

## Summary

1. On 29 March 2005 the Office of Fair Trading (OFT) referred the proposed acquisition of London Stock Exchange plc (LSE) by Deutsche Börse AG (DBAG) or Euronext NV (Euronext) to the Competition Commission (CC) for investigation and report. The references were made under section 33(1) of the Enterprise Act 2002 (the Act). We are required to publish our final report by 12 September 2005.
2. Exchanges are centralized marketplaces where investors buy and sell securities, either directly or through intermediaries. In addition to being carried out on an exchange's electronic order book (on-book), equities trades can be executed away from the order book (off-book). Off-book trading can be conducted using alternative trading systems (ATSs), over the counter through bilateral deals, or internalized by brokers.
3. Exchanges earn revenue in a variety of ways, including by charging issuers an initial fee for listing and an ongoing annual charge for maintaining that listing. Once an equity has been admitted to trading, the exchange provides a platform to match the offers and bids of the trading firms under rules set by the relevant regulator and the exchange. Exchanges generally charge trading firms for membership of the exchange and for on-book trading, as well as for reporting trades executed away from the order book (where this is required). Exchanges also provide a series of ancillary services, including market information services and information technology (IT).
4. When equity trades have been executed, clearing and settlement begins. Clearing houses prepare payment or security transfer orders, and establish final positions for settlement. Two key functions commonly associated with clearing are the central counterparty (CCP) function and netting. A CCP guarantees the fulfilment of trading

obligations by becoming the common counterparty to the buyer and seller in each trade. Netting is the offsetting of trading obligations. Settlement services for equity trades include two key functions: the delivery of securities in return for a cash payment (settlement function), and the registry function, which is the maintenance of the central register of the owners of a security. Once a trade has been settled, custodian banks may provide additional services, such as holding and safekeeping securities for customers, transmitting transfer orders and processing corporate actions. They may also offer related banking services such as securities finance. We refer to these activities collectively as custody and banking services.

5. There are different business models for post-trade services in equity markets that reflect varying levels of vertical integration between trading, clearing and settlement services. The vertically-integrated model, which sees the integration of all three activities under one organization, is at one end of the spectrum, whilst at the other end is the vertically-disaggregated model in which all three activities are performed by separate organizations.
6. Exchanges, trading firms, investing institutions and providers of post-trade services must comply with laws and regulations aimed at supporting the efficient functioning of securities markets while maintaining investors' confidence in those markets. The regulatory framework for the financial sector in the UK, including securities listing and trading, is set out in the Financial Services and Markets Act 2000 and the related rules of the Financial Services Authority (FSA). EU directives play an important role in setting the regulatory framework for financial services, including the listing and trading of securities.
7. DBAG is a German company which demutualized in 1992 and has been listed on the Frankfurt Stock Exchange since 2001. DBAG operates a vertically-integrated

business model in Germany. Clearing is performed by Eurex Clearing AG (Eurex Clearing), a 100 per cent owned subsidiary of Eurex Zurich AG (Eurex). Eurex, which operates the largest derivatives exchange in Europe, is a joint venture between DBAG and the SWX Group Zurich. Clearstream International SA and its subsidiaries (Clearstream), 100 per cent owned by DBAG, carry out settlement services.

8. Euronext is a Dutch public company with limited liability, which is listed on the Paris stock exchange. Euronext was formed in September 2000 from the merger of the Amsterdam, Brussels and Paris stock exchanges. It acquired the London International Financial Futures and Options Exchange (Euronext.liffe) and the Portuguese stock exchange in 2002. Clearing is provided for Euronext exchanges by LCH.Clearnet. At present, settlement services for Euronext in Brussels and Lisbon are provided through Euronext subsidiaries, while Euroclear plc (Euroclear) provides settlement services for Euronext's remaining exchanges through its subsidiaries.
9. LSE is a UK public limited company that demutualized in 2000 and listed on the London Stock Exchange in July 2001. LSE's product and services portfolio covers listing, trading, and the provision of market information. LSE has a limited presence in the derivatives sector through its majority ownership of EDX London Ltd (EDX). Clearing services are provided to members of LSE under contract by LCH.Clearnet Group Limited (LCH.Clearnet). LCH.Clearnet has outsourcing arrangements for netting with CRESTCo Limited (CRESTCo), which also provides settlement services to LSE.
10. DBAG announced on 13 December 2004 that it was in discussions with LSE with a view to making a recommended cash offer. Euronext confirmed its interest in a possible cash offer for LSE on 27 January 2005. On 6 March 2005, DBAG withdrew

its offer, but reserved the right to make an offer if Euronext or another third party were to announce an offer for LSE.

