

# **London Stock Exchange issuer fees**

Report of the OFT's investigation

March 2004

A confidential version of the report was sent to HM Treasury, the Competition Commission and the Financial Services Authority on 31 March 2004. Certain information has been excluded from the published report in order to comply with the provisions of section 304(8) of the Financial Services and Markets Act 2000. Excisions are denoted by [...]. In certain instances, excisions are footnoted with alternative wording.

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## SUMMARY

In April 2002 the London Stock Exchange plc (LSE) increased the fees that it charges to companies whose shares are admitted to trading on its main market and alternative investment market (AIM). These fees are called 'issuer fees'. The exact size of the fee increase varied from company to company, but many companies, whose shares were already traded on the LSE's main market, faced an increase in annual issuer fees of 100 per cent or more. This is a report on the OFT's investigation into those issuer fee increases.

The OFT conducted its investigation using its powers under the Financial Services and Markets Act 2000 (FSMA 2000), and this report is made under Section 304(3) of that Act. During the course of the investigation the LSE agreed to reduce most of its issuer fees with effect from 1 April 2004, reversing much of the effect of the increases that took place in 2002.

In this case, the OFT had to consider whether the issuer fee increases have a significantly adverse effect on competition. If the OFT had concluded that they do, it would have had to ask the Competition Commission to investigate. The OFT has concluded:

- that the LSE has a position of strength in the market for issuer services for the issuing and public trading of UK equity in the UK
- that the LSE exploited that market strength by raising its fees to UK companies by more than it could have charged in the absence of that position of market strength
- that this exploitation of a position of market strength must be assumed to have an adverse effect on competition
- that if the original increases in issuer fees for 2002/03 had been maintained, the adverse effect on competition would have been significant
- but, taking account of the reductions in issuer fees which will apply from April 2004, that the adverse effect on competition is not significant.

The OFT is therefore not asking the Competition Commission to investigate in this case.





# 1 INTRODUCTION

- 1.1 This report is made under section 304(3) of the Financial Services and Markets Act 2000 (FSMA 2000). Section 304(3) gives the Office of Fair Trading (OFT) discretion to make a report if at any time it considers that one or more regulatory provision(s) or practice(s) or a combination of regulatory provisions and practices of a recognised body does not have a significantly adverse effect on competition.
- 1.2 This report looks at the fees (referred to as 'issuer fees') charged to UK businesses whose shares are traded on the exchange operated by the London Stock Exchange plc (LSE). The LSE charges two types of issuer fees: admission to trading fees and annual fees. For each type of fee there are separate rates for the LSE's main market and for the LSE's Alternative Investment Market (AIM). This report does not consider the issuer fees charged to non-UK (or 'international') companies whose shares are traded on the LSE's exchange.<sup>1</sup>
- 1.3 In financial year 2002/03 the LSE increased certain of its issuer fees substantially. However, for 2004/05 the LSE has agreed to reverse most of the increase in annual issuer fees for the UK main market, and also to reduce issuer fees on AIM, and not to raise its issuer fees on the UK main market and on AIM significantly for a further two years. Taking into account these reductions, the OFT concludes that the 2002/03 increase in issuer fees does not have a significantly adverse effect on competition.
- 1.4 The report considers only issuer fees, within the context of the profit returns for the LSE's exchange as a whole. However, in accordance with its duty under section 304(1) FSMA 2000 to keep under review the regulatory provisions and practices of recognised bodies, the OFT will continue to monitor any increases in any fees made by the LSE.

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<sup>1</sup> Admission to trading fees for international companies were increased for 2002/03 but annual fees were not changed.

## 2 BACKGROUND

### The LSE

- 2.1 The LSE is a Recognised Investment Exchange (RIE) for the purposes of FSMA 2000. This means that the Financial Services Authority (FSA) relies on the LSE to take responsibility for the day-to-day regulatory compliance of its members. As an RIE, the LSE is a 'recognised body' under section 313(1) FSMA 2000.
- 2.2 The LSE is the main forum in the UK for issuing in a number of classes of UK securities (shares, bonds and warrants). In addition, the LSE provides the most important trading platform in the UK for UK equity (shares issued by UK-based companies), while there is also significant trading activity in international equity (shares issued by non-UK-based companies).
- 2.3 Businesses and Government issue securities in order to raise finance for their activities. Investors purchase securities as a means of investing and providing a source of future income. Brokers and dealers execute orders for securities both for their own account and as an agent for investors.
- 2.4 These players interact on the LSE's exchange, a centralised forum providing a trading platform and rules for the issuing and trading of securities. The LSE's exchange thus forms part of the wider securities trading infrastructure, which includes a number of other complementary functions, not necessarily owned by the LSE, such as central counterparty, clearing and settlement systems, depositary, listing authority and information dissemination systems.
- 2.5 The LSE, therefore, has a number of types of customers to whom it provides services, either directly or indirectly, and the different customers interact with, and benefit from the presence of, each other. Hence, the LSE can be seen as operating a 'two-sided' business which provides services to issuers on one side and to brokers, dealers and investors on the other, with 'network effects' between the two sides. These network effects mean that the more

investors there are offering capital, the more companies will be attracted to issue securities for trading on the LSE's exchange and the greater the level of liquidity that will be provided. Similarly, the more companies there are traded on the LSE's exchange, the more attractive it becomes to investors. Conversely, as this is a two-sided business, a loss of business on one side is likely to induce a loss on the other side.<sup>2</sup>

2.6 The LSE has a long history dating back over two hundred years. For most of its existence it has been a mutual organisation, owned by its members, who were the brokers and dealers trading on the LSE's exchange. In June 2000 the LSE demutualised and in July 2001 it became a listed company. As part of its transition to corporate status, the LSE created separate profit centres, based on the principal services it provided, along the following lines:

- *Issuer services* – services provided to businesses (or Government) issuing securities on the LSE's exchange. Such services include those for an Initial Public Offering (IPO) (i.e. when securities are first issued on an exchange) and those for the continued trading of issued stock on the LSE's exchange
- *Broker services* – services to brokers and dealers trading on the LSE's exchange, i.e. using facilities such as the trading systems in order to buy or sell securities. Users of such services include not just brokers, but also the investors on whose instructions the brokers act, and dealers
- *Information services* – the provision of exchange-produced data, principally real-time price and quote data on the trading of securities.

2.7 Corresponding to each of these profit centres, the LSE has three main sources of income (issuer fees, broker fees and information

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<sup>2</sup> See, for example, M Armstrong, 'Competition in Two-Sided Markets', presentation at ESEM meeting, Venice, August 2002. OXERA: 'Trading punches: competition between exchanges' Competing Ideas (February 2004).

fees). In addition, the LSE receives a comparatively small amount of revenue from other sources (e.g. rental income).

2.8 The LSE has not been able to provide a detailed breakdown of revenues associated with its different activities and with the trading of different classes of securities. It did, however, provide the OFT with estimated revenue figures by line of business, split between UK and international business, for 2000/01, 2001/02 and 2002/03 (forecast).<sup>3</sup> These showed that Broker Services and Information Services contributed substantially more revenue than Issuer Services, and that the LSE obtained most of its revenue from UK securities, as illustrated by the forecasts for 2002/03.

