 (LL_6D-8D_055).

9.3.2.2. Commission's preliminary view in the Statement of Objections

(788) In its Statement of Objections, the Commission preliminary considered that the Transaction is likely to lead to a significant impediment of effective competition as it would eliminate EurexOTC Clear, SwapClear's most credible competitor in Europe, This finding was based on the following considerations:

(789) Even though EurexOTC Clear has not attracted any relevant market share since its launch in 2013, the Commission considered there were still significant volumes of uncleared transactions for which EurexOTC Clear would be well-positioned.

(790) In addition, the Commission considered that EurexOTC Clear had all necessary attributes to become a successful challenger for SwapClear. This finding was based on the understanding that EurexOTC Clear has a realistic chance to attract liquidity based on the advantages it can generate for its clients in terms of capital efficiency, margin savings, lower membership criteria, asset protection and range of accepted collateral, as well as its attractive fee model.

(791) The Commission also considered that EurexOTC Clear had a realistic chance to attract further dealer support and is perceived by LCH.Clearnet as a relevant competitive threat and close competitor. In addition, the Commission also considered that LCH.Clearnet had already reacted to the competitive threat posed by EurexOTC Clear.

9.3.2.3. Notifying Parties' view

(792) First and foremost the Notifying Parties claim that EurexOTC Clear is [NOTIFYING PARTIES' ASSESSMENT OF CURRENT COMMERCIAL SITUATION]. As a result, and due to the network effects inherent in derivatives trading and clearing, the Notifying Parties argue that [NOTIFYING PARTIES' ASSESSMENT OF RELEVANT MARKET CHARACTERISTICS] "*tipping*" of the market is highly unlikely.[582]

[582] Notifying Parties' response to the Statement of Objections I, paragraph 185.

(793) The Notifying Parties further claim that EurexOTC Clear has [BUSINESS SECRETS].[583]

(794) The Notifying Parties also disagree with the Commission's preliminary finding in the Statement of Objections about the future prospects of EurexOTC Clear and dismiss the argument that significant uncleared volumes exist that EurexOTC Clear could attract. According to the Notifying Parties, additional potential for further growth does not exist as suggested by the Commission. First, cross-currency swaps are not relevant [BUSINESS SECRETS].[584] Similarly, Swaptions are not relevant [BUSINESS SECRETS].[585]

(795) [NOTIFYING PARTIES' ASSESSMENT OF COMPETITIVE ASSESSMENT REASONING WHY OTHER PLAYERS ARE CLOSER COMPETITORS FOR SWAPCLEAR THAN EUREX OTC CLEAR][586]

(796) Finally, the Notifying Parties argue that the most credible constraint on SwapClear resides in the [BUSINESS SECRETS].[587]

9.3.2.4. The Commission's assessment

(797) The Commission has carefully considered the Notifying Parties' arguments and the evidence presented in their response to the Statement of Objections, including the [QUANTITATIVE ANALYSES PROVIDED IN RELATION TO CROSS-MARGINING].[588]

(798) However, the question of whether the Transaction gives rise to a significant impediment of effective competition in the market for clearing of interest rate derivatives traded OTC can be left open for the purposes of this Decision, as the overall assessment of the case would not change. This is because, as explained in Section 11, the remedies submitted by the Notifying Parties are insufficient to solve competition concerns in the markets for CCP clearing of bonds, for ATS traded and CCP cleared triparty repos, ATS traded and CCP cleared non-triparty repos, as well as on the markets for settlement and custody services in relation to fixed income provided by ICSDs and large custodians and for collateral management.

9.3.3. *Single stock equity derivatives*

(799) The Commission assesses in this section the overlap between the Notifying Parties in the market for trading and clearing of single stock equity derivatives. The market definition left open if the relevant product market comprises single stock equities based on national underlyings only or includes contracts based on any EEA underlying.

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583 Notifying Parties' response to the Statement of Objections I, paragraph 186.

584 Notifying Parties' response to the Statement of Objections I, paragraph 227 et seq.

585 Notifying Parties' response to the Statement of Objections I, paragraph 236.

586 The Notifying Parties also argue that there are a number of other CCPs that are at least as well placed as Eurex OTC Clear to exert competitive pressure on the merged entity, namely JSCC, HKEX, SGX, and ASX which are all approved to clearing OTC IRD in Europe, pursuant to equivalence decisions. While the Notifying Parties recognise that these CCPs do not have an equivalent presence to CME or LCH, they nonetheless exercise a relevant competitive constraint for clearing OTC IRD given the global nature of the market.

587 Notifying Parties' response to the Statement of Objections I, paragraph 189.

588 Notifying Parties' response to the Statement of Objections I Annex B1 [BUSINESS SECRETS] Analysis) and Annex B2 [BUSINESS SECRETS]).

(800) It is recalled that from a horizontal perspective, it has to be taken into account that the Notifying Parties do not only compete for trading of single stock equity derivatives separately but rather for the combined offer of trading and clearing of these products. The complementarity of trading and clearing components is characterised by competition between service bundles, or bundle-to-bundle competition.[589] This finding is relevant for all exchange traded derivatives where market participants cannot buy trading and clearing services separately from each other; it is however particularly relevant in the market for trading and clearing of single stock equity derivatives in light of actual market structure.

(801) DBAG offers vertically integrated trading/clearing bundles for single stock equity derivatives based on a number of national underlyings, comprising both DBAG's trading services (Eurex Trading) and DBAG's clearing services (Eurex Clearing).

(802) In the area of single stock derivatives, two types of horizontal overlaps arise: first an overlap in single stock equity derivatives based on Italian underlyings where LSEG is present through the Italian home market exchange, IDEM, and Eurex is a competitor, and second in single stock equity derivatives based on French, Dutch, Belgian, and Portuguese underlyings where DBAG competes with Euronext's bundles comprising trading services on its own venues and LSEG's clearing services provided by LCH.Clearnet SA.

9.3.3.1. Italian single stock equity derivatives

9.3.3.1.1 Market structure

(803) In case separate product markets for single stock equity derivatives based on the nationality of the underlying existed, a horizontal overlap arises in the market for Italian single stock equity derivatives. In such a scenario IDEM as part of Borsa Italiana (and therefore LSEG) is the incumbent exchange with a strong local presence while Eurex with its pan-European offer of single stock equity derivatives could be a relevant competitor.

(804) In 2015 [BUSINESS SECRETS] Italian single stock futures were traded on Eurex and [BUSINESS SECRETS] on IDEM; in the same time, [BUSINESS SECRETS] Italian single stock options were traded on Eurex and [BUSINESS SECRETS] on IDEM.[590] During the same period, ICE reports 1.4 million trades in Italian single stock and dividend futures and 0.7 million trades in Italian single stock options.[591] Based on this data, IDEM has a market share of [50-60%] in the overall market for Italian single stock equity derivatives and Eurex a share of [30-40%]. ICE was able to grow its market share to almost [5-10%] . In case of separate markets for futures and options, IDEM would be particularly strong in the latter with over [70-80%] market shares while its presence is more limited in futures with only [20-30%] market shares.[592] In this market segment, Eurex is the market leader with over [60-70%] market shares, while ICE accounts for [10-20%].

589 See above Section 5.1.2.2.

590 Parties' response to RFI 3 of 27 May 2016 received on 13 June 2016, Annex 27, Table 3.

591 ICE's response to RFI 3 of 29 November 2016 received on 1 December 2016, Annex 2 [ID 5918].

592 ICE reply to RFI dated 29 November 2016, Annex 2.

9.3.3.1.2 Commission's preliminary view in the Statement of objections

(805) In the Statement of Objections the Commission took a preliminary view that the Transaction would lead to a significant impediment of effective competition in the market for Italian single stock equity derivatives based the high combined market shares, and the absence of other competitors that could replicate the competition constraints the Parties currently exercise upon each other. This was supported by a preliminary assessment that the Transaction could eliminate the cheapest competitor in the market.

9.3.3.1.3 Notifying Parties' view

(806) The Notifying Parties claim that Eurex' main competitor in the market for Italian single stock equity derivatives is not LSEG. They argue that [ASSESSMENT OF IDEM'S POSITIONING IN THE MARKET]. The offerings are therefore in the Notifying Parties' view complementarity. Moreover, the Notifying Parties submitted [ASSESSMENT OF IDEM'S POSITIONING IN THE MARKET]. Finally, according to the Notifying Parties, other actual and/or potential competitors, namely ICE and Euronext will continue to be present and constrain the merged entity.

9.3.3.1.4 The Commission's assessment

(807) The Commission has carefully considered the Notifying Parties' arguments and the evidence presented in the response to the Statement of Objections.

(808) However, the question of whether the Transaction gives rise to a significant impediment of effective competition in the market for trading and clearing of single stock equity derivatives based on Italian underlyings can be left open for the purpose of this Decision, as the overall assessment of the case would not change. This is because, as explained in Section 11, the remedies submitted by the Notifying Parties are insufficient to solve competition concerns in the markets for CCP clearing of bonds, for ATS traded and CCP cleared triparty repos, ATS traded and CCP cleared non-triparty repos, as well as on the markets for settlement and custody services in relation to fixed income provided by ICSDs and large custodians and for collateral management.

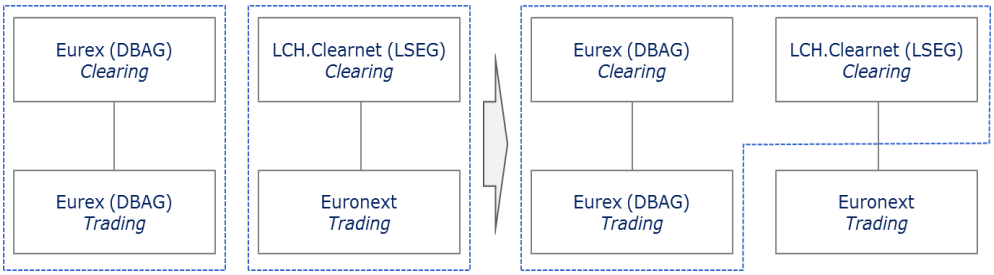
9.3.3.2. The Transaction would lead to the elimination of competition in trading and clearing of single stock equity derivatives in which Eurex competes with Euronext

(809) As explained in Section 5.1.2.2. above, following the Transaction, the merged entity could control clearing for single stock equity derivatives for its own vertically integrated offers as well as for those where LCH SA currently provides merchant clearing services for Euronext. As a result, DBAG will be in a position to exert pricing control over trading/clearing bundles that compete with Eurex' own integrated bundles. This may permit DBAG to simultaneously increase the prices both of its own bundles and of competing bundles[593] ultimately lessening or even

[593] It is important to understand the competitive difference of this theory of harm to the vertical theory of harm addressed in Section 9.3.3.4. below. From an economic perspective, vertical foreclosure arises in a situation where an integrated firm with market power increases prices or reduces access/quality for rivals in order to divert customers towards its own integrated offering. In mergers which combine both vertically and horizontally related assets however (as is the case here), the transaction may substantially inhibit horizontal competition albeit no diversion of customers towards the integrated company arises (or is even intended).

completely eliminating competition for the trading/clearing-bundles offered by Euronext/LCH.Clearnet. This holds true for a potential wide market for all EEA based single stock equity derivatives as well as for several markets based on national underlyings only.

Figure 8: Pre- (left) and post-Transaction (right) competition between DBAG and Euronext/LCH.Clearnet in trading/clearing bundles



Source: Commission's illustration.

(810) The competition between such bundles (or "vertical stacks") is depicted in Figure 8 above (both for the pre-merger and the post-merger situation). The figure illustrates the interaction between DBAG's vertical silo (Eurex) and substitutable bundle offerings of Euronext with LCH SA clearing.

9.3.3.2.1 Notifying Parties' views

(811) The Notifying Parties base their main argument on the claim that the relevant market includes all European single stock equity derivatives; a market definition based on national underlyings would be unduly narrow. They further reject the concept of bundle-to-bundle competition but rather focus on direct overlaps on the trading level alone. In such a market, the increment resulting from the merger would be limited to less than [0-5%] of all EEA trading volumes. In addition, the Notifying Parties submit that they will continue to face strong competition from other exchanges across Europe, particularly ICE and Euronext.

(812) As regards the differentiation between trading and clearing, the Notifying Parties submit that these are different markets: The trading of specific single stock derivatives should be regarded separately from the market for merchant clearing services in which LCH.Clearnet provides services for other trading venues. This market would not be affected at all by the Transaction because DBAG does not provide this kind of services; hence, there is no overlap. The Notifying Parties restrict the competition issues in relation to Euronext to a vertical constellation, rather than analysing the horizontal overlaps in the market for bundled services that arise from the increasing market power on the clearing level.

9.3.3.2.1. The Commission's assessment

(813) The Commission rejects the Notifying Parties' argument that DBAG's and LSEG's clearing services are not in competition with each other merely because DBAG is not offering clearing access to third party platforms. While this appears to be technically correct from a simplistic view, it masks the fact that final customers may face a significant reduction in competition if the merged entity will be able to steer the price not only of its own bundles, but also of competing bundles by controlling LCH.Clearnet's merchant pricing which is an indispensable component for customers who consider trading on a rival's platform such as Euronext. From the perspective of final customers, therefore, the merger could lead to a substantial reduction in

alternatives which are not directly or indirectly controlled by DBAG through their simultaneous control of Eurex and LCH.Clearnet.

(814) Therefore, the Commission analyses the relevant markets based on the bundle-to-bundle competition that characterises these markets. Given that the precise market definition for single stock equity derivatives was left open, the different potential markets have to be treated separately.