11. DBAG and Euronext have each advanced similar rationales for their proposed acquisition of LSE. Both have told us that a merger with LSE would realize significant cost savings through migrating the equities trading activities of the merged companies on to a single IT platform. There would also be synergies arising from reduced overheads as well as revenue enhancement opportunities.
12. We concluded that there was a relevant merger situation in respect of both DBAG and Euronext's proposed mergers with LSE. However, we will observe developments at DBAG with interest prior to the publication of our final report.

### **Listing services**

13. We concluded that there was little, if any, competition between the parties in the provision of primary listing services to domestic companies, and that competition takes place on a global basis for secondary listing services and primary listing services to companies seeking listings outside their domestic market.
14. We concluded that the proposed acquisition of LSE by either DBAG or Euronext would not give rise to a substantial lessening of competition (SLC) either within the market for primary listings to domestic companies, or within the market for the provision of secondary listing services and primary listing services to companies seeking listings outside their domestic market.

## **Equities trading services**

### ***Market definition***

15. We considered the substitutability of different trading platforms provided by exchanges, and, more importantly, the degree to which other forms of trading, such as off-book trading (including trading both off the order book and off the exchange altogether), were substitutable for trading on an exchange's order book.
16. We concluded that equities trading services should not form part of the same relevant market as derivatives trading and bond trading services.
17. A trading firm can execute a trade either through an exchange's order book or off-book. We looked at the trends in on-book and off-book trading, and their relationship to changes in fees. It was difficult to identify the impact of price changes, since the trends were influenced by a variety of internal and external factors. Our analysis indicated that on- and off-book trading tended to move together, and did not provide evidence of switching from one to the other. Nor could we identify any statistically significant relationship between price changes and trading value or volume.
18. Several parties told us that an increased trading fee would have the most significant impact on technical trading (including both statistical arbitrage trading and Direct Market Access), for which explicit trading costs constitute around two-thirds of the total trading cost for an average-sized trade. LSE said that the reduction in the volume of technical trading that would result from a trading fee increase would reduce overall liquidity and, by widening bid-ask spreads, increase total trading costs. This would drive other business off the order book for two reasons. First, wider bid-ask spreads would increase the volume and profitability of internalization. Second, reduced liquidity would make the exchange less attractive to other forms of trading. LSE argued that the consequent increase in implicit trading costs would result in a

further reduction in statistical arbitrage trading volumes, further increasing spreads and further increasing the amount of business that is internalized—ie a vicious circle would be created.

19. We considered the extent to which an increase in trading fees could lead to the creation of a vicious circle. Despite extensive discussions with main and third parties, we could not find factual evidence that enabled us to establish the existence of, or to quantify in any way, a competitive constraint from such a vicious circle. We therefore considered that the primary effect of an increase in trading fees might be a reduction in the volume of statistical arbitrage trading, and any effect on overall volumes of other trades would, in our view, be second-order. We concluded, on balance, given all of the evidence that we received, that the product market was the provision of on-book equities trading services.
  
20. We believed that the relevant market for equities trading services should include all exchanges currently placing a competitive constraint on the pricing and behaviour of LSE in the UK through the threat of head-to-head competition. As these constraints are exercised by the major exchanges in Europe and the USA, and because of the history of actual and planned expansion and entry, the geographic market should be defined to include Europe and the USA.

### ***Horizontal competition***

21. Network effects operating at the trading level make it very difficult for liquidity associated with trading in a particular equity to shift to an alternative exchange. These network effects do not prevent head-to-head competition between exchanges for trading the same set of equities, although the network effects would result in switching costs. Competition between exchanges manifests itself either through

direct head-to-head competition for the trading of equities currently conducted on LSE in the UK, or the threat of such head-to-head competition.