TABLE 2.1: LSE REVENUES (FORECASTS FOR 2002/03)

Line of business	UK revenue £m	International revenue £m	Total revenue £m	Percentage share of total
Issuer Services	[...]	[...]	40.3	17.8
Broker Services	[...]	[...]	85.2	37.7
Information	[...]	[...]	90.1	39.9
Other	[...]	-	10.4	4.6
Total	[...]	[...]	226.0	100

<sup>3</sup> LSE submission to the OFT (14 March 2003), pages 5-7.

## Issuer services

- 2.9 The focus of the OFT's investigation has been on increases in the fees charged for Issuer Services in 2002/03 to UK companies and has included both the LSE's main market and AIM, which is the LSE's market for fledgling companies.
- 2.10 Within Issuer Services, there are two principal sources of revenue: first, admission to trading fees paid when a business first issues equity on an exchange (an IPO), or issues additional stock (i.e. the primary market); and second, annual fees paid by issuers for their existing shares to continue to be admitted to trading on the LSE's exchange (i.e. secondary trading). In terms of volume and value, secondary trading typically dominates. However, the admission to trading fee for an IPO is generally much greater than an individual annual fee,<sup>4</sup> and until recently, when the number of IPOs has dwindled, the LSE's revenues from these two sources has tended to be of a similar order.
- 2.11 For the financial year 1 April 2002 to 31 March 2003, the LSE introduced changes to the methods of calculating admission to trading fees and annual fees on the main market for UK companies.<sup>5</sup> These resulted in significant increases in the level of issuer fees charged. Changes were also made to admission to trading and annual fees on AIM, although in respect of annual fees, the most significant changes had already been made for 2001/02 when the minimum fee was increased to £5,000.<sup>6</sup>

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<sup>4</sup> This is the case on the LSE's main market, except for the smallest companies. On AIM, admission to trading fees and annual fees are similar.

<sup>5</sup> London Stock Exchange: Admission and annual fees, April 2002.

<sup>6</sup> London Stock Exchange: AIM fees for companies and nominated advisers, April 2002. In practice, almost all companies on AIM paid the minimum annual fee.

2.12 As a result of the changes, admission to trading fees for an IPO on the LSE's main market for UK companies with market capitalisations of between £250 million and £2,000 million increased by around 30 to 40 per cent.<sup>7</sup>

2.13 Annual fees for UK companies whose equity was traded on the LSE's main market increased by between 41 per cent and 115 per cent depending on the company's market capitalisation.<sup>8</sup>

TABLE 2.2: ANNUAL MAIN MARKET FEES FOR UK COMPANIES ILLUSTRATING PRICE INCREASES FOR 2002/03

Market capitalisation	New tariff 2002/03	Old tariff 2001/02	Increase
£m	£	£	%
2	5,000	2,500	100
5	5,000	2,500	100
10	5,000	2,500	100
25	5,000	2,500	100
50	5,375	2,500	115
100	6,125	2,875	113
250	8,375	4,000	110
500	12,125	5,875	107
1,000	19,625	12,125	62
2,000	34,625	24,625	41
Over 2,500	42,125	24,625	71

2.14 With these changes, the LSE's projection at September 2001 for revenues from issuer fees for UK companies on the main market showed a marked increase for 2002/03. Revenue from annual fees for UK companies was projected to rise by 86 per cent, and a projection based on the same profile of admissions as 2000/01

<sup>7</sup> Admission fees for smaller companies were increased more substantially but such companies are more likely to be admitted to trading on AIM than the LSE's main market. Admission to trading fees on the main market for further issues of a company's equity, subsequent to an IPO, were charged at a 25 per cent discount from the IPO rate.

<sup>8</sup> Issuers with a market capitalisation of up to £25 million paid the minimum fee of £5,000. Those with a market capitalisation above £25 million paid an additional £15, up to a maximum fee of £42,125, for every extra £1 million of market capitalisation.

resulted in an increase in revenue from admission to trading fees for UK companies of 36 per cent. An increase of over 120 per cent in revenue was also projected for admission to trading fees on AIM.<sup>9</sup>

2.15 Early in 2002, the OFT received complaints from two UK companies whose shares were publicly traded on the LSE's main market regarding the proposed increases in annual fees for the year 2002/03. For one of these companies, which had a market capitalisation of less than £25 million, the annual fee would double from £2,500 + VAT, the previous minimum, to £5,000 + VAT, the new minimum amount. The annual fee for the other company, which had a market capitalisation of between £50 and £100 million, would increase by 115 per cent. The complainants referred to the magnitude of the increases, the lack of justification for them, and the monopoly power of the LSE in respect of exchange-based equity trading in the UK. In the complainants' view, there was no realistic alternative for a UK-listed company other than to continue to have its shares traded on the LSE's exchange and, therefore, to pay the increased annual fee.

2.16 The LSE advanced a number of reasons for the increases in issuer fees, with particular reference to annual issuer fees for UK companies on its main market:<sup>10</sup>

- The LSE was a listed company run on a commercial basis and needed to ensure that the prices it charged to issuers reflected

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<sup>9</sup> Internal LSE e-mail, dated 6/9/2001, with an attachment on Issuer Fees, provided to the OFT by the LSE in its submission of 1 October 2002. In the submission of 1 October 2002, attachment 8b, the LSE provided details of the budgeted revenue from issuer fees for 2002/03, and in November 2003 the LSE provided details of the actual revenue from issuer fees for 2002/03. From these figures, the OFT has calculated that compared to 2001/02: revenue from annual fees for UK companies on the main market was budgeted to increase by 79 per cent and rose by just over 75 per cent, while revenue from admission to trading fees for UK companies on the main market was budgeted to increase by 17 per cent and rose by 5 per cent; and revenue from admission to trading fees on AIM was budgeted to increase by 183 per cent and rose by around 167 per cent. Paragraph 4.8 considers reasons for the differences between the budgeted and actual revenue.

<sup>10</sup> Letter from the LSE to the OFT (6 February 2002); meeting between the LSE and the OFT on 8 May 2002; LSE submission to the OFT (1 October 2002); LSE submission to the OFT (8 September 2003); LSE presentation to the OFT (11 September 2003).

the core services it offered and any enhancements to those services.

- Issuer Services as a whole needed to improve its performance as a profit centre within the LSE's exchange business. For the financial year 2001/02, Issuer Services had an operating profit margin of [...] per cent compared to [...] per cent for Broker Services and [...] per cent for Information Services. Largely as a result of increased revenue resulting from the issuer fee increases, the LSE anticipated that during the financial year 2002/03 Issuer Services would increase its operating profit margin to [...] per cent.<sup>11</sup>
- The increase in annual issuer fees reflected recent improvements in services to listed UK companies. These included: landMark, a web-based product that groups companies with their regional peers and provides each company with an online investor relations service; the City Media Centre, a suite of broadcast and presentation facilities that can be used by listed companies; lobbying on UK and EU issues relevant to listed companies such as the Prospectus Directive; and the organisation of events and seminars to promote and educate listed companies.
- The LSE needed to maintain a strong commercial and financial position so that it could compete effectively against rival exchanges when the Financial Services Action Plan, establishing an integrated European securities market, came into force.
- The increase in the minimum annual issuer fees for UK companies on the main LSE market to £5,000 was made in order to bring it into line with the minimum annual fee for trading on AIM, which had been increased to £5,000 in April 2001.
- The LSE's increased annual issuer fees were in line with those charged by competitor exchanges. For example in 2001, minimum annual issuer fees ranged from about the equivalent of

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<sup>11</sup> See Figure 4.1, paragraph 4.14.