9.3.3.2.1.1. Assessment on narrowest markets defined based on the country of the underlying

(815) In the possible scenario of a separate market for single stock equity derivatives per nationality of the underlying and based on the bundle-to-bundle competition described above,[594] the Commission considers that horizontal competition concerns could arise in markets where Eurex competes with Euronext because of its dependency on LCH SA for clearing of these instruments.

(816) The relevant affected markets in such a scenario would be the markets for trading and clearing of single stock equity derivatives based on underlyings from Belgium, France, and the Netherlands where the Notifying Parties including Euronext have relevant horizontal overlaps. The market shares for these potential markets are presented in the table below.

Table 5: Trading-clearing market shares of single stock equity derivatives, Euronext countries

Clearing Service	Eurex Clearing	LCH Ltd.	LCH SA
Trading platform	Eurex	LSE	Euronext
Belgium	[40-50%]	-	[10-20%]
Netherlands	[20-30%]	-	[40-50%]
France	[40-50%]	-	[30-40%]

Source: Commission's assessment based on data provided in Form CO Table D.9.

(817) More specifically, DBAG has a pre-merger trading and clearing market share in the EEA for French single-equity derivatives of [40-50%]. Post-Transaction it will gain substantial influence over the price of its competitor Euronext's bundle which has a market share of [30-40%] for French single stock derivatives by acquiring its control over the Paris based clearing house, LCH SA. As a result, the merged entity will directly or indirectly control pricing of close to [80-90%] of exchange traded single stock equity derivatives based on French underlyings. Similarly, in the area of exchange traded single stock equity derivatives based on Belgian underlyings the merged entity will have pricing power over [60-70%] of the relevant bundles and [60-70%] of those based on Dutch underlyings. The merger is therefore likely to have significant horizontal anti-competitive effects on the competition for combined

[594] See above Section 9.3.3.2.

trading and clearing of stock derivatives relating to underlyings from countries where LCH.Clearnet provides appreciable merchant clearing services.[595]

(818) These findings are largely supported by the results of the market investigation. In particular, numerous respondents show significant concern that the Transaction will create a dominant clearing house for derivatives which would control the clearing prices of a large proportion of trades. For instance, one respondent notes that the Transaction will lead to a "*massive increase in market power at the clearing level*".[596]

(819) Significantly, this increase in market power is not alleviated by the possibility of exchanges switching from LCH.Clearnet to other merchant clearing providers. On the contrary, it appears that Euronext has no realistic clearing alternative at this stage. Indeed, the only other large derivatives clearing house in Europe is ICE Clear, which currently follows a closed silo-model similar to DBAG's and hence does not offer clearing access for third party trading venues.

(820) The fact that Euronext can currently rely on the provision of merchant clearing services from LSEG appears to be primarily due to the fact that LSEG is *not* active in competing trading services to any appreciable degree. Other than DBAG and ICE (who withhold access), LSEG has an incentive pre-merger to offer access, since Euronext is not a competitor. This is likely to change one Eurex and LCH.Clearnet belong to the same group.

(821) In the following, the Commission first discusses the arguments brought by the Notifying Parties in response to the concept of bundle-to-bundle competition in general, before assessing the possible anti-competitive behaviour and the potential harm to the customers in the three potential markets for single stock equity derivatives based on Belgian, French, and Dutch underlyings.

9.3.3.2.1.1.1. The Notifying Parties' arguments for denying material horizontal effects in bundle-to-bundle competition cannot be accepted

(822) The Commission rejects the claim that viewing clearing as an input to trading implies that a separate merchant clearing market must be defined. From the perspective of horizontal competition, it is immaterial whether clearing is viewed as a complementary service to trading or whether it is viewed as an input to trading. Rather, what matters is whether the Notifying Parties' offerings are in actual competition with each (i.e., whether they exert a price constraint on each other).

(823) The latter is clearly the case since not even the Notifying Parties deny that traders choose between competing bundles of trading and clearing. When DBAG gains horizontal control over LCH.Clearnet's clearing, the merged entity will be able to exert market power over competing bundles of trade.

(824) The Commission further rejects the Notifying Parties' claim that market power along the value chain is determined by trading rather than clearing and that one should therefore ignore the horizontal overlap in clearing. Rather than being a negligible element of a derivatives trade, clearing is a central component of the value

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595 An equivalent outcome would arise on a potential separate clearing market towards end-customers (i.e., comprising both internal and merchant clearing services).

596 Euroclear, submission dated 26 April 2016, page 1, [ID 2291].

proposition in derivatives markets. Since Euronext has no viable alternative other than LCH SA, the post-Transaction market power exerted on the clearing level implies a significant loss of competition.

9.3.3.2.1.1.2. The Transaction would lead to price increases

(825) The Notifying Parties' arguments with respect to lack of appreciable effects must be rejected. The likelihood of a price increase post-Transaction cannot be rejected with an argument that LCH.Clearnet would not have an incentive to "support" such anti-competitive behaviour. The Notifying Parties merely postulate that these entities would "prevent" a price increase without specifying how these platforms should achieve this. Euronext has not a single viable clearing alternative to switch to, since both Eurex clearing and ICE clearing do not provide clearing services to competitors. This venue is therefore locked-in with LCH.Clearnet which would be controlled by their competitor DBAG post-Transaction. Moreover, a horizontal effect would not only lead to a price increase of Euronext's trading/clearing bundle but would similarly permit Eurex to increase the price of its trading/clearing bundle. As a result, it must not necessarily be the case that the merged entity would divert customers away from Euronext to Eurex (and thereby inflict harm on Euronext). Rather, the main competitive injury would be inflicted on customers, who would face higher prices both for Euronext's and Eurex's trading/clearing bundles.

(826) The Commission further rejects the notion that Euronext possesses sufficient countervailing buyer power which allegedly allows it to sponsor entry, integrate backwards or otherwise switch its clearing house. As noted before, there is no viable alternative merchant clearing house in existence (which is underlined by the Notifying Parties' inability to name a credible rival). Nor is the prospect of sponsoring entry or backward integration realistic, given the substantial capital requirements for such an undertaking.

(827) In particular, the alleged real world examples of "switching" via integration are highly misleading. Concretely, the Notifying Parties give the example of Liffe and LME "switching away" from LCH.Clearnet.[597] However, the case of Liffe concerned the merger of two trading venues, where one of them (ICE) already had an internal clearing house. Obviously, also Euronext could overcome its concerns of clearing reliance on the merged entity by merging with the merged entity. However, if anything, this would only further exacerbate the anticompetitive effect of the merger rather than remedying it. The reality is that there simply exists no independent merchant clearing house in the market which Euronext could merge with.

(828) Similarly, the example of LME developing its own in-house clearing underlines, rather than contradicts the Commission's analysis. Indeed, the clearing house required substantial capital investment and at least three years to get from the planning phase to the operation.

(829) Finally, the Notifying Parties' argument wrongly assumes that horizontal effects must necessarily harm Euronext. As explained above, the main result of anticompetitive horizontal effect is that both Eurex and Euronext bundles of trading and clearing become more expensive, since the merged entity will be able to raise both the merchant clearing price and the clearing component of its own integrated

[597] Parties' consolidated response to Decision opening the procedures, paragraph 1078.

trading/clearing services. Such a price increase across the board can easily be orchestrated in such a way that no diversion of customers away from Euronext takes place. As a result, even if Euronext had any countervailing power (which the Commission denies), the Notifying Parties could easily implement any price increase in such a way that Euronext and similar platforms are not harmed, while the damage accrues to consumers.

(830) The argument that users (traders) could prevent a price increase or switch to another trading and clearing bundle is also not convincing. As noted in Section 5.3.3. above, customers have no viable ability to stop LCH.Clearnet from raising prices. Neither LCH.Clearnet's governance structure nor LCH.Clearnet's FRAND undertaking are sufficient to stop any possible price increase resulting from the likely loss of competition.

(831) Moreover, even if banks had the ability to stop a price increase (*quod non*), they would nonetheless lack the incentive to do so. After all, platform price increases would predominantly harm final customers due to pass-through, while banks themselves could easily be compensated by the Notifying Parties through rebates if there was any necessity for this (which the Commission denies in any event).

(832) Moreover, even in the unrealistic scenario where users could prevent a price increase by LCH.Clearnet, note that horizontal effects go in both directions: they not only increase the first merging party's incentive to raise prices, but also the second party's. In the case discussed here, the Notifying Parties focus all of their arguments on LCH.Clearnet's alleged lack of pricing power. Even if this was correct (which is denied), it would not stop Eurex from raising prices post-Transaction. Specifically, note that the concentration will give Eurex substantial incentives to raise prices. Concretely, any potential diversion away of customers from Eurex would be softened by the fact that LCH.Clearnet would benefit from such diversion and would be part of the same group post-Transaction.

(833) The horizontal competition concerns are further aggravated by the fact that Euronext and Eurex are close competitors in the relevant markets. Both venues are pan-European players, focus on the same investor groups and have closely comparable pricing schemes. This is also perceived by market participants replying that when comparing fees for Eurex and Euronext they see "*No difference*"[598] or find them to be "*roughly in line*"[599]. Others state that "*We believe they are roughly the same, structured in a similar way*"[600].

(834) The fact that Eurex and Euronext are in fact close competitors can also supported by further results of the market investigation. A large European bank states that "*Single stock futures and options on a variety of European issuers are available on both Eurex and Euronext*."[601] That both venues are competing on "*Equity derivatives*" in

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598 Intermonte, reply to Questionnaire Q3 "Derivatives Customers", question 11.3, [ID 2754].

599 Bank of America Merrill Lynch, reply to Questionnaire Q3 "Derivatives Customers", question 11.3, [ID 3253]; a comparable answer was provided by Barclays, [ID 2621].

600 SEB, reply to Questionnaire Q3 "Derivatives Customers", question 11.3, [ID 1987].

601 Deutsche Bank, reply to Questionnaire Q3 "Derivatives Customers", question 11, [ID 2515]. Banca IMI replies in a comparable way "*Single stock futures and options on a variety of European issuers are available on both Eurex and Euronext*", [ID 2337].

general can also be deducted from several other respondents.[602] The closeness of competition can be further deducted from other large European banks that either see "*no major differences*" between both venues[603] or explain that differences are "*very case-by-case dependent (or contract-by-contract). Contract A might be more liquid on EUREX while contract B might be overall more attractive*".[604]

(835) Further answers given by the market participants lead to the same conclusion that both venues are closely competing with each other: When asked which market participants would consider for trades currently executed on Euronext, all respondents that would see an alternative at all mentioned Eurex.[605]

(836) Finally, the closeness of competition between Eurex and Euronext is also claimed by the Notifying Parties themselves, stating that "*Eurex's closest competitors are other mainstream competitors like ICE and Euronext offering convenient trading to international customers across a broad range of underlying nationalities*."[606] This finding is also in line with the Commission's prior assessment in *DBAG / NYSE Euronext*.[607]

(837) In light of these findings, the Commission concludes that Eurex and Euronext are close competitors in the potential market for single stock equity derivatives based on Belgian, French, and Dutch underlyings and that the merged entity will be in a position to control pricing of both of them.

9.3.3.2.1.1.3. Conclusion

(838) In light of the above, the Commission considers that the Transaction will lead to a significant impediment of effective competition in a potential market for single stock equity derivatives based on Dutch, French, and Belgium underlyings as it would eliminate competition for combined trading and clearing of exchange traded derivatives in a number of underlyings where Eurex competes with Euronext relying on merchant clearing services from LCH.Clearnet SA.

9.3.3.2.1.2. Assessment on a wider market comprising all EEA single stock derivatives

(839) As can be seen from the market share table provided below, DBAG is the leading exchange in the potential wider market of all EEA based single stock equity derivatives. By comparison, the direct increment from the merger is relatively small with less than [0-5%] and mainly originates from IDEM, LSEG's Italian derivatives market. The increment originating from LSE DM is even smaller with only [0-5%] and mainly based on activities in small niche markets.

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602 Bank of America Merrill Lynch, reply to Questionnaire Q3 "Derivatives Customers", question 11, [ID 3253]; comparable replies to the same question were also collected from numerous other respondents including UBS, RBS, Morgan Stanley, HSBC, and Barclays [IDs 2994, 3066, 3181, 2528, 2621].

603 Société Générale, reply to Questionnaire Q3 "Derivatives Customers", question 11.2, [ID 2615].

604 Commerzbank, reply to Questionnaire Q3 "Derivatives Customers", question 11.2 [ID 1970]; this view that the advantages and disadvantages vary by contract is also supported by Morgan Stanley in reply to the same question.