22. Trading on LSE, as on other exchanges in Europe, is concentrated in a small number of large trading firms. This degree of concentration has facilitated a higher degree of actual head-to-head competition between exchanges in recent years than would otherwise have been the case. There are two important consequences of this concentration of trading firms. First, the actions of a relatively small number of trading firms in transferring their trading activities from one platform to another would facilitate a shift in liquidity. Second, an exchange wishing to compete head-to-head with LSE could readily identify key trading firms and, more importantly, would need to gain the commitment of only a small number of them.
23. Whilst both DBAG and Euronext provided a competitive constraint on LSE, primarily due to the perceived threat of head-to-head competition in the UK, we concluded that there were other exchanges, including virt-x and the major US exchanges, as well as, to a lesser degree, off-book trading venues, which also provide a competitive constraint to LSE.
24. We concluded that the proposed acquisition of LSE by either DBAG or Euronext would not give rise to an SLC within the market for on-book equities trading services within the UK, by virtue of the removal of the horizontal constraint currently imposed on LSE by DBAG or Euronext alone.

### **Derivatives trading services**

25. LSE has a limited presence in the derivatives sector through EDX. EDX mainly trades Scandinavian equities and equity indices derivatives.

26. We concluded that EDX did not compete in any significant way with either Eurex or Euronext.liffe. We did not consider that, in the absence of the proposed mergers, EDX was likely to represent a serious competitive threat in the short to medium term. We concluded that the proposed acquisition of LSE by either DBAG or Euronext would not give rise to an SLC within derivatives trading services in the UK.

## **Post-trade services**

### ***Foreclosure of trading services***

27. The overwhelming majority of the evidence that we received, including evidence from LSE and Euronext, suggests that fully fungible access to the incumbent exchange's post-trade services is of critical importance for successful entry or expansion at the trading level, primarily because of the infrastructure costs of connecting to multiple systems and the costs associated with clearing trades through more than one CCP. We concluded that a potential competitor would be able to get fully fungible access to LSE's clearing services in the UK today.

### ***DBAG/LSE merger***

28. We concluded that the proposed DBAG/LSE merger would lead to the introduction of Eurex Clearing as LSE's provider of clearing services, and that DBAG had control over Eurex Clearing. The merged entity would have the incentive and ability to foreclose entry and expansion in the UK at the trading level. Given the importance of the threat of entry or expansion at the trading level as one of the constraints on LSE's behaviour, we expect control by the merged entity over clearing services would result in an increase in the costs to trading firms of switching trading platform, raising barriers to entry and hence reducing the threat of entry or expansion at the trading level.

29. Such foreclosure would allow the merged entity to reduce the attractiveness of LSE's offer, by increasing prices or reducing levels of service or innovation beyond the levels they would otherwise have been at in the absence of the proposed DBAG/LSE merger. We concluded that the proposed acquisition of LSE by DBAG may be expected to give rise to an SLC in the market for the provision of on-book trading services within the UK because of the ability and incentive to foreclose entry or expansion to other providers of trading services.

#### *Euronext/LSE merger*

30. We considered the merged entity's influence over LCH.Clearnet should Euronext acquire LSE. LSE does not currently have any material influence over LCH.Clearnet. Euronext has a 41.5 per cent shareholding in LCH.Clearnet, with its voting rights capped at 24.9 per cent. It has four of the 18 board seats. Over 60 per cent of LCH.Clearnet's total fee income is currently dependent on the clearing of trades made on exchanges owned by Euronext. Despite its importance to LCH.Clearnet as a customer, Euronext told us that it had no ability or interest in controlling LCH.Clearnet.
31. In recognition of user concern about the possible ongoing influence of Euronext over LCH.Clearnet, strict governance arrangements were put in place at the time of the LCH.Clearnet merger. We acknowledged that the governance arrangements between Euronext and LCH.Clearnet, taken in isolation, appeared to be robust. However, we have taken account of the merged entity's significant shareholding and four seats on the board. At present LSE accounts for less than 10 per cent of LCH.Clearnet's total fee income; the merged entity would have around two-thirds of LCH.Clearnet's total fee income as a result of LSE's proposed merger with Euronext. We considered that, on balance, we would expect the merged entity to have the ability to influence LCH.Clearnet's strategic decisions in its favour.