£2,500 on Euronext, to £5,000 on Deutsche Börse's Neuer Markt and £6,000 on Nasdaq Europe. On the other hand, annual fees on the New York Stock Exchange were the equivalent of £25,000.<sup>12</sup>

2.17 The reasons put forward by the LSE did not specifically address the size of the increases and the fact that they were not related to increased costs. Revenue for Issuer Services as a whole for the financial year 2002/03 was forecast to rise by around 50 per cent compared to 2001/02. However, costs were forecast to increase by only about [...] <sup>13</sup> per cent in the same period.<sup>14</sup>

2.18 The OFT, therefore, decided to investigate the LSE's 2002/03 increases in issuer fees for UK companies under FSMA 2000 to consider, under section 304 FSMA 2000, whether they have (or are intended or likely to have) a significantly adverse effect on competition.

2.19 During the course of the OFT's investigation, the LSE put forward non-statutory proposals to reduce issuer fees on both its main market and AIM from 1 April 2004.<sup>15</sup>

2.20 Under these proposals, the LSE agreed to reduce its annual fees for UK companies on the main market as follows:

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<sup>12</sup> Letter from the LSE to the OFT (6 February 2002). In addition, the LSE's submission to the OFT, dated 8 September 2003, paragraphs 2.9-10, referred to recent increases in issuer fees on other exchanges and noted that currently OFEX charges annual fees of between £4,000 and £6,500.

<sup>13</sup> Less than 10.

<sup>14</sup> Based on figures provided to the OFT by the LSE in a letter dated 1 March 2002, at a meeting with the OFT on 8 May 2002 and in its submission to the OFT dated 1 October 2002.

<sup>15</sup> The LSE's proposals were set out in a letter to the OFT dated 13 November 2003, and were considered by the OFT Board at its meeting held on 17 November 2003.

TABLE 2.3: ANNUAL MAIN MARKET FEES FOR UK COMPANIES  
ILLUSTRATING PRICE REDUCTIONS FOR 2004/05

Market capitalisation	New tariff 2004/05	Current tariff 2003/04	Reduction
£m	£	£	%
2	3,375	5,125	34
5	3,375	5,125	34
10	3,375	5,125	34
25	3,375	5,125	34
50	3,375	5,510	39
100	3,881	6,280	38
250	5,400	8,590	37
500	7,931	12,440	36
1,000	16,369	20,140	19
2,000	33,244	35,540	6
Over 2,500	33,244	43,240	23

2.21 If the new reduced annual fees had been implemented in 2002/03, the price increase compared to the annual fees for 2001/02 would have been 35 per cent for all companies, whatever their market capitalisation, instead of between 41 and 115 per cent.<sup>16</sup>

2.22 The LSE proposed to make no change to admission to trading fees for UK companies on the main market, which had been increased less than annual fees and for which the actual increase in revenue for 2002/03 (of 5 per cent) had been significantly less than forecast.<sup>17</sup>

2.23 The LSE agreed to reduce issuer fees on AIM to the level of the tariffs in existence at 1 January 2001, namely a flat admission to trading fee of £4,000 for each new issue and a flat annual fee of £4,000.

<sup>16</sup> 35 per cent is the increase from the old tariffs (for 2001/02) in Table 2.2 to the new tariffs (for 2004/05) in Table 2.3. Annual fees were increased by around 2.5 per cent in 2003/04, hence the differences between the new tariffs (for 2002/03) in Table 2.2 and the current tariffs (for 2003/04) in Table 2.3.

<sup>17</sup> See footnote 9.

2.24 Further, the LSE agreed not to increase UK main market or AIM annual and admission to trading fees, other than to reflect increases in the Office of National Statistics (ONS) Services Sector Wages Index, for a further two years until 1 April 2007.<sup>18</sup>

### **Relevant legislation**

2.25 The OFT has investigated the LSE's issuer fee increases under the sector-specific competition scrutiny provisions of FSMA 2000.

2.26 The LSE is an RIE as defined in section 285(1)(a) FSMA 2000. As such it is a recognised body under section 313(1) FSMA 2000. The Chapter I and Chapter II prohibitions of the Competition Act 1998 (CA 1998) do not apply to the regulatory provisions and practices of recognised bodies, including RIEs, because of sections 311 and 312 of FSMA 2000. Under section 311(4) and (6), the CA 1998 Chapter I prohibition does not apply to a recognised body's regulatory provisions or practices. Under section 312, the CA 1998 Chapter II prohibition does not apply to a recognised body's practices, to the adoption or enforcement of its regulatory provisions, or to any conduct by a recognised body to the extent to which it is encouraged or required by its regulatory provisions.

2.27 Part XVIII ('Recognised Investment Exchanges and Clearing Houses') Chapter II ('Competition Scrutiny') of FSMA 2000 sets out sector-specific competition scrutiny provisions for the regulatory provisions and practices of recognised bodies (sections 302 to 310 FSMA 2000). Under section 304(1) FSMA 2000, the OFT has a duty to keep under review the regulatory provisions and practices of recognised bodies. Under section 304(2) FSMA 2000 the OFT is required to make a report if it considers that one or more of those regulatory provisions or practices or a combination of regulatory provisions and practices has a significantly adverse effect on competition. Under section 304(3) the OFT may, at its discretion, make a report if it considers that one or more of those

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<sup>18</sup> The LSE argued that the ONS Services Sector Wages Index is a reasonable measure of increases in costs in the financial services sector.

regulatory provisions or practices or a combination of regulatory provisions and practices does not have a significantly adverse effect on competition.

2.28 Regulatory provisions are defined in sections 302(1) and 287(3) FSMA 2000, in respect of investment exchanges, as the rules of an investment exchange, guidance issued by an investment exchange, arrangements made by an investment exchange for the provision of clearing services for transactions on the exchange and criteria applied by an investment exchange for the provision of clearing services for off-exchange transactions.

- The expression 'rules' is defined in section 313(2) FSMA 2000 as rules made or conditions imposed by an investment exchange in respect of (a) recognition requirements, or (b) admission of persons to, or their exclusion from the use of, its facilities, or (c) matters relating to its constitution.
- The expression 'guidance' is defined in section 313(3) FSMA 2000 as guidance issued, or any recommendation made, in writing or other legible form and intended to have continuing effect, by an investment exchange to all or any class of its members or users or to persons seeking to become members of the investment exchange or to use its facilities with respect to (a) recognition requirements, or (b) admission of persons to, or their exclusion from the use of, its facilities, or (c) matters relating to its constitution.