605 Replies to Questionnaire Q3 "Derivatives Customers", question 10.2.1.

606 Form CO, paragraph 3194.

607 See Case COMP/M.6166 – DBAG / NYSE Euronext, paragraph 868.

Table 6: Trading of all single equity derivatives in the EEA

Exchange	2014		2015	
	Traded contracts ('000)	Share (%)	Traded contracts ('000)	Share (%)
Eurex (DBAG)	[BUSINESS SECRETS]	[40-50%]	[BUSINESS SECRETS]	[50-60%]
LSE DM (LSEG)	[BUSINESS SECRETS]	[0-5%]	[BUSINESS SECRETS]	[0-5%]
IDEM (LSEG)	[BUSINESS SECRETS]	[0-5%]	[BUSINESS SECRETS]	[0-5%]
Combined	[BUSINESS SECRETS]	**[50-60%]**	[BUSINESS SECRETS]	**[50-60%]**
ICE Europe	[BUSINESS SECRETS]	[10-20%]	[BUSINESS SECRETS]	[10-20%]
Euronext	[BUSINESS SECRETS]	[10-20%]	[BUSINESS SECRETS]	[10-20%]
NASDAQ OMX	[BUSINESS SECRETS]	[5-10%]	[BUSINESS SECRETS]	[5-10%]
MEFF	[BUSINESS SECRETS]	[5-10%]	[BUSINESS SECRETS]	[5-10%]
TOM	[BUSINESS SECRETS]	[0-5%]	[BUSINESS SECRETS]	[0-5%]
ADX (Athens Stock Exchange)	[BUSINESS SECRETS]	[0-5%]	[BUSINESS SECRETS]	[0-5%]
Oslo Børs	[BUSINESS SECRETS]	[0-5%]	[BUSINESS SECRETS]	[0-5%]
WSE	[BUSINESS SECRETS]	[0-5%]	[BUSINESS SECRETS]	[0-5%]
Budapest SE	[BUSINESS SECRETS]	[0-5%]	[BUSINESS SECRETS]	[0-5%]
WBAG	[BUSINESS SECRETS]	[0-5%]	[BUSINESS SECRETS]	[0-5%]
Total	[BUSINESS SECRETS]	**100.0**	[BUSINESS SECRETS]	**100.0**

Source: Consolidated Form CO, Table D.4.

(840) The list above shows however only direct overlaps between the Notifying Parties in trading and does not take into account the impact of bundle-to-bundle competition as discussed above. If the assessment is therefore correctly widened to include not only trading but rather the combined offer for trading and clearing, Euronext's market shares also have to be taken into account. Under this scenario, the combined market share, driven by the overlaps in clearing, amounts to almost [60-70%].

(841) This overview also indicates the different types of derivatives markets with two distinct strategic positionings. On the one hand, national incumbents with strong positions in national home markets compete with pan-European offerings from exchanges that are active across national boundaries. The most prominent examples for the latter type are Eurex, Euronext and ICE who attract international investors and offer products based on a wide range of underlyings.

(842) The Commission already considered in *DBAG / NYSE Euronext*, that Eurex and Liffe (now split into ICE and Euronext) are close competitors in the market for single

stock equity derivatives, irrespective of whether the market comprises all European stock equity derivatives or is further subdivided.[608] In this decision, the Commission also identified differences between incumbent exchanges and pan-European providers.[609] In spite of relevant developments like the spin-off of Euronext after the *ICE / NYSE Euronext* merger this general market structure still holds true.

(843) In the market definition, it was left open whether the relevant market should be subdivided into options and futures or actually includes both instruments. When analysing a potential market for EEA based single stock equity derivatives, issues particularly arise in the options segment where Euronext has shares of over [10-20%] which has to be seen in addition to the direct market shares of the Notifying Parties' amounting to [50-60%] ([50-60%] from Eurex plus [0-5%] direct LSEG increment). In this particular segment, ICE accounts for only [5-10%]. The remaining market shares are distributed among mostly locally focussed exchanges (including Nasdaq OMX with its core activities in Scandinavia). The only remaining truly pan-European player would be significantly smaller than the merged entity and would not be in a position to fully replicate the competitive pressure currently exercised by Euronext on Eurex. In a potential market for EEA based single stock futures, ICE is stronger with a share of almost [20-30%]. Nevertheless, it would still be the only credible pan-European alternative to the Notifying Parties that combine almost [60-70%] of the market.

(844) In light if the above, the Commission considers that the Transaction leads to a significant impediment of effective competition even under a wide market definition, including single stock equity derivatives of any EEA underlying because of the bundle-to-bundle competition in which the merged entity will also control clearing for products traded on Euronext through its control of LCH SA.

9.3.3.3. The Transaction would lead to the foreclosure of Euronext in relation to single stock equity derivatives

(845) The fact that DBAG competes head-to-head with Euronext for trading and clearing of single stock equity derivatives holds true for a wide market comprising all EEA underlyings as well as a number of smaller markets, including only contracts based on specific national underlyings. The dependency of Euronext on clearing via LCH SA is also independent of this specific market definition.

(846) Therefore, and in addition to the horizontal concerns already discussed above, the Transaction would also lead to vertical concerns originating from the same structural link between Euronext and LCH SA but having different effects on competition.. This dependency needs to be analysed in further detail.

9.3.3.3.1. Notifying Parties' view

(847) According to the Notifying Parties, the bundle-to-bundle competition should be assessed only as a vertical relationship. However even from this perspective, the Notifying Parties submit that the combination of DBAG's and LSEG's clearing houses would not give rise to any vertical foreclosure concerns for the following reasons.

608 See Case COMP/M.6166 – DBAG / NYSE Euronext, paragraph 859.

609 See Case COMP/M.6166 – DBAG / NYSE Euronext, paragraph 827.

(848) First, in the Form CO, in their response to the Decision opening the proceedings, and the response to the SO, the Notifying Parties argue that LCH.Clearnet's governance structure, including open access and FRAND commitments as well as the individual customer clearing arrangements would prevent such foreclosure. In addition, the Notifying Parties argue that customers exercise significant countervailing buyer power through a treat to switch to alternative CCPs, sponsoring entry or expansion or moving to a self-supply model.

(849) Second, the Notifying Parties argue that open access requirements introduced by MiFID II/MiFIR would prevent such foreclosure. According to the Notifying Parties, these access requirements would force their clearing houses to offer clearing access to third party trading venues and therefore solve any concerns relating from the exclusivity of the connection between Euronext and LCH SA.

(850) Finally, the Notifying Parties argue that the merged entity would lack the incentive to pursue any foreclosure strategy as going against the open access model of LCH.Clearnet would have negative impact on LCH.Clearnet's commercial reputation and would likely result in retaliation from the large customers.

9.3.3.3.2. The Commission's assessment

(851) The Commission considers that the merged entity will have an incentive to leverage its market power at clearing level by fully or partially foreclosing Euronext that relies on LCH SA's clearing services to eliminate competition at trading level.

(852) Both trading and clearing are characterised by substantial economies of scale (on the supply-side) and network effects (on the demand-side). Successful operation requires providers to maintain an efficient scale to be attractive to traders and to be able to spread their fixed costs over a sufficiently large base of trades. Against this background, a foreclosure strategy can be undertaken through price (for example margin squeeze) and non-price measures (for example degrading access).

(853) A foreclosure strategy that aims at increasing the price of bundled products (including the clearing component from LCH SA) offered by DBAG's competitors and/or reducing the quality of these services may seriously damage their competitive capabilities to the benefit of DBAG. This is because customers facing price increases by DBAG's competitors will likely shift the liquidity away from these platforms, which will further increase the costs of these platforms.

(854) Such a strategy would have (at least) two significant economic benefits for the merged entity.

(855) First, raising rivals' cost is likely to enhance DBAG's own pricing power at both trading and clearing levels and thus extract surplus along the value chain.

(856) Second, partial or full foreclosure of Euronext would also fortify the significant market power that the Notifying Parties already possess in the respective parts of the complementary services. As a result of such foreclosure, entry by potential competitors may be deterred even more than pre-merger. In particular, after the exclusion of competitors from the trading market, competitive entry against the merged entity would be considerably more difficult if the potential entrant has to enter on all levels of the supply chain. In particular, this precludes the ability of an entrant to first penetrate one layer (for example trading) and then expand its product offering to other layers of the vertical stack subsequently. A successful foreclosure strategy would therefore not only increase the Notifying Parties' immediate market

power over bundles of trading and clearing, but would additionally increase the difficulty of challenging its position in the future at individual layers of the value chain.

(857) The concerns described above are supported by the results of the market investigation. In particular, various respondents see a concrete danger that the merged entity might engage in price and/or non-price foreclosure at the trading level to the detriment of Euronext. For instance, one market participant argues that "*The merged entity will also inherit DBAG's dominant position in the trading and clearing of listed equity derivatives (with a 75% post-merger share), which will be strengthened by the fact that its largest competitor at the trading level, Euronext, clears through LSE (LCH.Clearnet Paris), creating a real risk of vertical foreclosure at the trading level.*"[610] In this respect, Euronext itself explains that: "*Unlike DBAG and LSEG, Euronext does not own or control its own CCP. Instead, it relies on LCH.Clearnet's clearing services. This situation is acceptable today because there is no material competition at the trading level between LSE, which controls LCH.Clearnet, and Euronext. Following the merger of DBAG and LSEG, LCH.Clearnet would be owned and controlled by DBAG, Euronext's leading Eurozone competitor in listed derivatives. This could have serious implications for Euronext, in particular in derivatives, where trading and clearing are closely integrated.*"[611]

(858) Partial ownership does not typically reduce the incentive to foreclose. On the contrary, the merged entity's partial ownership of LCH.Clearnet only means that there is an even larger incentive to divert customers to Eurex. After all, the merged entity would earn the entirety of Eurex's silo profits, whereas any profits of LCH.Clearnet must be shared with a number of minority shareholders. The Notifying Parties should therefore have an economic preference to divert customers away from LCH.Clearnet towards the DBAG silo.

(859) One market participant has voiced concerns that the Notifying Parties engage already today in exclusionary practices by bundling trades that have to be cleared on their CCPs (trades executed on DBAG, Borsa Italiana and LSE's International Order Book) and trades that are on the contestable clearing market. The market participant indicates that LCH SA and LCH Ltd already engage in such practices which would be even more detrimental post-Transaction, as the merged entity would have access to an even larger pool of "protected" trades.[612] These techniques are directly replicable in the context of the markets for single stock equity derivatives.

(860) The ability to foreclose is further supported by the fact that LCH SA is the only clearing house offering large-scale merchant clearing services in Europe. All other clearing houses, except for some niche players focusing on equities, operate vertical silos. It is unlikely that post-Transaction, and at least until the open access provisions kick-in, these players would open their vertical silos. If anything, with the merger, the incentives to continue operating vertical silo structures defending the own strongholds will even increase.

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610 Euroclear, submission dated 26 April 2016, page 3 et seq., [ID 2291].

611 Euronext, reply to questionnaire Q6 "Competitors (listing, trading, clearing)", question 190, [ID 6175]

612 EuroCCP, reply to questionnaire Q6 "Competitors (listing, trading, clearing)", question 85.1, [ID 1928].

(861) The Notifying Parties claim that Euronext could change CCPs with the support of LCH.Clearnet, if it would become unsatisfied with the service. This should enable that "*Euronext is able to switch to an alternative provider without disruptions to its services*".[613] Euronext, however, perceives this option more skeptically stating: "*Any scenario in which Euronext is forced to switch from LCH.Clearnet SA to another CCP remains technically complex, operationally risky and expensive. In addition, there is no guarantee that current Euronext customers would be willing to invest time, effort and money in changing CCPs, not least when they are already connected to other markets that have clearing structures able to deliver their needs at a lower cost for any transition of volume. The frictional costs of switching flow from Euronext to another exchange with suitable clearing is likely less than the costs members would face if Euronext introduced a new CCP*."[614]

(862) It follows that the threat to switch to alternative merchant clearing providers would not be credible so as to discipline the merged entity and prevent any foreclosure strategy.

9.3.3.3.2.1. LCH.Clearnet's governance structure is insufficient to prevent foreclosure

(863) The Parties' claim that LCH.Clearnet's governance structure prevents any attempt to foreclose Euronext does not hold in light of the evidence.

(864) LCH.Clearnet has incorporated in its "Core Operating Principles", that services should be offered on fair, reasonable, open, and non-discriminatory" ("FRAND") terms.[615] However, these cannot, in itself, be expected to defeat a foreclosure strategy. FRAND commitments generally consist of two parts: (i) a non-discrimination part and (ii) a commitment to "reasonable" price levels.

(865) As regards non-discrimination, a price-based foreclosure strategy does not require that externally provided services are priced higher than internal service charges. Indeed, internal charges are merely transfer prices within a company and can therefore be adjusted to whichever external fee is necessary to engage in foreclosure.

(866) As regards defining a reasonable price standard this may prove difficult in the absence of clear industry benchmarks. Indeed, LCH.Clearnet is currently a quasi-monopolist for merchant clearing services of appreciable volumes of trades. There is therefore no competitive benchmark price for external clearing services. It is not clear that a functional external comparator exists that would enable a "fair" level of access charges to be determined for the purposes of a FRAND assessment. What constitutes a "fair" access price risks therefore to be largely arbitrary in these specific circumstances. Certainly, it should be expected that sellers and buyers would have largely different opinions about what is "fair" and "reasonable". The large number of actual disputes over FRAND royalties across the globe is evidence to this. It is not clear, therefore, that the existence of a FRAND commitment, on its own, could constitute a meaningful barrier to foreclosure.

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613 Notifying Parties' response to the Decision opening the proceedings of 28 September 2016, paragraph 1051.