32. Euronext said that its past actions in the case of LSE's Dutch Trading Service (DTS) supported its argument that it did not exert any influence over LCH.Clearnet. LSE approached Clearnet to provide clearing services for DTS and Euronext did not exert its influence to stop Clearnet doing so. However, we noted that the losses that the merged entity would incur as a result of successful competition against LSE following the proposed Euronext/LSE merger would be much greater than the losses Euronext would have envisaged with DTS. Hence, the merged entity might be expected to adopt a different attitude to competition against LSE in the future. We considered that, in order to protect its substantial investment in LSE, the merged entity would have a strong incentive to influence adversely access to clearing services in the UK.
33. We concluded, on balance, that the merged entity would, despite LCH.Clearnet's governance arrangements, have the incentive and ability to foreclose entry and expansion in the UK at the trading level in the event of the proposed Euronext/LSE merger going ahead. Such foreclosure would allow the merged entity to reduce the attractiveness of LSE's offer, by increasing prices or reducing levels of service or innovation beyond the levels they would otherwise have been at in the absence of the proposed Euronext/LSE merger. We concluded, therefore, that the proposed acquisition of LSE by Euronext may be expected to give rise to an SLC in the market for the provision of on-book trading services within the UK because of the ability and incentive to foreclose entry or expansion to other providers of trading services.

### ***Clearing services***

34. Clearing services are provided to members of LSE under contract by LCH.Clearnet. Individual customers are unable to choose an alternative CCP to that appointed by the exchange.

35. In 2003 the incumbent provider, London Clearing House, retained the LSE clearing contract with a 25 per cent reduction in clearing fees. However, we considered that there were specific circumstances regarding this tender and note the limited competition for clearing services more generally.
36. We concluded that the proposed acquisition of LSE by either DBAG or Euronext would not give rise to an SLC within clearing services in the UK.

### ***Settlement services***

37. Settlement services are usually provided by a single entity for each exchange. At present CRESTCo is the default provider of the settlement function for trades conducted on LSE and for legal and regulatory reasons it is the only provider of the registry function in the UK. We concluded that there was little competition at present in the provision of settlement services in the UK.
38. We concluded that the proposed acquisition of LSE by either DBAG or Euronext would not give rise to an SLC within settlement services in the UK.

### ***Custody and banking services***

39. We considered the provision of custody and banking services. We were told that users can choose from a broad range of entities such as custodian banks as well as International Clearing and Securities Depositories for the provision of custody and banking services.
40. We concluded that the proposed acquisition of LSE by either DBAG or Euronext would not give rise to an SLC in the provision of custody and banking services in the UK.

## Other areas

41. The exchanges provide proprietary market information, such as real-time pricing and trading volume data, and non-proprietary market information, such as indices and historical information. Given that the exchange is the sole provider of proprietary information, and given the large number of competitors for the provision of non-proprietary information, we did not expect the proposed acquisition of LSE by either DBAG or Euronext to result in an SLC in this area.
42. We considered the possible impact of either proposed merger on regulation and any resulting impact on competition. We noted the FSA's statement of February 2005 which raised the possibility that a new owner of LSE might decide to operate LSE from another EU member state, with consequences for the operations and regulation of LSE's markets.
43. Both DBAG and Euronext provided us with details of the commitments they would give to maintain UK RIE status for LSE. We also considered whether DBAG or Euronext would have the incentive to remove LSE's RIE status. Both told us that it would not be in their interest to do so, since users would react negatively and might switch business away from LSE.
44. The FSA told us that in practice, in particular given the stated positions of the bidders, it considered the likelihood of the regulation of LSE's markets moving to another EU member state to be remote, at least in the short term.
45. We therefore concluded that neither DBAG nor Euronext would be likely to seek to remove the UK's RIE status as a result of their proposed mergers. We did not find it necessary to consider whether the loss of UK RIE status to LSE would have an effect on competition.

## **Provisional conclusions**

46. We provisionally concluded that the proposed acquisition of LSE by DBAG and the proposed acquisition of LSE by Euronext in each case constituted arrangements in progress or contemplation which, if carried into effect, would result in the creation of a relevant merger situation. We also provisionally concluded that the proposed acquisition of LSE by DBAG would be expected to result in an SLC within the market for the provision of on-book equities trading services within the UK because of the ability and incentive to foreclose entry or expansion to other providers of trading services; and that the proposed acquisition of LSE by Euronext would be expected to result in an SLC within the market for the provision of on-book equities trading services within the UK because of the ability and incentive to foreclose entry or expansion to other providers of trading services.