2.29 Practices are defined in section 302(1) FSMA 2000. In relation to an RIE, 'practices' means the practices of the exchange in its capacity as such.

2.30 A company (issuer) wishing to have its equity traded on the LSE's exchange must accept the LSE's Admission and Disclosure Standards (the Standards).<sup>19</sup> The Standards 'contain admission requirements and continuing obligations for companies seeking admission, or already admitted, to trading on [the LSE's exchange]

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<sup>19</sup> References are to the Admission and Disclosure Standards published in April 2002.

for listed securities,<sup>20</sup> including requirements as to the payment of issuer fees. The Standards constitute rules of an RIE as they relate to the admission of persons to, or their exclusion from, the use of the LSE's exchange facilities.

2.31 Under paragraph 2.5 of the Standards, on admission, an issuer must pay 'the admission fee, calculated in accordance with the Exchange's scale of fees for the time being in force.' As a continuing obligation, under paragraph 3.12 of the Standards, the issuer must 'pay the annual fee for admission to trading calculated in accordance with the Exchange's scale of fees for the time being in force as soon as such payment becomes due.' The 'scale of fees' referred to in paragraphs 2.5 and 3.12 is set out in a separate document 'Admission and Annual Fees'. This forms an essential element of the rules in paragraphs 2.5 and 3.12 of the Standards. If the fees are not paid or are underpaid, the admission requirements are no longer met and the issuer's right to have its equity traded on the LSE's exchange can be cancelled<sup>21</sup>. In other words, payment of the admission to trading and annual fees at the level set out in the scale of fees is a condition of admission to, or exclusion from, trading on the LSE's exchange.

2.32 The competitive effects of the LSE's scale of issuer fees can be reviewed by the OFT under section 304(1) FSMA 2000 either as a regulatory provision or as a practice of a regulated body. The scale of issuer fees is a rule of the LSE (and therefore a regulatory provision of a recognised body) insofar as it forms part of the rules in paragraphs 2.15 and 3.12 of the Standards and because it concerns the admission of persons to, or their exclusion from, the use of the LSE's exchange facilities. The scale of issuer fees can also be considered as guidance issued to the LSE's members or users as to their admission to, or their exclusion from the use of, the LSE's facilities. Alternatively, the LSE's fixing of its scale of issuer fees can be reviewed by the OFT as a practice of the LSE in

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<sup>20</sup> LSE Standards, Part 1, Introduction to the Admission and Disclosure Standards, section 1, Introduction, paragraph 4.

<sup>21</sup> Paragraph 3.21 of the Standards.

its capacity as an exchange, and therefore as a practice of a recognised body.

- 2.33 Under section 302(2) FSMA 2000, regulatory provisions or practices have a significantly adverse effect on competition if: (a) they have or are intended or likely to have that effect; or (b) the effect that they have, or are intended or likely to have, is to require or encourage behaviour which has, or is intended or likely to have, a significantly adverse effect on competition.
- 2.34 Section 302(3) FSMA 2000 states that if regulatory provisions or practices have, or are intended or likely to have, the effect of requiring or encouraging exploitation of the strength of a market position they are to be taken to have an adverse effect on competition. The language of section 302(3) does not exhaustively define what is meant by an adverse effect on competition. It is a statutory presumption that allows the OFT to assume that there is an adverse effect on competition whenever its conditions are met. The OFT must then consider separately whether any assumed adverse effect on competition is significant, such that it is obliged to make a report under section 304(2) FSMA 2000.
- 2.35 As section 302(3) of FSMA 2000 refers to regulatory provisions or practices 'requiring or encouraging exploitation of the strength of a market position' the OFT considered whether this sub-section applies only to the effect of regulatory provisions or practices in requiring or encouraging exploitation of the strength of a market position by **third party** members of recognised bodies. It concluded, however, that it also applies when regulatory provisions or practices could be said to 'require or encourage' exploitation of the strength of a market position by a recognised body – in this case the LSE – itself. The OFT notes that when section 302(3) is read in its context, the text of the exclusion from the CA 1998 Chapter II prohibition (at section 312(1)(c) FSMA 2000) strongly suggests that a recognised body can 'require or encourage' itself to exploit the strength of its market position by means of its own regulatory provisions.

2.36 Separately, the OFT has concluded that in order to determine whether the LSE's increase in issuer fees has a significantly adverse effect on competition, the test is broader than the abuse of dominance test in the Chapter II prohibition of CA 1998. The wording of section 302(2) and (3) does not require the OFT to consider whether a recognised body occupies a dominant position and whether it has abused any dominant position. Nevertheless, in assessing whether there is or is likely to be an adverse effect on competition or a significantly adverse effect on competition, the OFT will apply principles of economic analysis that are also applied in CA 1998 cases.

2.37 It follows from the above that the LSE's increase in issuer fees should be considered under section 304(1) FSMA 2000 as a regulatory provision or practice. It also follows that under section 302(2) and (3) FSMA 2000 the relevant test is:

- does the LSE's increase in issuer fees have (or is it intended or likely to have, or does it require or encourage behaviour which is intended or likely to have) a significantly adverse effect on competition?

Given that section 302(3) FSMA 2000 applies to the effect of the increase in issuer fees on the LSE itself, the OFT will be entitled to assume that there is an adverse effect on competition if:

- the LSE has a strong market position, and
- its increase in issuer fees has, or is intended or likely to have, the effect of requiring or encouraging the LSE to exploit that strong market position.

If the statutory presumption in section 302(3) applies, the OFT will also need to consider whether any assumed adverse effect on competition is significant.

- 2.38 This report is being made under section 304(3) FSMA 2000. Section 304(3) FSMA 2000 gives the OFT a discretion to make a report if at any time it considers that one or more regulatory provisions or practices, or a combination of regulatory provisions and practices, does *not* have a significantly adverse effect on competition.
- 2.39 Under section 304(6)(a) FSMA 2000, the OFT is required to send a copy of this report to HM Treasury, the Competition Commission (CC) and the FSA. In addition, the OFT will publish this report, as it is empowered (but not required) to do under section 304(6)(b) FSMA 2000.
- 2.40 When the OFT makes a report under section 304(3) FSMA 2000 it has the power under section 306(3) FSMA 2000 to ask the CC to consider the report even though the OFT has concluded that there is no significantly adverse effect on competition. In the light of the LSE's agreement to reduce its issuer fees, the OFT does not intend to ask the CC to consider this report.
- 2.41 Nevertheless, we consider it helpful to describe the procedure that will apply if the CC considers a report made under either section 304(2) or 304(3) FSMA 2000 in a future case.
- 2.42 If the CC receives a report made under section 304(2) FSMA 2000, or is asked, under section 306(3) FSMA 2000, to consider a report made under section 304(3) FSMA 2000 the CC must, under section 306(1) FSMA 2000, investigate the subject matter of the OFT's report.
- 2.43 Under section 306(4) FSMA 2000, the CC must make its own report on the matter unless it considers that, as a result of a change of circumstances, no useful purpose would be served by a report. Under section 306(6) FSMA 2000 a CC report must state the CC's conclusion as to whether the regulatory provision(s) or practice(s), or combination of regulatory provisions and practices, which are the subject of the OFT's report, have a significantly adverse effect on competition. Under section 306(7) FSMA 2000,

if the CC's report concludes that there is a significant adverse effect on competition, the report must also state whether the CC considers that the effect is justified. If the CC considers that the effect is not justified, the report must state the CC's conclusion as to what action, if any, HM Treasury ought to direct the FSA to take. Under section 306(12) FSMA 2000, the CC must send a copy of its report to the OFT, HM Treasury and the FSA.