614 Euronext, reply to questionnaire Q6 "Competitors", question 74, [ID 2230].

615 Form CO (updated version of 26 August 2016), paragraph 3095 [BUSINESS SECRETS].

(867) The Notifying Parties submission that the Commission accepted commitments based on FRAND terms in other cases[616] is misleading in this context. Behavioural commitments imposed by the Commission in other cases cannot be compared to purely commercial arrangements that could be changed at any time in the future. In addition, it has to be taken into account that the identified issue is structural in nature and that the Commissions guidelines are clear that in these types of situations, structural remedies are, as a rule, preferable.[617]

(868) In this context the Commission also notes that the Notifying Parties misrepresent the OFT decision by stating that the decision *"supports the argument that LCH.Clearnet's governance arrangements militate against any foreclosure strategy."*[618] Indeed, this is at odds with the OFT conclusion that "*even taking account of the corporate governance provisions and regulatory framework, the parties would be likely to retain the ability to engage in partial foreclosure strategies (namely a uniform price rise and/or quality degradation)*".[619] The only strategies OFT concluded that may be limited by the governance structure in place would relate to the ability to engage in total foreclosure through refusal of access/supply.[620]

(869) Indeed, partial foreclosure strategies such [CONFIDENTIAL INFORMATION ON THE EXTENT TO WHICH LCH.CLEARNET MAY BE ABLE TO PURSUE SUCH POTENTIAL PARTIAL FORECLOSURE STRATEGIES]..[621]

(870) The Notifying Parties argue in their response to the Decision opening the proceedings[622] that the introduction of new products is subject to [BUSINESS SECRETS]

(871) Finally, [CONFIDENTIAL INFORMATION ABOUT PAST EXPERIENCE OF EURONEXT].[623] [BUSINESS SECRETS].

9.3.3.3.2.2. Individual arrangements are insufficient to prevent foreclosure

(872) The Notifying Parties claim that [DISCUSSION ABOUT THE ABILITY OF LCH TO IMPACT EURONEXT'S ABILITY TO INTRODUCE NEW PRODUCTS QUICKLY AND AT COMPETITIVE TERMS].[624, 625, 626]

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616 Notifying Parties' response to the Statement of Objections I, paragraph 625.

617 Commission notice on remedies (2008/C 267/01), paragraph 15. This distinguishes the present case from a case like the commitments accepted by the Commission regarding credit default swaps (see Notifying Parties' response to the Statement of Objections I, paragraph 625, sub i), which were intended to remedy competition concerns resulting from a suspected anti-competitive conduct, not from a concentration resulting in a structural change in the market.

618 Notifying Parties' response to the Decision opening the proceedings of 28 September 2016, paragraph 1021.

619 OFT decision ME/5464-12 from 14 December 2012 on the anticipated acquisition by London Stock Exchange Group plc of Control of LCH.Clearnet Group Limited, paragraph 337.

620 OFT decision ME/5464-12 from 14 December 2012 on the anticipated acquisition by London Stock Exchange Group plc of Control of LCH.Clearnet Group Limited, paragraph 336.

621 Specific examples of the abilities LCH.Clearnet retains – [BUSINESS SECRETS] are described under the discussion of the individual customer arrangements below.

622 See response to the Decision opening the proceedings, paragraph 1039 of consolidated response, annex A.

623 Notifying Parties' response to RFI 24, of 18 November 2016, Question paragraphs 17 et seq.

624 Replies to questionnaire Q3 "Derivatives customers", question 56 clearly shows that market participants take margin requirements into account for the selection of a specific trading / clearing venue. Replies to question 57 of the same questionnaire show that at least a relevant part of the respondents consider

(873) This episode clearly shows that the obligation to accept new products for clearing – even for reasonable clearing fees – is not sufficient to shield third party venues relying on merchant clearing by LCH.Clearnet. Indeed, [BUSINESS SECRETS] are a very practical example of how LCH.Clearnet has an ability to obstruct Euronext's success on the market.

(874) The Notifying Parties' claim that LCH.Clearnet is obliged to exercise its best efforts to support the introduction of new products as well as the claim regarding the influence of the Derivatives Steering Committee can also be reviewed in light of the incident described by Euronext.

(875) In fact, Euronext did complain [CONFIDENTIAL INFORMATION ABOUT TIMING AND COMPETITIVENESS OF CLEARING ARRANGEMENTS FOR SPECIFIC PRODUCTS][627] – shows significant ability for a partial foreclosure. Such a delay has to be seen in the context of the competitive structures in the relevant markets where a clear first mover advantage exists; given the strong network effects typical for these markets, every late comer will face additional difficulties to attract liquidity for a new type of product.

(876) Based on the above, the Commission concludes that Euronext's specific arrangements with LCH.Clearnet are insufficient to prevent at least partial foreclosure strategies.

9.3.3.3.2.3. MiFID II/MIFIR would not fully prevent foreclosure of trading venues

(877) The Commission acknowledges that MiFID II and MiFIR are important steps in further promoting competition between exchanges. However, the new rules are not designed to remedy specific foreclosure concerns stemming from the proposed Transaction.

(878) First, the full implementation of the open access provisions will take place after the proposed closing of the Transaction and might be effectively delayed in practice until 2020 in some member states.[628]

(879) Second, competition at trading level brought about by opening access to trading venues to the merged entity's CCPs could be hampered if the merged entity would charge very low or no trading fee to evict competitors at trading level and recoup the loss of trading revenue by charging a higher clearing fee. Open access obligations do not prescribe the level of fees for (non-discriminatory) access, and thereby exchanges can react by raising the clearing fee and decrease the trading fee. While for their own users such a change in the fee structure would be neutral, a high clearing fee would be uneconomical for any trading venue that wants to access a CCP. In addition, given that the merged entity will enjoy significant market power at clearing level, charging

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CCPs to at least compete to some extent and over the long term on margin requirements. Credit Agricole stated in reply to this question: "*Exchanges compete in all areas including margin requirements and it is difficult to dissociate one criteria from the rest of the product offer*". This perception is also shared by Euronext, stating that "Margin requirements are the largest determining factor for a member in choosing a trading venue" (Euronext post-meeting RFI response, page 6 [ID 3309]).

625 Euronext post-meeting RFI response, page 2, [ID 3309].

626 Euronext post-meeting RFI response, page 4, [ID 3309].

627 Euronext post-meeting RFI response [ID 3309], page 5. See also Annex 3 to RFI September [ID 5821].

628 See above Section 9.1.1.

high clearing fees is possible as it would not necessarily be defeated by a loss of demand. The Commission notes that such a higher clearing fee needs not to be discriminatory and may be applied across the board for all trading venues, including those of the merged entity. As a result, such a strategy would at worst have a neutral effect on the revenues of the merged entity and at best be profitable.[629]

(880) As concerns access to CCPs other than those of the Notifying Parties under the upcoming access regime, the Commission notes that the Parties will be able to implement (partial) foreclosure strategies even before full applicability of the new rules. The anti-competitive effects of the merger would have already materialized and customers would have already diverted to the merged entity by then. Given the network nature of the industry, liquidity would have become even stickier to the merged entity and barriers to expansion for the other players thus higher.

9.3.3.4. Conclusion

(881) In view of the foregoing, the Commission concludes that the Transaction would lead to a significant impediment of effective competition in the market for single stock equity derivatives, regardless of the precise market definition as the Transaction would eliminate the horizontal bundle-to-bundle competition between Eurex and Euronext.

(882) In addition, the Commission also considers that the Transaction would lead to a significant impediment of effective competition as it would foreclose Euronext (fully or partially) relying on clearing services provided by LCH SA.

10. PROVISION OF INTEGRATED CLEARING SERVICES

10.1. Notifying Parties' activities

(883) DBAG and LSEG are active in the provision of clearing services in relation to a variety of financial instruments.

(884) DBAG provides clearing services with respect to equities and equities-like products, bonds, repos, and for exchange traded derivatives through Eurex Clearing, which acts as CCP for the Eurex Exchange, Eurex Bonds, Eurex Repo, FWB, and the Irish Stock Exchange. Within Eurex, Eurex OTC Clear service offers central clearing of OTC interest rate swaps and a number of other OTC derivatives such as vanilla interest rate swaps, forward rate agreements, overnight index swaps, and single currency basis swaps.

(885) DBAG also operates "ECC", a commodity derivatives clearing house, wholly-owned by EEX, which provides clearing services for a range of energy products, including physical and financial trading of power, freight, natural gas and emissions derivatives traded on EEX or on third party trading venues linked to ECC.[630]

(886) LSEG offers clearing services for equities, equities-like products, exchange traded derivatives, bonds, and repos through LCH.Clearnet Group which it acquired in 2013 and Italian clearing house CC&G clearing instruments traded on LSEG's subsidiary, Borsa Italiana.

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629 It is illustrative that [BUSINESS SECRETS].

630 Third party trading venues linked to ECC include the Hungarian Power Exchange, See Power Exchange AD, Central European Gas Hub and NOREXECO.

(887) The LCH.Clearnet comprises two separate CCPs in Europe: LCH.Clearnet SA, located in Paris and LCH.Clearnet Ltd located in London. [BUSINESS SECRETS].

(888) LCH.Clearnet Ltd runs separate business units for its diverse product lines (SwapClear, RepoClear, EquityClear, etc.). The spider tool enables cross-margining across [BUSINESS SECRETS] but not the [POOLS] operated by LCH.Clearnet SA. SwapClear is by far the largest single pool of LCH.Clearnet, accounting for over 80% of the total open interest held by LCH.Clearnet Ltd.

(889) LCH.Clearnet offers merchant clearing services to several trading venues across a variety of financial instruments including Euronext, Nasdaq's NLX, BrokerTec, BATS, Oslo Børs etc.

(890) With respect to commodities, LSEG offers clearing services for Italian and German power derivatives through CC&G. CC&G only clears power derivative contracts traded or registered on IDEX[631]. LCH Ltd is active provides merchant clearing for a number of commodities including freight derivatives traded via Baltex, CLTX, FIS, SSYm Clarksons, GFI and ICAP.

10.2. Market definition

10.2.1. The Commission's preliminary view in the Statement of Objections

(891) In the Statement of Objections, the Commission preliminarily considered that it is appropriate, in addition to an analysis by type of financial instrument, to also to conduct an assessment along the financial services value chain.

(892) In the Statement of Objections, the Commission expressed the view that this position appeared to be supported by the evidence gathered by the Commission during its market investigation, and that the evidence on the file, including Parties' internal documents indicated that there is increasing demand – and supply – of integrated clearing services, defined as an offering for customers to clear several types of financial instruments or asset classes in a single CCP.

(893) The Commission preliminarily considered that this separate market existed for the following reasons:

(894) First, the demand for integrated clearing solutions can be distinguished from the demand for individual products.

(895) It is driven by capital savings that can be achieved by customers pooling their demand for clearing services across instruments in one place. These savings may be collateral savings, default fund contributions savings, savings from operational efficiency and reduced connections etc. These saving are generally of such a magnitude that the supply of such integrated clearing services is not substitutable from customers' point of view. As a result, customers seeking joint clearing solutions will generally not be satisfied with the supply of individual components. Rather than switching to suppliers of individual components and selecting those on the basis of price and non-price parameters, customers will look for another supplier of integrated clearing solutions (to the extent that such solutions are available). In other

631 IDEX is the energy commodity derivatives segment of the Italian Derivatives Market ("IDEM"), the derivatives trading platform of Borsa Italiana S.p.A. ("Borsa Italiana").

words, customers will compare the integrated solutions of various suppliers rather than the sum of individual services.

(896) Second, collateral savings and regulatory capital requirements drive demand for integrated clearing services.

(897) There is an increasing importance of CCP clearing and a related demand for efficiencies as regards collateral and regulatory capital requirements. Many customers, in particular sell-side customers, trade and clear a variety of different financial instruments and consider that clearing differing types of transactions in the same CCP brings significant benefits. In view of these drivers in the market a new demand for integrated clearing services that encompass clearing of different types of financial instruments has started to emerge.

(898) Financial market infrastructure providers are seeking to maximise complementarities across clearing services which make it increasingly desirable for large customers to concentrate as much of their diverse clearing needs in one place as possible in order to derive savings from integrated clearing services.

(899) Third, large clearing houses have begun to supply integrated clearing services in response to this new demand

(900) In response to the changing demand, providers of clearing services have begun to enhance the attractiveness of their services by offering clearing of complementary products, for example by providing the possibility of cross-margining of correlated positions in a customers' overall portfolio, or to exploit other synergies deriving from clearing (or even trading) of financial instruments under one roof, all in order to reduce their customers' capital costs (for example through a reduction of the initial margin, of default fund contributions etc.).

(901) The Commission considered in the Statement of Objections that as a response to the regulation driven demand for integrated clearing services, large clearing houses have recognised that they need to supply such services in order to remain competitive. The foregoing also has important implications as to the actors on the market for integrated clearing services: Given the importance of cross-asset clearing, supply of these services can only come from clearing houses offering the clearing of a sufficiently large number of different instruments and assets.

(902) Fourth, the Commission considered that clearing of OTC and exchange traded interest rate derivatives are but one example of integrated clearing services being provided as a response to a distinct demand, and that there there is a variety of different combinations of integrated clearing services. Indeed, there are strong indications that there is demand, and as a result, competition, for even broader integrated clearing services, in essence for the same reason that drove the development of cross-margining tools for IR swaps and futures: The pressing need of large customers to save collateral, capital and reduce the leverage ratio.

(903) In view of the above, the Commission considered in the Statement of Objections that there are strong indications of the existence not only of distinct demand for integrated clearing services, but also of distinct supply of such integrated clearing services.

(904) The Commission left open the question of whether the geographic scope of the market for integrated clearing services is worldwide or limited to the EEA.

(905) Against the background of this market definition, the Commission preliminarily concluded in the Statement of Objections that, in view of the exceptionally diverse offering of clearing services that the Notifying Parties are able to provide as compared to their rivals, the closeness of competition between them, the reduction of competitors from four to three, the merger between two important innovators and the resulting likely loss of innovation competition, and the lack of likely entry, the Transaction would lead to a significant impediment of effective competition in the market for integrated clearing services.