- 2.44 Under section 308(2) FSMA 2000, if the CC's conclusion, as stated in a report made under section 306(4) FSMA 2000, is that the adverse effect on competition is not justified, HM Treasury must give a remedial direction to the FSA. Under section 308(8) a remedial direction is a direction requiring the FSA to revoke the recognition order for the body concerned or to give such directions to the body concerned as may be specified in it.
- 2.45 Under section 308(4) FSMA 2000, HM Treasury's remedial direction must have regard to any conclusion of the CC as to what, if any, action HM Treasury ought to direct the FSA to take. HM Treasury can only refrain from giving a remedial direction in such a case if there are exceptional circumstances which make it inappropriate or unnecessary for it to do so, or if the FSA or the recognised body concerned has already taken action in response to the CC's report which makes a remedial direction unnecessary (section 308(3) FSMA 2000).
- 2.46 Under section 308(5) and (6) FSMA 2000, if the CC concludes that the adverse effect on competition is justified, but HM Treasury nevertheless considers that the exceptional circumstances of the case require it to act, HM Treasury may give a direction to the FSA requiring it to take such action as HM Treasury considers necessary in the light of the exceptional circumstances, which HM Treasury may specify in its direction.
- 2.47 The rest of this report sets out the OFT's assessment of the relevant test under section 302(2) and 302(3) FSMA 2000, (set

out at paragraph 2.37 above), and explains the basis for its conclusions:

- that the LSE has a strong market position, and
- that the increase in its issuer fees require or encourage the LSE to exploit its strong market position, but
- that the adverse effect on competition (that must be assumed) is not significant.

### 3 MARKET POSITION OF THE LSE

#### Market definition

- 3.1 In order to assess the market position of the LSE it is necessary first to define the market in which it operates and then assess the LSE's position within that market. Market definition is a standard element of competition analysis,<sup>22</sup> regardless of the legislation under which an investigation is conducted. Market definition covers both the relevant goods or services (the product market) and the geographic extent of the market (the geographic market).
- 3.2 In considering market definition, the key issue is the extent to which other goods or services may be substitutes for those relevant to the investigation. Substitutability should be considered both from the demand-side, i.e. the extent to which customers may switch to alternative goods or services, and the supply-side, i.e. the extent to which suppliers of other goods or services may, in the short-run, switch to supplying the goods or services in question. Similar considerations apply to geographical market definition.
- 3.3 In practice there may be many potential substitute products but not all will compete significantly with each other in the market and therefore constrain a firm from exploiting its market power to the same extent. One way to identify the closest substitute products is to consider how consumers and suppliers would react to a small but significant (normally 5-10 per cent) non-transitory increase in the price of the relevant good or service (the 'SSNIP test'). If such a price increase would not be profitable due to substitution by customers to other products, or due to suppliers switching to supply the products relevant to the investigation, then the products to which customers substitute or from which suppliers switch, will be included in the relevant market.
- 3.4 The starting point for market definition is the description of the goods and services under investigation. In this case, the OFT has

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<sup>22</sup>OFT Competition Act 1998 guideline: Market Definition. OFT 403 (March 1999).

investigated the increase in issuer fees for 2002/03 charged by the LSE to UK companies in order for their equity to be traded on the LSE's exchange.

- 3.5 This suggests the market might be defined narrowly as services to issuers for the exchange trading of UK equity, and that the relevant question when defining the market is whether substitution on the demand or supply-side would constrain the LSE from profitably increasing issuer fees above their competitive level.
- 3.6 As described above, the LSE can be regarded as operating a 'two-sided' business which provides services to issuers on one side and to brokers, dealers and investors on the other, with network effects between the two sides (paragraph 2.5). In defining the relevant market in which the LSE operates, the OFT has therefore considered potential substitutes not only in relation to the issuing of UK equity but also in relation to the trading of UK equity on the secondary market by brokers, dealers and investors.
- 3.7 It is important to consider both sides of the business since the extent to which brokers, dealers and investors (i.e. the trading side) can switch to substitute services or suppliers may influence the behaviour of issuers, and whether they choose to have their shares admitted to trading on the LSE's exchange and continue to have them traded there. An essential characteristic of an exchange is the bringing together of the issuing and trading sides of the business, and therefore the market position on one side may be influenced by the market position on the other side.

## Product market

### *Demand-side substitution*

- 3.8 UK equity issuers demand exchange services, such as those provided by the LSE, for two main reasons. First, to raise capital through the selling of shares when a company first issues its equity (an IPO) or when it issues additional equity - the primary market. Second, once issued, a company's equity will continue to be traded

between brokers, dealers and investors - the secondary market. Trading on the secondary market does not directly bring additional capital to the company that issued the equity but it does provide a publicly-available indication of the value placed on the company by investors in the public market place.

- 3.9 Given the increase in issuer fees, the focus for demand-side substitution must be those services that are received in return for the issuer fee payment. However, it is also relevant to consider the competitive position of the trading services offered by the LSE since issuers will wish to be traded where there is liquidity.
- 3.10 Until mid-2000, the LSE was the UK listing authority responsible for authorising the issue of new equity in the UK. In 2000, the FSA took over the role of UK listing authority (UKLA). However, before granting a listing, the UKLA requires a company to seek admission to trading on an RIE, and in practice this will be the LSE which is the only RIE that operates as a primary market for equities in the UK.<sup>23</sup> Moreover, within the UK, the LSE offers companies the largest pool of capital for an IPO. Once new equity issues have been authorised by the UKLA and admitted to trading by the LSE, they can be traded elsewhere but it is on the LSE's exchange that there is likely to be the greatest liquidity and that the price formation process for the trading of UK equity in the UK principally takes place.<sup>24</sup>
- 3.11 The LSE has argued that there are other ways in which a company can raise capital which should be considered as substitutes for issuing shares on the LSE:

'Listing on the LSE is only one part of a much wider process of capital raising. Companies have a number of other alternatives for raising capital and will appraise these with

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<sup>23</sup> This is the process for companies seeking an IPO on the LSE's main market. A company wishing to join AIM must first appoint a Nominated Adviser who will assess its appropriateness.

<sup>24</sup> The word 'listed' strictly speaking refers to an IPO but is used more generally to describe equity which is traded on an exchange or other public trading platform.

their advisers on each occasion they want to raise new capital ...Recommended capital-raising options will depend on a number of factors, including strategy, business profile, size and stage of development.

*Companies do not consider it essential to list on a stock exchange in order to raise capital.* They can raise finance from a number of alternative pools of capital:

- bank finance
- business angels
- venture capital
- further investment from existing shareholders, and
- debt instruments, including bonds.<sup>25</sup>

3.12 The OFT accepts that there are many alternative ways in which companies might raise capital. In practice, though, the nature and circumstances of the business will to a significant extent dictate the means of finance. Even where there are several options available to a company, its precise requirements are likely to determine which one it chooses. For example, an equity issue will have very significant consequences for the ownership and control of the company. Thus while bonds and equity are both sources of finance, they might not be regarded as substitutes in all instances. Decisions are also influenced by the need to find the appropriate balance between debt and equity.

3.13 Ultimately, as the LSE itself states, the preferred option of a particular company for raising new capital will depend on a variety of factors peculiar to that company. Depending on those factors, the substitutability between different options is likely to be limited. Moreover, even if a company were choosing between a public flotation and some other form of finance, and was taking into account the relative costs, exchange fees form such a small part of the total cost of an IPO that it is unlikely they would be a significant factor in determining the choice.

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<sup>25</sup> LSE submission to the OFT (8 September 2003), paragraphs 3.52 and 3.54 (emphasis in original).

3.14 As noted above, the trading of equity in the secondary market offers certain benefits to issuers. In general, issuers will want their equity to be traded where there is the greatest liquidity. This is most likely to be where the equity was first admitted to trading. However, once a UK company has issued its equity for trading on the LSE, there are a number of ways in which it can be traded in the UK other than on the LSE's exchange.<sup>26</sup>

3.15 In relation to wholesale trading of UK equity, the LSE has commented:

'A sell-side [wholesale] broker can place a trade with any of the following:

- an Electronic Crossing Network ("ECN") – a system similar to the LSE's SETS platform which provides for the automatic execution of matching bid and offer prices away from a traditional stock exchange
- through its own book: either by crossing the trade directly with other clients, or trading with the buy-side and taking on the associated price risk (known as "internalisation"). Internalisation is a growing trend whereby brokers with a high volume of trades in both directions net them off against each other, so as to extract greater value from the order flows that pass across them
- other sell-side brokers
- a non-member firm entity: this enables firms to execute trades "over the counter" ("OTC"), avoiding any obligation to report to an exchange platform. [...]

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<sup>26</sup> A company's shares will only be available for trading in the secondary market in the UK so long as they continue to be listed on the LSE's exchange. They might, however, be traded on an overseas exchange, see below on the geographic market.

- other exchanges, such as virt-x in the UK or other EU exchanges, or
- one of the LSE's electronic execution mechanisms e.g. SETS.<sup>27</sup>

3.16 It is important to recognise that the focus of this investigation is the services provided to UK equity issuers and even if traders and investors regard an alternative to the LSE's exchange as a close substitute, this does not necessarily mean that issuing companies will view these alternatives as close substitutes.

3.17 The OFT recognises that UK equity might be traded on a number of public platforms in the UK in addition to the LSE's exchange. These include virt-x, an RIE where Swiss and other European, including UK, 'blue chip' equities are traded; and alternative trading systems (ATs) or electronic crossing networks (ECNs) such as Instinet, Posit and E-Crossnet. From the perspective of a broker or dealer, these trading platforms would appear to offer much the same service as the LSE, although clearly their smaller scale and limited membership reduces liquidity and trading opportunities. The OFT accepts, therefore, that these public platforms might be regarded as substitutes for the LSE's exchange for the trading of UK equity.

3.18 For issuers, these platforms might perform a function that is similar to the LSE's exchange in the secondary market, in that they also offer a forum for trading UK equity. However, these platforms do not currently operate in the primary market, and the OFT considers them to be at best partial substitutes for the LSE's issuer services.

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<sup>27</sup> LSE submission to the OFT (8 September 2003), paragraph 3.75. Regarding retail trades, the LSE has indicated that [...] per cent of trades are sent by investors to Retail Service Providers (RSPs) to be transacted, *ibid.* paragraph 3.77.

- 3.19 The OFT does not see a case for including in the relevant market the other means of trading equity referred to by the LSE. In essence, most of the other forms of trading (e.g. internalisation or broker-to-broker) might be described as 'private' trading in that the trading is not exposed or open to the full market. Such private trading depends on the arrangements and opportunities of the traders in question.
- 3.20 For example, a broker receiving buy and sell orders of similar magnitudes within a short space of time may be able to cross or 'internalise' the order without the need to go to an exchange in order to execute it. The broker's scope for doing so must depend on receiving well-timed, well-matched orders. Crossing is not an appropriate way of trading equities where the trade is time-sensitive.
- 3.21 It seems unlikely, however, that an individual broker will have opportunities to cross a significant proportion of customers' orders in this way, since to be able to do so would require a large proportion of its business to consist of similarly-timed buy and sell orders of equivalent size. This activity does not, therefore, appear to be a close substitute for exchange-based trading, where there will be opportunities to interact with a large number of potential counterparties and execute trades which the broker is not able to internalise.
- 3.22 Similarly dealers and brokers may trade shares between each other outside of an exchange. Their ability to do so will depend on the relationships and networks they have formed but, even where they have formed effective networks to which they may give preference to exchange-based trading for certain trades, it is unlikely that these can be treated as substitutes. There will be many trades that can be executed on an exchange but not on a private network.
- 3.23 Such evidence as the OFT is aware of would suggest that internalisation and other forms of private trading account for only a

small percentage of the value of trades in UK equity. Moreover, whatever the levels of these forms of private trading, the OFT does not consider that they would diminish the value to issuers of having shares publicly traded on the LSE's exchange. Private forms of trading UK equity are therefore excluded from the relevant product market.

- 3.24 The OFT has considered whether, on the assumption that end-investors may regard alternative financial assets as substitutes, the markets where such assets are traded might be included in the same market as the LSE. For example, if UK bonds or derivatives are viewed by end-investors as substitutes for UK equity, a case might be made that the trading of these assets imposes competitive constraints on the trading of UK equity.
- 3.25 This appears unlikely. The markets in which such assets are traded tend to operate in very different ways, and to have different cost structures from equity trading platforms. More importantly, concerns over the correct investment decision (reflecting portfolio balance, investment analysis etc) are likely to play a much more important role in the choice of investment asset than trading cost concerns. On this basis, the OFT considers that forums for trading financial securities other than equities are not close substitutes for the LSE's exchange.
- 3.26 The approach used here defines the market according to the class or broad category of securities traded (e.g. 'UK equity' or 'UK financial derivatives') and is consistent with that taken by the OFT in earlier investigations of the LSE, where it has implicitly recognised the LSE's strong position in the trading of UK equity.<sup>28</sup> There is also little evidence of mergers between exchanges being blocked where there is little or no overlap in the securities (or commodities etc) being traded.

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<sup>28</sup> OFT (1994): Trade Publication Rules of the London Stock Exchange; and OFT (1995): Rules of the London Stock Exchange Relating to Market Makers. The European Commission did not take issue with the product markets defined on the basis of different classes of derivatives which Deutsche Börse AG and the SWX Swiss Exchange argued for in their notification of their joint venture Eurex: case COMP/37.557- Eurex, OJ C231, 11.08.2000, page 2.