10.2.2. Notifying Parties' views

(906) In response to the Statement of Objections, the Notifying Parties first argue that the hypothetical market for integrated clearing services does not exist, and that a definition of an integrated clearing services market is inconsistent with the market definition adopted for ETDs and OTC IRDs.

(907) In addition, the Notifying Parties argue that the Commission's theory in relation to integrated clearing services relies heavily on the availability and competitive significance of cross-margining between ETDs and OTC IRDs, [BUSINESS SECRETS].

(908) Moreover, the Notifying Parties argued that there is no general trend towards customers wanting to consolidate their clearing activities in a single CCP, as arguably demonstrated by the fact that market shares of large CCPs are not increasing across asset classes, and that the CCP landscape remains fragmented.

(909) Finally, the Notifying Parties argued that the Statement of Objections has ignored the significance of the Parties' European and global competitors in this regard, and in particular also as regards innovation. The Notifying Parties submit that all of them will continue to innovate post-Transaction. Indeed CME (now benefitting from equivalence at both trading and clearing levels in the EEA) was the first to launch cross-margining between ET and OTC IRDs, ahead of either of the Parties. Post-Transaction, the Parties' competitors will be just as well-placed to continue innovating to win business and maintain their competitive constraint.

10.2.3. The Commission's assessment

(910) The Commission has carefully considered the Notifying Parties' arguments and the evidence presented in their response to the Statement of Objections.[632]

(911) However, the questions of whether a separate market for integrated clearing services exists and of whether the Transaction gives rise to a significant impediment of effective competition in such possible market can be left open for the purposes of this Decision, as the overall assessment of the case would not change. This is because, as explained in Section 11, the remedies submitted by the Notifying Parties are insufficient to solve competition concerns in the markets for CCP clearing of bonds, for ATS traded and CCP cleared triparty repos, ATS traded and CCP cleared non-triparty repos, as well as on the markets for settlement and custody services in relation to fixed income provided by ICSDs and large custodians and for collateral management.

[632] Notifying Parties' response to the Statement of Objections I, paragraphs 386 et seq.

11. COMMITMENTS

11.1. Analytical framework for the assessment of the Commitments

(912) Where the Commission finds that a concentration raises competition concerns in that it could significantly impede effective competition, the parties may seek to modify the concentration in order to resolve the competition concerns and thereby gain clearance of their merger.[633]

(913) Under the Merger Regulation, it is the responsibility of the Commission to show that a concentration would significantly impede effective competition. The Commission then communicates its competition concerns to the parties to allow them to formulate appropriate and corresponding proposals for remedies. It is then for the parties to the concentration to put forward commitments.[634] The Commission only has power to accept commitments that are deemed capable of rendering the concentration compatible with the internal market as they will prevent a significant impediment of effective competition in all relevant markets where competition concerns were identified.[635] To this end, the commitments have to eliminate the competition concerns entirely and have to be comprehensive and effective from all points of view.[636] The commitments must also be proportionate to the competition concerns identified.[637]

(914) In assessing whether proposed commitments will likely eliminate the competition concerns identified, the Commission considers all relevant factors including *inter alia* the type, scale and scope of the proposed commitments, judged by reference to the structure and particular characteristics of the market in which the competition concerns arise, including the position of the parties and other participants on the market.[638]

(915) In order for the commitments to comply with those principles, commitments must be capable of being implemented effectively within a short period of time.[639] Where, however, the parties submit proposals for remedies that are so extensive and complex that is not possible for the Commission to determine with the requisite degree of certainty, at the time of its decision, that they will be fully implemented and that they are likely to maintain effective competition in the market, an authorisation decision cannot be granted.[640]

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633 See Commission notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 (the "Remedies Notice"), OJ 2008/C 267/01, paragraph 5.

634 Remedies Notice, paragraph 6.

635 Remedies Notice, paragraph 9.

636 Remedies Notice, paragraph 9 and 61.

637 Recital 30 of the Merger Regulation. The General Court set out the requirements of proportionality as follows: "*the principle of proportionality requires measures adopted by Community institutions not to exceed the limits of what is appropriate and necessary in order to attain the objectives pursued; when there is a choice between several appropriate measures recourse must be had to the least onerous, and the disadvantages caused must not be disproportionate to the aims pursued*" (T-177/04 *easyJet v Commission* [2006] ECR II-1931, paragraph 133).

638 Remedies Notice, paragraph 12.

639 Remedies Notice, paragraph 9.

640 Remedies Notice, paragraph 13, 14 and 61 ff.

(916) The Merger Regulation leaves discretion to the Commission as regards the form which acceptable commitments take as long as the commitments meet the requisite standard.[641]

(917) Structural commitments will meet the applicable conditions only in so far as the Commission is able to conclude with the requisite degree of certainty that it will be possible to implement them and that it is likely that the new commercial structures resulting from them will be sufficiently workable, viable and lasting to ensure that the significant impediment to effective competition will not materialise.[642]

(918) While divestiture commitments are generally the best way to eliminate competition concerns resulting from horizontal overlaps, other structural commitments, such as access remedies, may be suitable to resolve concerns if those remedies are equivalent to divestitures in their effects.[643] Commitments relating to the future behaviour of the merged entity may be acceptable only exceptionally in very specific circumstances.[644]

(919) When assessing the remedies proposed by the parties, the Commission has the duty to ensure that the remedies would be effective in practice. In order for the commitments to remove the competition concerns entirely and be comprehensive and effective, there has to be an effective implementation and ability to monitor the commitments.[645] Whereas divestitures once implemented do not require any further monitoring measures, other types of commitments require effective monitoring mechanisms in order to ensure that their effect is not reduced or even eliminated by the parties. Otherwise such commitments would have to be considered as mere declarations of intentions by the parties and would not amount to binding conditions and obligations, as, due to the lack of effective monitoring mechanisms, it is unlikely that the Commission would be able to detect any breach and, if necessary, to revoke the decision according to Article 8(6)(b) of the Merger Regulation or to impose fines as per Article 14(2)(d) of the Merger Regulation.

(920) As for divestitures, the divested activities must consist of a viable business that can compete with the merged entity on a lasting basis. To ensure the viability of the business, it may also be necessary to include activities which are related to markets where the Commission did not identify competition concerns.[646]

(921) In terms of timing, pursuant to Article 19(2) of the Commission Regulation (EC) No 802/2004,[647] the commitments must be submitted in a timely fashion, that is no later than 65 working days after proceedings were initiated, to allow for an adequate

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641 See Case T-177/04 easyJet v Commission [2006] ECR II-1913, paragraph 197: "*Article 6(2) of Regulation No 4064/89 provides that the Commission may authorise a merger if the commitments proposed by the parties dispel the serious doubts as to the compatibility of the merger with the common market. Regulation No 4064/89 thus lays down the objective to be achieved by the Commission, but leaves it a wide discretion as to the form which the commitments in question may take.*"

642 Remedies Notice, paragraph 10.

643 Remedies Notice, paragraph 19.

644 Remedies Notice, paragraph 17.

645 Remedies Notice, paragraph 13.

646 Remedies Notice, paragraph 23.

647 Commission Regulation (EC) No 802/2004 of 21 April 2004 implementing Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings (the "Implementing Regulation").

assessment and for proper consultation of Member States.[648] The Commission is under no obligation to accept any potential improvements to the commitments after the expiry of that deadline.[649] If the Commission nevertheless voluntarily agrees to assess such commitments, they will only be accepted where it can clearly be determined – on the basis of the Commission's assessment of information already received in the course of the investigation, including the results of prior market testing, and without the need for any other market test – that such commitments, once implemented, fully and unambiguously resolve the competition concerns identified and where there is sufficient time for proper consultation with Member States. The Commission will normally reject modified commitments which do not fulfil those conditions.[650]

(922) It is against these principles that the Commission assessed the viability, the effectiveness, and the ability of the proposed commitments to entirely eliminate the competition concerns identified in Sections 6, 7, 8 and 9 of this Decision.

(923) The Commission's conclusions with respect to the suitability of the submitted commitments are based on all available evidence, including the results of the market test and its own analysis against the criteria for acceptable remedies in merger cases contained in the Remedies Notice.

11.2. The various sets of commitments submitted by the Notifying Parties

(924) In the area of fixed income clearing the Transaction gives rise to a strengthening of a dominant position on three distinct markets (the market for CCP clearing of bonds, and the markets for ATS traded and CCP cleared triparty repos and non–triparty repos). The overall dominant position of the merged entity in these markets also has a knock-on effect on the market for settlement and custody provided by ICSDs and global custodians in relation to fixed income and the market for collateral management where it may lead to a foreclosure of competitors, and in particular Clearstream's main competitor, Euroclear which depends on inputs from CCPs, i.e. clearing fixed income trades.

(925) LCH SA has a significantly larger presence than DBAG (Eurex) in clearing of ATS traded and CCP cleared non-triparty repos and in CCP clearing of bonds, and clears € GC Plus, LSEG's triparty repo product.

(926) In order to address the competition concerns identified in the Statement of Objections, and maintained following the Notifying Parties' response to the Statement of Objections, the Notifying Parties formally submitted commitments on 6 February 2017. Modified versions of those commitments were submitted on 8 and 9 February 2017 ("First Commitments").

(927) In essence, the First Commitments concerned a binding agreement that LSEG had entered into with Euronext N.V. ("Euronext" or the "Purchaser") on 3 January 2017 for the sale of LCH SA, completion of the agreement being conditional on the Transaction being approved by the Commission in accordance with the Merger Regulation.

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648 Remedies Notice, paragraph 94.

649 Implementing Regulation, Article 19 (2).

650 Remedies Notice, paragraph 94.

(928) The First Commitments aimed at removing the significant impediments to effective competition discussed in Sections 6, 7, 8 and 9, namely on the markets for:

- CCP clearing of bonds;
- ATS traded and CCP cleared non-triparty repos;
- ATS traded and CCP cleared triparty repos;
- settlement and custody services in relation to fixed income provided by ICSDs and large custodians;
- collateral management; and
- single stock equity derivatives.

(929) On 9 February 2017, the Commission launched a market test of the First Commitments (referred to as the "Market Test"). The deadline for market participants to provide feedback was 14 February 2017.[651]

(930) On 16 February 2017, the Commission informed the Notifying Parties of the results of the Market Test during a state of play call. Further conference calls between the Notifying Parties and the Commission took place on 17 and 18 February 2017.

(931) To allow the Notifying Parties to verify the Commission's statements, the Commission granted them access to non-confidential responses to the Market Test within the framework of the access to the file procedure, in the morning of 17 February 2017. The last response from Euronext was sent to the Notifying Parties on 18 February 2017 shortly after the non-confidential version of Euronext's reply became available.

(932) On 17 February 2017, the Notifying Parties orally hinted at the idea of an alternative remedy ("alternative remedy proposal").

(933) On the same day and in subsequent exchanges on 18 and 19 February 2017 the Commission indicated that the informal proposal seemed to fall short of the legal standard for acceptance of late remedies[652] and indicated that a clear-cut solution at this stage which would not necessitate a further market test could be the divestiture of LSEG's MTS.

(934) During those conversations, LSEG explained that [FOLLOWING DIALOGUE WITH ITALIAN AUTHORITIES ABOUT THE COMMISSION'S REQUIRED REMEDY, IT WAS HIGHLY UNLIKELY THAT A SALE OF MTS COULD BE SATISFACTORILY ACHIEVED].

(935) On 22 February 2017, the Notifying Parties presented an alternative remedy proposal in writing.[653]

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651 The deadline was extended by 1 or 2 days for a few market participants.

652 See Section 11.1. above.

653 The draft of modified commitments presented however some discrepancies with the documents submitted together with this draft, in particular a "*Remedy Improvements Submission*" [FBD_Rem_052] which is submitted to "*explain[…] in detail the improvements LSEG proposes to supplement the existing LCH SA divestment remedy*". The explanatory paper contains some elements that are not reflected in the draft revised Commitments and can thus not be enforced by the Commission, should it consider these actions as appropriate. The explanatory paper indicates for example that [BUSINESS SECRETS], which does not appear in the draft revised Commitments.

(936) In a letter dated 23 February 2017 and received on 24 February 2017, the CEO of LSEG stated that [BUSINESS SECRETS].[654]

(937) On 27 February 2017, the Notifying Parties formally submitted the alternative remedy proposal (the "Final Commitments").

11.2.1. The First Commitments

11.2.1.1. Description of the First Commitments

(938) The First Commitments provided for a full divestiture of all shares in LCH SA, a Eurozone-based clearing house and central counterparty (CCP) to Euronext.

(939) LCH SA is 100% owned by the LCH.Clearnet Group Limited (referred to as "LCH Group" or LCH.Clearnet) with LSEG being the ultimate controlling parent through its 57.8% majority shareholding in LCH Group.

(940) LCH SA is incorporated in France and registered as Banque Centrale de Compensation S.A. The management of LCH SA and almost all of its 189 employees are based at its headquarters in Paris. It has two additional branch offices in Amsterdam and Brussels as well as a representative office in Porto. There are no further entities belonging to the Divestment Business.

(941) LCH SA has been active in providing clearing services to European financial markets since 1998. It became part of the LCH Group in 2003 following the merger between the London Clearing House and Clearnet SA.

(942) LCH SA is a CCP authorised under EMIR which means that its clearing authorisations are valid across all Contracting Parties to the EEA Agreement. It is also regulated as a Credit Institution (with its own banking license) by the French supervisory authorities.