3.27 From a demand-side perspective, therefore, the OFT concludes that for UK companies which decide to raise capital by issuing equity for public trading in the UK there is no substitute for the LSE, which is the only primary market in the UK where new equity issues are admitted to trading. However, in relation to the secondary market, those other public platforms where UK equity is traded might be considered as partial substitutes for the LSE's exchange and the market may, at its widest, include these alternative public platforms.

### *Supply-side substitution*

3.28 Market definitions may be widened owing to supply-side considerations. If suppliers can, in the short run, easily switch to providing the products or services in question, their existing services may be included within the market definition even if they were not a direct demand-side substitute.

3.29 virt-x, which is a UK RIE, at present operates as a secondary market for UK equity trading but it would not be difficult, at least from a regulatory perspective, for virt-x to expand its activities to include issuing as well as trading services for UK equity within a relatively short time frame.<sup>29</sup> In addition, it might be argued that UK recognised derivatives exchanges, such as LIFFE, might be able to switch comparatively quickly to issuing and/or trading UK equities, and that they should therefore be included in the relevant market.

3.30 In terms of technical possibility, it may not be particularly difficult for a derivatives exchange to switch to trading equities. For example, given the functionality of LIFFE's electronic trading system, with its connection to an established clearing and

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<sup>29</sup> The UK listing authority requires a company to seek admission to trading on an RIE before granting a 'listing' (paragraph 3.10). At present virt-x does not offer an admission to trading service, and all companies apply to the LSE to be admitted to trading.

settlement system, it might be adaptable to providing an electronic order book for equities.

- 3.31 However, exchanges are more than a trading platform. They need to provide a regulatory framework for trading securities (including a rule book), to have established relationships with their customers, and to have an appropriate standing with the regulatory authorities. For example, the exchange may have had to examine membership applications in considerable detail before admitting an applicant to trade. This would make it comparatively difficult for an exchange to switch to the trading of new and different products, at least in the short-run. More significantly, the externality associated with liquidity (i.e. buyers, sellers and issuers all want to be in the same place) would make it difficult for a new market entrant to capture business from an incumbent exchange to the extent that it would become an effective competitor.<sup>30</sup>
- 3.32 Bearing in mind supply-side considerations, the market for issuing UK equity might include virt-x as well as the LSE. Otherwise, supply-side substitution is unlikely to widen the definition of the product market in this case.

### *Conclusion*

- 3.33 The OFT concludes that the appropriate product market definition is issuer services for the issuing and public trading of UK equity, or, alternatively, exchange services to issuers of UK equity. At its widest the market may include those public platforms such as virt-x, Instinet, Posit and E-Crossnet where UK equity is traded in addition to the LSE's exchange.

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<sup>30</sup> In 2003, the LSE and Stockholmsbörsen established a joint venture company, EDX London Ltd to acquire and develop the securities derivative business conducted by OMLX London Exchange (OMLX). This represented a diversification into derivatives markets by the LSE but EDX basically took over OMLX's trading system, rulebook and membership, and the LSE did not have to adapt its equity trading activities to a derivatives market.

## Geographic market

### *Demand-side substitution*

- 3.34 The shares of a number of UK companies are traded on overseas exchanges in addition to being traded on the LSE's exchange.
- 3.35 The LSE has commented that 43 per cent of all FTSE 100 companies are also listed on NYSE, and that, on average, each FTSE 100 company has one additional listing.<sup>31</sup>
- 3.36 Some FTSE 100 companies are traded extensively on an overseas exchange as well as on the LSE's exchange. These generally include the very largest multinationals (such as Shell, BP/Amoco, Unilever and Vodafone), where a significant proportion of the overall value of trading may be on an overseas exchange such as Euronext or NYSE.<sup>32</sup>
- 3.37 A further set of FTSE 100 companies are predominantly UK companies, which have opted to be traded on other exchanges as well as the LSE. Such companies' shares (or equivalent<sup>33</sup>) are traded on the LSE and an overseas exchange (for example, BT shares are also traded on NYSE), but in most (though not all) cases trading on the overseas exchange accounts for a very small share of overall trading in that company's equity.<sup>34</sup>
- 3.38 For most quoted UK companies smaller than those in the FTSE 100, the main exchange where their shares are issued and traded is

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<sup>31</sup> LSE submission to the OFT (8 September 2003), paragraph 3.59.

<sup>32</sup> London Stock Exchange, Competition Analysis, final assessment (an OXERA study commissioned by the LSE, March 2001). This is mainly a result of the history of the company in question, for example where a trans-national merger has taken place between companies that were previously traded on their respective domestic exchanges.

<sup>33</sup> I.e. 'American or Global Depositary Receipts' (ADRs) where a bank issues a receipt for foreign shares it owns. This receipt can then be traded without the usual regulatory requirements of trading foreign shares.

<sup>34</sup> London Stock Exchange, Competition Analysis, final assessment (an OXERA study commissioned by the LSE, March 2001). This is often referred to as a 'secondary' or 'cross-listing', although this is confusing terminology and not employed here.

the LSE.<sup>35</sup> Smaller companies are, therefore, particularly dependent on the LSE's exchange.

3.39 While there is a small class of IPOs for which the LSE competes with other overseas exchanges (typically IPOs of non-UK based companies), for most UK issuers the LSE is the obvious exchange of choice. Indeed, as was recognised in a report prepared for the LSE by OXERA, in practice most companies issue in their domestic markets.

'A high proportion of UK companies (76%) have considered listing on alternative exchanges, in particular in the US. But at the end of the day most remain in London. Overall, international competition in listings should be kept in perspective: the vast majority of companies list in their domestic markets.'<sup>36</sup>

3.40 Further, from an issuer's perspective alternative venues are generally complementary rather than competitive. This means that rather than being alternatives, the issuer requires the services of both. Where a substantial proportion of shares are traded at an exchange, it is not an option for the issuer to withdraw from that exchange, as doing so would have a significant negative impact on liquidity. For issuers, therefore, once they have a large number of shares listed on one exchange, they no longer have any choice between two competing exchanges. Thus although the shares of some larger companies are issued on both the LSE's exchange and overseas exchanges, this is unlikely to widen the market beyond the UK in terms of demand-side substitution for issuer services.

3.41 From the perspective of trading UK equity, demand-side substitution might widen the market beyond the UK. For example, a broker or dealer seeking to buy or sell Vodafone shares might consider doing so on either the LSE's exchange or on Deutsche Börse since both exchanges provide a significant market in these

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<sup>35</sup> OFEX offers an alternative venue for some small companies.

<sup>36</sup> London Stock Exchange, Competition Analysis, final assessment (an OXERA study commissioned by the LSE, March 2001), paragraph 3.5.

shares. However, for those UK companies whose equity is issued only on the LSE, traders do not have this choice.

- 3.42 Although non-UK-based public trading in UK equities fulfils some of the characteristics of demand-side substitution when viewed from the perspective of brokers, dealers and investors in certain larger UK companies, it does not do so when viewed from the perspective of issuers.