(943) LCH SA clears trades in a broad range of asset classes comprising both listed and OTC products and serves regulated markets and trading platforms across Europe. This includes euro denominated bonds, non-triparty and triparty repos, cash equities, exchange traded derivatives and commodities.

(944) LCH SA's main activity is clearing of derivatives and equities traded on Euronext.[655] In addition, it clears euro denominated cash bond, non-triparty repo trades (French, Italian and Spanish government bonds), as well as the €GC Plus triparty repo product.[656]

(945) Prior to the Transaction, the LCH Group launched [THE REDACTED TEXT EXPLAINS AN INTERNAL LCH PROJECT TO EXPAND EURO DENOMINATED FIXED INCOME CLEARING CAPABILITY IN LCH SA] in

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654 Letter of LSEG to Commissioner Vestager, dated 23 February 2017 and submitted by email on 24 February 2017.

655 Divestment Business' gross income in 2015 for listed derivatives and commodities: EUR [BUSINESS SECRETS] (Source: revised Form RM (Second Version) submitted on 8 February 2017 ("Form RM"), Table 25), for CDSClear: EUR [BUSINESS SECRETS] (Source: Form RM, Table 27), for cash equities: EUR [BUSINESS SECRETS] (Source: Form RM, Table 23).

656 Divestment Business' gross income for fixed income in 2015: EUR [BUSINESS SECRETS] (Source: Form RM, Table 21)

order to create balance sheet netting possibilities for customers that are enabled through T2S.[657]

(946) The [REDACTED TEXT GIVES ADDITIONAL DETAILS ON THE INTERNAL LCH PROJECT TO EXPAND EURO DENOMINATED FIXED INCOME CLEARING CAPABILITY IN LCH SA] was that as of February 2017, LCH SA has become capable of clearing German government bonds and repos. [BUSINESS SECRETS].[658]

(947) LCH SA currently provides clearing services for a range of trading venues including notably, LSEG's MTS for bonds and LSEG's MTS, BrokerTec, and Tullett Prebon's tpRepo for repos.[659]

(948) The "Divestment Business" as proposed in the First Commitments included in particular, subject to exceptions listed in the recital below, all tangible and intangible assets, IT and material software used by LCH SA including arrangements for the supply of transitional services for a period of up to [BUSINESS SECRETS], all necessary licences, permits and authorisations, all contracts, leases, commitments and customer orders of LCH SA, the multi-year clearing contracts with Euronext and all Personnel employed directly by LCH SA and all personnel necessary to maintain the viability and competitiveness of the Divestment Business, as listed in the Schedule of the First Commitments ("Key Personnel").

(949) The First Commitments excluded certain assets from the Divestment business which are described below:

– three brands that are currently used by both LCH SA and LCH Ltd, and will be retained by LCH Ltd. These are "LCH", "RepoClear" and "EquityClear".

– two categories of employees: (i) six non-essential LCH SA employees with substantial LSEG or LCH Ltd responsibilities with roles in the following areas: Post-trade regulatory, Finance/ Oracle Project, Internal Audit and LSEG Relationship Management, and (ii) individuals with LCH Group level responsibilities such as LCH Group's executive committee members, the Group CEO, and the Global Head of Repoclear.

– the [BUSINESS SECRETS] Data Centre Agreement. This is a lease agreement concluded with [BUSINESS SECRETS], a third party data centre services provider, for the storage of data. [BUSINESS SECRETS]. This agreement will be novated to LCH Ltd.

11.2.2. Assessment of the First Commitments

(950) The Commission launched the Market Test of the First Commitments on 9 February 2017.

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657 Form RM (for example, Section E.2.(a) [BUSINESS SECRETS]: the importance of netting and T2S, page 25).

658 Form RM, paragraph 97 and footnote 48. Form RM, Annex, additional internal document in relation to [BUSINESS SECRETS], page 6.

659 LCH SA receives (i) [BUSINESS SECRETS] of its bond volumes from MTS and [BUSINESS SECRETS] from BrokerTec, (ii) [BUSINESS SECRETS] of its non-triparty repo volumes from MTS, [BUSINESS SECRETS] from BrokerTec and [BUSINESS SECRETS] from voice/direct trading, and (iii) [BUSINESS SECRETS] of its triparty repo volumes from MTS and [BUSINESS SECRETS] from BrokerTec. Source: Form CO, Annex1a.

(951) The Market Test mainly aimed at allowing the Commission to assess: (i) the scope and effectiveness of the First Commitments, (ii) the viability of the Divestment Business and possible implementation risks and (iii) the suitability of Euronext as a purchaser of the Divestment Business.

(952) Overall, the results of the Market Test pointed to two main concerns relating to the viability of the Divestment Business in the markets for ATS traded and CCP cleared triparty and non-triparty repos (together referred to, for convenience as "repos clearing" or "repos clearing markets"), as well as for CCP clearing of bonds (together referred to, for convenience, as "fixed income clearing" or "fixed income clearing markets" for the purposes of Section 11 of this Decision).

(953) Given these concerns, the Commission could not conclude that the First Commitments would be effective to remedy all competition concerns entirely, in particular those relating to fixed income clearing.

11.2.2.1. Importance of access to MTS

(954) The results of the Market Test, as described in greater detail in the remainder of the present section, clearly indicated that, for the Divestment Business to remain viable as regards bonds and repos clearing, access to trade feeds, and the trading platform MTS in particular is crucial because without access to MTS, the Divestment Business' market share would not be retained. This is because currently LCH SA's bonds and repos clearing volumes come predominantly from MTS. The market test also provided indications of customers' general stickiness to a trading platform as opposed to a clearing location in fixed income, in a sense that customers would prefer changing the latter rather than the former. This seems in particular to be the case for Italian bonds and repos, for example, where BrokerTec seems to be a suboptimal alternative to MTS, due to Italian domestic regulation incentivising banks to trade on MTS.[660]

(955) First, a clear majority of customers responding to the Commission's Market Test identified ownership of, or alternatively access to, MTS, as being important for the Divestment Business' ability to compete in fixed income clearing.[661] For example, one market participant explained that "*transferring LCH Clearnet SA while retaining MTS will obviously limit the ability of LCH Clearnet SA to retain even its current market share; let alone be a real competitor of the merged entity*".[662] Another market participant stated that *"it's very difficult that it could compete as the markets [i.e. trading platforms] [choose] the clearer and the merged entity could not choose the divestment entity as one of its clearer"*.[663]

(956) Importantly, Euronext, the prospective buyer of the Divestment Business, also underlines that MTS is an "*essential trading partner in ATS-traded and CCP-cleared non-triparty repos (and triparty) repos*".[664]

(957) Moreover, a large majority of respondents to the Market Test also consider that LCH Ltd could use the fact that it is part of the same group as MTS to attract additional

660 Agreed minutes of a teleconference call with ICAP of 2 August 2016, [ID 3627].
661 Replies to questionnaire R2 "Customers", question 7.
662 Natixis, reply to questionnaire R2 "Customers", question 8, [ID 7204].
663 Banca Sella, reply to questionnaire R2 "Customers", question 7, [ID 7164].
664 Euronext comments on remedies, dated 15 February 2017 [ID 7332].

clearing volumes, even if it remained possible post-Transaction to clear transactions traded on MTS in LCH SA[665] In that context, one market participant remarked that "*it is hard to guess what proportion of market participants will move from LCH Clearnet SA to LCH Clearnet Ltd for MTS Trade clearing. But the risk does exist that the Fixed Income and repo business clearing could move almost exclusively to LCH Clearnet Ltd"*.[666]

(958) Second, in response to the question of what the customers' reaction would be in case MTS were to sever the link with LCH SA, of those market participants that provided an informative answer and took a position[667], a significant majority (26 out of 32) indicated they would keep on trading on MTS and move clearing to LCH Ltd, whereas only 6 out of 32 would switch trading platform and continue to clear with LCH SA.[668] Those market participants explained for example that the reasons for this were that "*MTS has quite a large user base and provides significant liquidity*"[669], that "*there is a preference of a specific trading platform over CCP choice*"[670] and that *"MTS platform is the main dealer to dealer platform and liquidity/activity would continue there, we don't see any reason why dealers could be willing to move their business from MTS to Brokertec*"[671].

(959) In a similar vein, Euroclear expects that in such an event, *"the most likely effect would […] be for these trading volumes to remain on MTS and for clearing volumes to move to LCH Ltd and/or Eurex Clearing. Alternatively, for clients already clearing some Italian government bond and repo trades in CC&G [that will also be part of the merged entity] an acceptable arrangement might be to keep trading on MTS and move clearing to CC&G*".[672]

(960) The results of the Market Test, therefore, indicate that a large share of those customers trading on MTS would continue to do so and would switch clearing houses if necessary, rather than change trading platforms so as to continue clearing with the Divestment Business.

(961) In view of the network effects described in Section 5.2.1, if a large proportion of customers were to switch to another clearing house, and in particular to LCH Ltd, this would immediately make the Divestment Business less attractive for those that would initially stay. It could ultimately lead to a point where the majority of volume would tip. As a result, the Divestment Business' viability as a going concern in these markets would be significantly affected.

(962) In addition, a number of customers also indicated that the success of €GC Plus (LSEG triparty repo product), traded on MTS and BrokerTec, depends on access to

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665 Replies to questionnaire R2 "Customers", question 9.

666 Landesbank Hessen-Thüringen, reply to questionnaire R2 "Customers", question 9 [ID 7213]

667 This excludes market participants that replied "other".

668 Replies to questionnaire R2 "Customers", question 10. Of 59 responses, 26 consider that clearing volumes would switch to LCH Ltd, whereas only 6 consider that trading volumes would switch to BrokerTec and clearing would remain with LCH SA. The remainder of those that answered selected "other", i.e. did not take a definitive position

669 Deutsche Bank, reply to questionnaire R2 "Customers", question 10.1, [ID 7281].

670 DekaBank Deutsche Girozentrale, reply to questionnaire R2 "Customers", question 10.1, [ID 7256].

671 BBVA, reply to questionnaire R2 "Customers", question 10.1, [ID 7198].

672 Euroclear, reply to questionnaire R1 "Competitors", question 10.1, [ID 7293].

MTS.[673] For example, one market participant explained that "*the fact that it [€ GC Plus] is traded on MTS could affect LCH SA*"[674], whereas another suggested that "*a guarantee for the Divestment Business to be able to clear transactions conducted on MTS*"[675] could help to mitigate the risk that the ownership of MTS by €GC Plus' main competitor poses.

(963) This view is also shared by Euroclear, which provides CMS for €GC Plus, and considers that "*the continued viability and expansion of €GC Plus obviously entirely depends on it receiving a sufficient number and type of trades from trading systems [including MTS] that are successful in capturing trading liquidity*".[676]

(964) It follows that the Market Test provided clear indications that the link to MTS is an essential condition for the Divestment Business' continued presence and potential growth in the bonds and repos clearing business. The key reason for this is that LCH SA's clearing business in fixed income comes to a very large extent from MTS, and that trading feeds from BrokerTec, the largest trading platform for these instruments, could likely not replace this dependency were it no longer possible to clear trades executed on MTS in LCH SA.

11.2.2.2. Uncertainty about the migration of the German [BUSINESS SECRETS] denominated government bonds to LCH SA

(965) The Market Test also aimed at assessing the extent to which Project [BUSINESS SECRETS][677] would hold in a Transaction scenario. Were this migration to occur, it would considerably strengthen the Divestment Business' viability in fixed income clearing.

(966) First, the Market Test results indicate that [BUSINESS SECRETS] customers are indeed interested in pooling their euro denominated fixed income business in a single CCP, due in particular to balance sheet netting opportunities arising from the introduction of T2S.[678] In this context one market participant explained the circumstances in which such balance sheet netting efficiencies can be achieved "*There are four conditions to do balance sheet netting; coincidence in the settlement dates, coincidence in the counterparty, coincidence of currency and coincidence of settlement venue. If these four conditions apply, banks are able to net different trades on different bonds on their balance sheets. It is clear, in view of the four conditions and with the incoming implementation of Target 2 Securities as settlement venue for all the main bonds, that concentrating volume within a single CCP (to have the same counterparty) will be a driving factor to get this balance sheet netting*".[679]

(967) However, the results of the Market Test cast considerable doubt on whether the migration of further euro denominated fixed income business from LCH Ltd to LCH SA will happen, especially in the post-Transaction scenario where the merged entity

673 Replies to questionnaire R2 "Customers", question 11.
674 BBVA, reply to questionnaire R2 "Customers", question 10.1, [ID 7198].
675 Unicredit, reply to questionnaire R2 "Customers", question 11.1, [ID 7268].
676 Euroclear, reply to questionnaire R1 "Competitors", question 11, [ID 7293].
677 In particular that a [THE REDACTED TEXT EXPLAINS AN INTERNAL LCH PROJECT TO EXPAND EURO DENOMINATED FIXED INCOME CLEARING CAPABILITY IN LCH SA]
678 Replies to questionnaire R2 "Customers", questions 21 and 22.
679 BME, reply to questionnaire R1 "Competitors", question 21, [ID 7287].

would also continue clearing fixed income instruments and thus retain substantial liquidity.

(968) Even in the current situation, only few customers confirmed they are going to migrate. For example, when asked if they would move the clearing of all or most of their repo and bond volumes to LCH SA after it starts offering the clearing of German government bonds, only a very small number of market participants said they would, whereas approximately half of all respondents indicated that they would not move any or only small volumes and a substantial share of market participants explained that they would move only after substantial liquidity (open interest) has shifted to LCH SA.[680] In this respect, for example, one respondent explained that "*if market liquidity moves to Clearnet SA – then we would expect all or some of our volume to migrate. We go where market liquidity is in order to maximise netting*".[681]

(969) Generally speaking, the results of the Market Test are fully consistent with the information obtained by the Commission during its investigation, in so far as liquidity is the key driver for trading (and clearing) location choices, as described in Section 7 above. In fact, the large majority of respondents to the market test indicated that liquidity is more important a factor for the choice of trading venue/CCP than balance sheet netting possibilities.[682]

(970) This and the fact that most customers appear only willing to move once sufficient liquidity has built up in LCH SA would suggest that the mere possibility of clearing German bonds and repos on LCH SA as of February 2017 will not automatically induce the business shift that [BUSINESS SECRETS] aimed to achieve.

(971) These results should also be seen against the important background whereby, pre-Transaction, LCH as a group had the incentives to encourage customers and make the movement happen, while this can no longer be assumed post-Transaction. Rather, it can even be predicted that the merged entity would likely try to prevent or reverse such migration. Indeed, the market test indicates that the merged entity would have the ability and incentive to do so. In this context approximately half of the respondents considered that the merged entity would be able to obstruct the movement of German government bonds/repos to LCH SA post-Transaction.[683] For example, one market participant explained that the Notifying Parties would be able to do so because "*they control the trading platforms*"[684] which, as explained in Section 11.2.2.1 above, would enable them to significantly decrease LCH SA's attractiveness by depriving it of trades performed on MTS. This view is shared by some market infrastructure providers, of which BME for example explains that "*the merged entity will do everything possible to retain the German government bonds/repos based on German government bonds and it will have such a strong position that it will have serious chances of being successful, thereby significantly hindering the movement of such bonds/repos to LCHClearnet SA post-merger*."[685]

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680 Replies to questionnaire R2 "Customers", question 16.

681 UBS, reply to questionnaire R2 "Customers", question 16.1, [ID 7275].

682 Replies to questionnaire R2 "Customers", question 24.

683 Replies to questionnaire R2 "Customers", question 27.

684 Banca Sella, reply to questionnaire R2 "Customers", question 27, [ID 7164].

685 BME, reply to questionnaire R1 "Competitors", question 27, [ID 7287]. See also those of ICE, [ID 7254] and Euroclear, [ID 7293].

(972) Therefore, the migration [BUSINESS SECRETS] to LCH SA is far from certain with a further risk that post-Transaction the open interest would migrate towards LCH Ltd or another of the merged entity's clearing houses (that is to say CC&G or Eurex) that manages to attract a critical mass of [BUSINESS SECRETS] fixed income clearing.

11.2.2.3. Euronext as purchaser of the Divestment Business

(973) Market participants generally considered that Euronext is a suitable prospective buyer for the Divestment Business.[686] However, some market participants underline Euronext's lack of experience in the field of fixed income products and in relation to clearing services as a possible drawback, especially if the merged entity continued to be active through LCH Ltd and retained some of LCH Group's executive management responsible for LCH.Clearnet's fixed income business at group level.

(974) In addition, Euronext was negative about the Divestment Business' evolution prospects in relation to clearing of fixed income instruments. Euronext considers that it will not be a viable competitor in respect of the clearing of fixed income instruments due, in particular, to LCH SA's dependence on MTS – which would remain with the merged entity - and the uncertainty surrounding the implementation and effectiveness of [BUSINESS SECRETS].[687]

11.2.2.4. Other issues arising from the Market Test

(975) The Market Test also provided some indications that RepoClear[688], a brand intended to remain with LCH Ltd, could help the Divestment Business to be recognised on the market and strengthen its viability. For example, one market participant explained that "*Repoclear is a strong brand, of an importance similar to that of SwapClear, and it has succeeded in generating momentum in the attraction of new repo clearing business"*[689] whereas another stated that *"this brand is widely recognized by market participants today as a good tool for liquid and efficient markets. It is clearly associated to the business offered by LCH Clearnet SA for services covering French, Italian and Spain government debts, on cash and repo transactions. Its exclusion from the divestment business may be a clear competitive advantage for the new merged entity.*[690]

11.2.2.5. Conclusion on the results of the Market Test

(976) In view of the above results of the Market Test the ongoing viability of the Divestment Business in bonds and repos clearing was not sufficiently certain. As a result the Commission could not conclude that the remedy would be effective in practice and restore the market structures on a lasting basis, in particular in markets where the Transaction leads to a *de facto* monopoly.

11.3. Final Commitments

(977) On 27 February 2017, the Notifying Parties submitted the Final Commitments. They submit that those commitments comprehensively address all concerns the Commission communicated to them in the state of play call on 16 February 2017.

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686 Replies to questionnaire R2 "Customers", question 30.

687 Euronext, comments on remedies, dated 15 February 2017 [ID 7332].

688 Repoclear is a brand currently used for both LCH Ltd's and LCH SA's clearing services for repos.

689 BNY Mellon, reply to questionnaire R2 "Customers", question 6, [ID 7278].

690 BNP Paribas, reply to questionnaire R2 "Customers", question 6, [ID 7324].

(978) In this context the Notifying Parties also claim that the Final Commitments constitute a clear-cut and appropriate structural remedy.

11.3.1. Description of the Final Commitments

(979) In addition to the First Commitments, the Final Commitments comprised in particular:

(a) [THE REDACTED TEXT EXPLAINS THE IMPROVED COMMITMENTS OFFERED BY THE PARTIES WHICH CONSIST OF A SET OF BEHAVIOURAL MEASURES, INCLUDING BUT NOT LIMITED TO GRANTING ACCESS OF LCH SA TO MTS TRADE FEEDS FOR THREE YEARS, IN ADDITION TO THE INITIAL COMMITMENTS];

(b) [ADDITIONAL DETAILS ON THE FINAL COMMITMENTS];

(c) [ADDITIONAL DETAILS ON THE FINAL COMMITMENTS];

(d) [ADDITIONAL DETAILS ON THE FINAL COMMITMENTS].

11.3.2. The Commission's assessment

(980) The following sections assess the suitability of the Final Commitments to address the Commission's concerns, and analyse in particular the scope, viability and effectiveness of the Final Commitments, as well their complexity and the timing of their submission.

(981) The Commitments aim at remedying the significant impediment to effective competition on the markets for

– CCP clearing of bonds,

– ATS traded and CCP cleared triparty repos,

– ATS traded and CCP cleared non-triparty repos,

– settlement and custody services in relation to fixed income provided by ICSDs and large custodians,

– collateral management, and

– single-stock equity derivatives where Euronext competes with Eurex.

(982) First, the Commission notes that the Final Commitments, and in particular the divestiture of LCH SA, fully address the Commission's finding that the Transaction would lead to a significant impediment of effective competition in the market or markets for single stock equity derivatives where Eurex's main competitor Euronext depends on LCH SA for clearing.

(983) As regards the significant impediment of effective competition in bonds and repos clearing as well as in settlement and custody services in relation to fixed income provided by ICSDs and large custodians and for collateral management, the Market Test of the First Commitments provided in particular strong indications that the Divestment Business' viability was critically dependent on MTS, a trading platform belonging to the merged entity, and the migration of further euro denominated fixed income business to the Divestment Business was doubtful.

(984) Therefore, Sections 11.3.2.1. to 11.3.2.5. will assess the suitability of the Final Commitments to remedy concerns in those markets, including to what extent the

issues revealed by the Market Test have been addressed by the Final Commitments in a clear-cut manner.

11.3.2.1. Scope of the Final Commitments

(985) According to the Remedies Notice "*the commitments have to eliminate the competition concerns entirely and have to be comprehensive and effective from all points of view*".[691]

(986) First, the Final Commitments do not fully remove the overlap between the Notifying Parties' activities on the market for ATS traded and CCP cleared triparty repos. On the trading level, LSEG's MTS would remain the most important trading venue for €GC Plus, the key competitive constraint on DBAG's dominant GC Pooling product.

(987) The Market Test, as described above in Section 11.2.2, also indicated that the success of € GC Plus depends on access to MTS,[692] which would remain part of the combined entity.

(988) The behavioural commitment according to which the Notifying Parties would be obliged to procure that MTS retain its link with LCH SA during a period of three years would maintain the high dependency of the Divestment Business on MTS, which would continue to have the ability to have an impact on the viability and the development of the business. In addition to raising issues as to whether it can be effectively monitored, this commitment therefore appears to be insufficient in scope. Moreover, the limited duration of this access commitment means that, even if it were to result in the intended effect for that period, it cannot be determined with the requisite degree of certainty that the new commercial structures arising from the Final Commitments would be sufficiently lasting, as required by paragraph 10 of the Remedies Notice.

(989) Further, in view of the opportunities for balance sheet netting created through T2S, it is vital for the Divestment Business not only to retain its current fixed income business in French, Spanish, and most importantly Italian bonds and repos, but also to attract those euro denominated volumes currently cleared in LCH Ltd to avoid jeopardising its current business.

(990) In this regard, the commitment [THE REDACTED TEXT EXPLAINS THE IMPROVED COMMITMENTS OFFERED BY THE PARTIES WHICH CONSIST OF A SET OF BEHAVIOURAL MEASURES, INCLUDING BUT NOT LIMITED TO GRANTING ACCESS OF LCH SA TO MTS TRADE FEEDS FOR THREE YEARS, IN ADDITION TO THE INITIAL COMMITMENTS] is unlikely to be sufficient to ensure the migration of the business to the Divestment Business. Customers may also opt to move their business to the remaining clearing houses of the merged entity (Eurex and CC&G), as further discussed in the following section, as the Notifying Parties will have the incentive to prevent this migration and attract the business to their pools.

(991) Because the Final Commitments were submitted at a very late stage of the procedure, the Commission was not able to perform another market test to verify whether the

691 Remedies Notice, paragraph 9.

692 Replies to questionnaire R2 "Customers", question 11.

scope of the Final Commitments was sufficient,[693] and therefore cannot conclude on this point with the requisite degree of certainty.

(992) In view of the above, the Commission considers that the Final Commitments are insufficient in scope.

11.3.2.2. Viability of the Divestment Business and effectiveness of the Final Commitments

(993) The Final Commitments are unlikely to create a competitor that would exert a competitive constraint on the merged entity similar to the one that exists between the Notifying Parties today in the area of bonds and repos clearing.

(994) The Market Test of the First Commitments revealed in particular that the Divestment Business' viability was dependent on receiving trade feeds from MTS, and attracting the euro denominated fixed income clearing business currently in LCH Ltd.

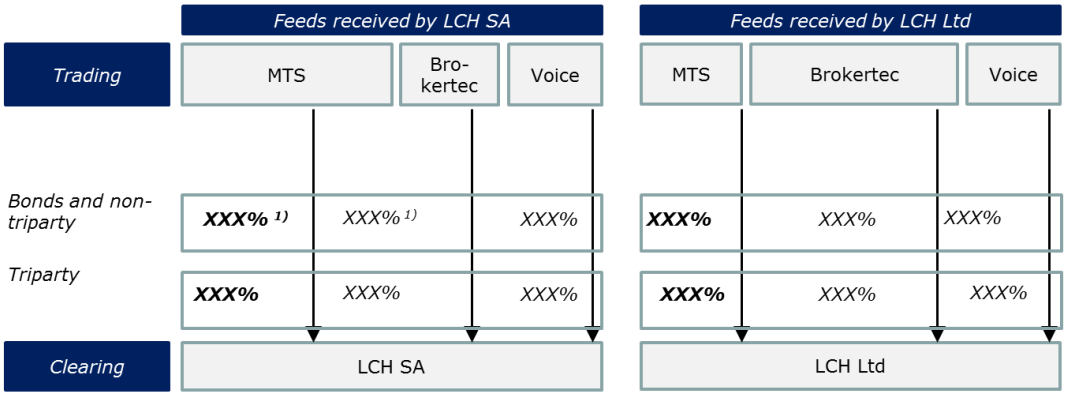
(995) As regards the dependence of the Divestment Business on MTS, it should be recalled that in particular as regards repos, almost all of LCH SA's business comes from trading on electronic platforms (ATS). On that level, the key players are MTS (owned by LSEG) and BrokerTec (a third party), which is currently the largest player.

(996) However, all these players have distinct strengths and weaknesses. For instance, MTS has a particularly strong position in trading Italian bonds and repos, whereas BrokerTec's strength lies more in German bonds.

(997) At the clearing level, the picture is similar: LCH SA (and CC&G) clears essentially all Italian debt, whereas LCH Ltd (and Eurex) together clear almost all German bonds and repos.

(998) This means that a [BUSINESS SECRETS] proportion of trading feeds for LCH SA come from MTS, as illustrated in Figure 9.

Figure 9: Importance of MTS feeds to LCH SA



1) Depending on business line (bonds vs non-triparty repos)

Source: Commission's compilation of information provided by the Parties [BUSINESS SECRETS].

693 Pursuant to the Remedies Notice (paragraph 94), modified commitments received at a late stage of the procedure (i.e. after the deadline of 65 working days) have to be assessed on the basis of information already received in the course of the investigation, including the results of prior market testing, and cannot be market tested.

(999) Against this background, it is not surprising that the results of the Market Test indicate that the Divestment Business' viability rests in particular on having access to MTS' trade feeds.

(1000) Moreover, the envisaged migration of the clearing of German and other euro denominated bonds and repos to the Divestment Business appears uncertain on the basis of the Market Test. If that open interest were to move to the Divestment Business, it would become the largest fixed income clearing house in Europe, and therefore this would evidently strengthen the Divestment Business' viability.

(1001) However, post-Transaction, the mere possibility of clearing these types of transactions in the Divestment Business appears to be insufficient to make the migration happen. In the absence of that migration, LCH SA's existing fixed income business in Italian, French and Spanish bonds and repos appears to be vulnerable to any attempts from the Notifying Parties to shift their existing business to their own clearing houses.

(1002) The Final Commitments do not allow the Commission to conclude, with the requisite degree of certainty, that these issues revealed by the Market Test of the First Commitments are satisfactorily addressed.

(1003) First, and perhaps most importantly, under the Final Commitment the trading platform MTS will remain a part of the group of the merged entity. Hence, the Divestment Business would continue to depend on a structural link with its main competitors, the clearing houses of the merged entity. The behavioural commitments set out in the Final Commitments with a view to addressing this concern do not allow the Commission to conclude with the required degree of certainty that they can achieve this objective, for the following reasons.

(1004) The commitment not to sever the link between the Divestment Business and MTS during a three year period, which resembles a type of access commitment, fundamentally amounts to nothing more than a promise, and does not, in the Commission's view, ensure with the requisite degree of certainty that the merged entity would not attempt to degrade this link, and thereby divert MTS' business elsewhere. For example, Euroclear explains that "*even if MTS did not stop feeding [LCH] SA, MTS could degrade the quality of the feed or other aspects of its service to favour the merged entity and harm [LCH] SA. For example: It could modify the user interface to propose in sequence Ltd and in a second step [LCH] SA, systematically roll out technical updates to the platform to Ltd before [LCH] SA, [LCH] SA will have to upgrade their platform which might also require adaptation at the level of MTS; MTS could slow down the required adaptations on their side*".[694]

(1005) Second, in particular as regards ATS traded and CCP cleared non-triparty and triparty repos, the suitability and effectiveness of the Final Commitments depend in particular on the commercial behaviour of a third party, BrokerTec. This is because in particular as regards ATS trading of (non-triparty) repos, BrokerTec is MTS' largest competitor, and the Notifying Parties argue that its presence would continue to discipline MTS. However, the Commission cannot take for granted that BrokerTec will retain its current role. For instance, as indicated above, BrokerTec appears to be considering establishing a link with Eurex. The establishment of links between

694 Euroclear, reply to questionnaire R1 "Competitors", question 9, [ID 7293].

different service providers is not problematic as such and can favour competition on the market. However, in the context of the attempt to remedy the competition concerns raised by the Transaction, this link might jeopardise the viability of the Divestment Business and its ability to compete with the merged entity as it could end up without the essential trade feeds input. While the Notifying Parties called the potential establishment of a link between BrokerTec and Eurex as "entirely speculative", [BUSINESS SECRETS].[695] [BUSINESS SECRETS], the Commission cannot determine whether post-Transaction or following the implementation of T2S, the merged entity might not wish to do so, in order to attempt to attract LCH.Clearnet's "former" fixed income business (namely LCH SA's pre-Transaction business and LCH Ltd's euro denominated activity).

(1006) Third, due to the implementation of T2S, the fixed income clearing markets are undergoing significant changes and, as also submitted by the Notifying Parties, significant savings can be obtained by pooling all clearing business in one CCP. This implies an even greater tendency towards further concentration.

(1007) In that context, the incentives of the merged entity to attempt to prevent the Divestment Business from becoming a competitive force cannot be underestimated. Therefore, while the Final Commitments might ensure that [DETAILS ON FINAL COMMITMENTS], nothing prevents the Notifying Parties from, for instance, attempting to strengthen CC&G, which already clears substantial fixed income volumes, notably Italian bonds and repos, or Eurex, or combining these two [BUSINESS SECRETS] fixed income clearing houses. As explained in Section 7, competition in the repo markets in particular will intensify post T2S implementation, and the Commission considers it likely that the Notifying Parties would have the incentive to try to counteract the stated objectives of the Final Commitments, which are in particular [EXPANDING LCH SA'S CLEARING OF EURO DENOMINATED FIXED INCOME BUSINESS]..

(1008) Therefore, in the absence of a clear-cut remedy such as the divestment of MTS, the Notifying Parties will control a large part of the Divestment Business' trading feeds for fixed income clearing and it is not possible to predict with the requisite degree of certainty how the Notifying Parties and other market participants will behave post-Transaction. That behaviour may have an impact on the viability of the Divestment Business in the fixed income clearing markets.

(1009) As concerns the possibility of LCH SA to request access to MTS under the upcoming regulatory regime set out in MiFID II/MIFIR, it is unlikely that this would durably solve the viability concern identified in the market test. Indeed, to the extent that these trades would also be cleared by CCPs of the merged entity, such access would not be sufficient to incentivise market participants to clear trades with LCH SA as this would lead to the splitting of the clearing venues for their fixed income clearing portfolio.[696] The behavioural measures set out in the Final Commitments would not address this issue as these measures would have been temporary[697] and expire around

695 [BUSINESS SECRETS].
696 See e.g. recitals 967 and 1007.
697 See recital 980.

the time when the open access would be certain to start applying (namely June 2020).[698]

(1010) This means that the Commission cannot determine, in particular without another market test, with the requisite degree of certainty that in the fixed income clearing markets, the Divestment Business would exert a competitive constraint on the merged entity similar to the one that exists between the Notifying Parties today. No market test could be conducted at this late stage of the procedure (15 days after the deadline of 65 working days). Pursuant to the Remedies Notice, the modified commitments had to be assessed on the basis of information already received in the course of the investigation, including the results of prior market testing.[699]

11.3.2.3. Suitability of the Final Commitments to remove the identified competition concerns

(1011) First, as explained in Section 11.3.2.2. above, the Final Commitments are not suitable to remedy the competition issues raised by the Transaction as the Commission cannot ascertain that the Divestment Business would be viable going forward in the bonds and repos clearing business.

(1012) Second, the additional elements brought by the Final Commitments are in essence behavioural promises[700] to engage in or abstain from a particular conduct for a certain period of time.

(1013) Besides the fact that these would require intensive monitoring, the Commission can only accept behavioural remedies that have the potential to achieve the same effect as structural remedies. In this case, for the reasons set out above, the Commission cannot conclude with the requisite degree of certainty that the Final Commitments would obtain the same effect as a clear-cut structural divestment such as for example the divestment of MTS. For instance, a promise to maintain a link for three years clearly does not produce the same effect as the transfer of ownership on a lasting basis.

(1014) Moreover, according to the Remedies Notice, where "*the parties submit remedies proposals that are so extensive and complex that it is not possible for the Commission to determine with the requisite degree of certainty, at the time of its decision, that they will be fully implemented and that they are likely to maintain effective competition in the market, an authorisation decision cannot be granted. The Commission may reject such remedies in particular on the grounds that the implementation of the remedies cannot be effectively monitored and that the lack of effective monitoring diminishes, or even eliminates, the effect of the commitments proposed*."[701]

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698 The level 2 requirements ensuring fair and open access are being finalised and will enter into application on 3 January 2018 with the possibility for national authorities to grant a postponement of the application of these rules until July 2020.

699 The Notifying Parties state in their submission dated 27 February 2017 "FBD_RM_064_M7995_DBAG_LSEG_Remedy Improvements Submission (27 Feb 2017)" that the Final Commitments are structural in nature (e.g. at paragraph 15). The Commission considers that, while the sale of LCH SA is structural, the rest of the commitments are behavioural ([DETAILS ON FINAL COMMITMENTS], commitment to maintain MTS' connection with the Divestment Business, etc.).

700 Remedies Notice, paragraph 94.

701 Remedies Notice, paragraph 14.

(1015) In that context, the Commission notes that the implementation of the Final Commitments would entail monitoring a set of complex behavioural commitments, [DETAILS ON FINAL COMMITMENTS],,and access of the Divestment Business to MTS.

(1016) Aside from the obvious challenges of monitoring compliance with such commitments in a complex industry, the Final Commitments are very broadly phrased and provide very little detail as regards the required conduct. For example, as regards the crucial access of the Divestment Business to MTS, the Final Commitments simply state that during a period of three years after Closing "*MTS will maintain its connection to the Divestment Business for clearing of euro-denominated cash bonds and non-triparty repo products*". Nothing in the Final Commitments defines more precisely what obligations this entails, and perhaps most importantly, what recourse the Divestment Business could have if the obligations were infringed. It should be noted that in this industry, even a temporary disruption could have very serious consequences, and could lead customers to reconsider the choice of clearing venues.

(1017) The Remedies Notice recognises that access commitments are often complex in nature and therefore that "*the Commission will only be able to accept such commitments where the complexity does not lead to a risk of their effectiveness from the outset and where the monitoring devices proposed ensure that those commitments will be effectively implemented and the enforcement mechanism will lead to timely results*."[702]

(1018) The access provisions are also devoid of any specific monitoring or enforcement mechanism that would allow the Commission to conclude that they are similar in effect to a divestment.

(1019) Thus, while an access commitment like the one proposed by the Notifying Parties is by its very nature complex, particularly in this industry, the Final Commitments contain overly simplistic provisions that would be extremely difficult to monitor and enforce.

(1020) For these reasons, the Commission considers that the Final Commitments are not suitable to remedy the identified competition concerns in the fixed income clearing markets. The Commission cannot conclude with the requisite degree of certainty that the Final Commitments, and in particular the access commitment obliging MTS to grant access to the Divestment Business, could be effectively monitored, enforced and this to be effective in practice.

11.3.2.4. Complexity and timing of submission of the Final Commitments

(1021) The Final Commitments were submitted on 27 February 2017, that is fifteen working days after expiry of the deadline for submitting commitments established by Article 19(2) of Regulation (EC) No 802/2004, and hence at a very stage of the proceedings.

(1022) As regards commitments submitted after that deadline ("late commitments"), the Remedies Notice provides, as explained in Section 11.1., that the Commission can only accept such modified commitments where it can clearly determine – on the basis of its assessment of information already received in the course of the

[702] Remedies Notice, paragraph 66.

investigation, including the results of prior market testing, and without the need for any other market test – that such commitments, once implemented, fully and unambiguously resolve the competition concerns identified and where there is sufficient time to allow for an adequate assessment by the Commission and for proper consultation with Member States.[703].

(1023) This stricter legal standard for the assessment of late commitments has clearly been confirmed by the case-law of the Court of Justice of the European Union. The General Court stated that "*It is clear from reading Article 8 of the Merger Regulation in conjunction with Article 18 of Regulation No 447/98 that the regulations on concentrations impose no obligation on the Commission to accept commitments submitted after the deadline. That deadline is to be explained primarily by the requirement of speed that characterises the general structure of the Merger Regulation*". In addition, the General Court has identified two cumulative conditions that must be fulfilled so that commitments which were submitted out of time can be taken into account: "*namely, first, that those commitments clearly, and without the need for further investigation, resolve the competition concerns previously identified and, second, that there is sufficient time to consult the Member States on those commitments.*"[704]

(1024) This means that the Commission cannot accept the Final Commitments unless, on the basis of the available information, it can clearly determine that, once implemented, they will fully and unambiguously resolve all the competition concerns identified. In other words, the Commission cannot accept the Final Commitments if, due to significant uncertainties about their actual implementation or effects, it is not able to clearly determine that, once implemented, they will fully and unambiguously resolve all the competition concerns identified.

(1025) In this case, the Commission communicated to the Notifying Parties that it would be willing to consider a clear cut remedy after the expiry of the deadline for submitting remedies.[705] As the Final Commitments do not constitute a clear-cut remedy for the reasons set out above, no such clear-cut commitments were therefore submitted by the Notifying Parties.

(1026) Therefore, for the reasons set out above the Commission rejects the Final Commitments also on the grounds that the Final Commitments do not allow the Commission to conclude that they would fully and unambiguously resolve the competition concerns identified in this Decision, without a further need for investigation.

11.3.2.5. Conclusion

(1027) In light of all the considerations set out above, in particular the late submission of the Final Commitments, their complexity, their shortcomings in terms of scope, effectiveness and suitability, as well as the difficulties relating to their effective monitoring and enforcement, the Commission concludes that the Final Commitments do not eliminate all the identified competition concerns, in particular in the markets for CCP clearing of bonds in the EEA, for ATS traded and CCP cleared triparty

703 Remedies Notice, paragraph 94.

704 Case T-87/05 EDP v Commission [2005] ECR II-3745, at paragraphs 161 and 163.

705 The Commission even postponed the consultation of Member States by 1 working day.

repos in the EEA, ATS traded and CCP cleared non-triparty repos in the EEA, as well as on the EEA markets for settlement and custody services in relation to fixed income provided by ICSDs and large custodians and for collateral management, and are not comprehensive and effective in all respects.

12. CONCLUSION

(1028) Based on the foregoing and the available evidence, the Commission concludes that the Transaction is incompatible with the internal market.

HAS ADOPTED THIS DECISION:

Article 1

The notified operation whereby Deutsche Börse AG and London Stock Exchange Group would merge within the meaning of Article 3(1)(a) of the Merger Regulation is hereby declared, pursuant to Article 8(3) of the Merger Regulation, incompatible with the internal market and the functioning of the EEA Agreement.

This Decision is addressed to:

London Stock Exchange Group plc

10 Paternoster Square

EC4M 7LS - EC4M 7LS

United Kingdom

Deutsche Börse AG

Mergenthalerallee 61, The Cube

65760 – Eschborn

Germany

Done at Brussels, 29.3.2017

For the Commission

(Signed)
Margrethe VESTAGER
Member of the Commission