### *Supply-side substitution*

- 3.43 Regarding supply-side substitution, the issue in relation to the geographic market is whether an overseas-based exchange could in the short-run switch its public trading activity to provide issuer services to UK public traded companies. Technically this might be possible but it seems unlikely that an overseas exchange would be able to overcome the network externality problem and capture sufficient liquidity across the range of companies traded on the LSE to become an effective competitor in the short-run.<sup>37</sup>

### *Conclusion*

- 3.44 The OFT concludes that the relevant geographic market should be defined as the UK. For the largest UK companies it might, at its widest, also include overseas exchanges on which UK equity is traded – but, for the reasons stated above, the OFT doubts that such exchanges are effective substitutes for companies whose shares are already listed on the LSE's exchange.

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<sup>37</sup> Under sections 287 and 292 of FSMA 2000, an overseas exchange can apply for recognised status in the UK. This enables the exchange to establish trading facilities, such as electronic terminals, in the UK, although the volume of trading will usually be very small compared to that on the home exchange. At present, there are a number of recognised overseas investment exchanges (ROIEs) in the UK, mainly derivatives exchanges.

## Position of the LSE

3.45 The OFT has assessed the LSE's position on the relevant market by considering the constraints on its behaviour arising from:

- competition from existing competitors – those already active on the relevant market, and
- competition from potential competitors – those who might enter the market in the near future.

3.46 As discussed above, the relevant product market is issuer services for the issuing and public trading of UK equity, and the relevant geographic market is the UK. In assessing the LSE's market position the OFT has taken into account its strength in both the issuing and the public trading of UK equity.

3.47 With regard to the issuing of UK equity, the LSE is by far the most important supplier of issuer services in the UK, and the only realistic option for most UK companies that decide to raise capital by issuing equity for public trading is to issue on the LSE. Some larger companies are also traded on overseas exchanges in addition to the LSE but such dual listing is complementary in nature. In most cases, issuers do not view different exchanges as alternatives but may use more than one exchange to access more liquidity.

3.48 Both of the companies which complained to the OFT about the increase in the LSE's annual issuer fees for 2002/03 made the point that for UK companies whose shares were already admitted to trading on the LSE and which wished to continue to have their shares traded in the UK there was no alternative to the LSE's exchange. Indeed, the most striking evidence for the strength of the LSE's position in the market for the issuing (and public trading) of UK equity is the reaction of listed companies to the increase in issuer fees.

- 3.49 Between 1 April 2002 and 31 January 2003, out of 138 companies that withdrew from the LSE's main market (referred to as 'de-listing'), only 5 de-listed as a result of a decision not to be traded on the LSE,<sup>38</sup> and even in these instances it is far from clear that the increase in issuer fees was a factor. The other companies which de-listed transferred to AIM, went into liquidation, merged or were taken over. Furthermore, there is no evidence of supply-side substitution or new entry in response to the price increase. Hence, applying the SSNIP test, this appears to be a real life example where an increase in prices of far more than 10 per cent did not lead to any significant loss of business.
- 3.50 Considering the LSE's market position with regard to the trading of UK equity, the conventional approach to assessing market power is to start by examining market shares. The LSE did not supply data on its share of public trading in UK equity. However, it is beyond dispute that the principal venue for the public trading of UK equity is the LSE. Liquidity breeds liquidity: traders want to be where other traders are, and issuers where the traders are. And for almost all UK equity it is the LSE which provides the greatest liquidity.
- 3.51 The LSE's flotation document stated: 'The Exchange is the primary source of price formation in UK equities with over 99 per cent by value of UK public trading transacted on the Exchange and over 98 per cent of UK domiciled, publicly traded companies admitted to trading on its markets'.<sup>39</sup>
- 3.52 Consistent with this pre-eminence within the UK are the details for the market shares in UK equity of virt-x and ATSS/ ECNs supplied by the LSE. These showed that in December 2002, virt-x accounted for 0.55 per cent of public UK equity trading, Posit 0.7 per cent, E-Crossnet 0.12 per cent and Instinet 2.1 per cent.<sup>40</sup>

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<sup>38</sup> LSE's response dated 14 March 2003 to question 6 of the OFT's Notice dated 20 February 2003.

<sup>39</sup> Introduction to the Official List Sponsored by Schroder Salomon Smith Barney, Key information, paragraph 1.

<sup>40</sup> LSE submission to the OFT (14 March 2003), Annex 4a(iv).

- 3.53 Within the UK, the LSE has an effective monopoly in the issuing of UK equity, and a position of enormous market strength, relative to its existing competitors, in the public trading of UK equity. For most UK companies who decide to raise capital by an equity issue the LSE's exchange is the only realistic option, and for those whose shares are already traded on the LSE the only alternatives are to continue to have their shares traded on the LSE, or to stop being publicly traded. Significantly, when the LSE increased its annual issuer fees for 2002/03, very few (if any) companies decided to stop being traded on the LSE's exchange for that reason.
- 3.54 The OFT has also considered whether the LSE's pricing behaviour might be constrained by the threat of new entry. However, the LSE does not appear to face such a constraint. Entry into the relevant market has occurred in recent years, with ATs such as Posit entering the market, but none has achieved a significant market share. New entrants would appear to face two principal barriers to entry and expansion. The first is the regulatory requirement to obtain authorisation from the FSA. The second, and far more significant, barrier to entry and expansion is the network externality that exists in this market (see paragraph 2.5). Any new entrant would find it difficult to attract business away from the LSE since that is where the liquidity in UK equities is located. In practice, there seems to be little prospect of significant new entry in the foreseeable future.
- 3.55 The LSE has raised the issue of 'tipping', i.e. that once a market displaying network effects has obtained a certain critical mass, then it may have a competitive advantage over rival networks, although significant competition can still exist.<sup>41</sup> In other competitive studies, typically where innovation is being discussed, this has been expressed as 'competition for the market' as opposed to 'competition within the market'.<sup>42</sup>

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<sup>41</sup> LSE submission to the OFT (8 September 2003), paragraph 3.30.

<sup>42</sup> See for example: OFT (2002): Economic Discussion Paper 3: Innovation and competition policy.

- 3.56 It might be argued that the LSE's competitive position should not be assessed in terms of the current lack of alternatives for the public trading of UK equity, but the potential for the LSE to cease to be the principal venue for public UK equity trading in the future. In other words, given the network externalities involved in public equity trading, it is inevitable that such trading will concentrate on one forum, but this forum could change over time.
- 3.57 However, the LSE's exchange has been the principal venue for the public trading of UK equities for an uninterrupted period of over two hundred years, and the OFT considers that at present there is no evidence to suggest that the LSE might in the longer term face a serious threat to its position of strength in the market for the issuing and public trading of UK equity.

### **Conclusion on the LSE's market position**

- 3.58 The OFT concludes that the LSE holds a position of market strength in the market for issuer services for the issuing and public trading of UK equity, and that it faces few, if any, constraints on the exploitation of its market strength from existing or potential competitors. This is shown, for example, by the lack of any substitution away from the LSE, or new entry into the market, following the price increases which are the subject of this investigation.

## 4 EXPLOITATION OF THE LSE'S STRONG MARKET POSITION

- 4.1 In part 3 the OFT concluded that the LSE has a strong market position in the market for the provision of issuer services for the issuing and public trading of UK equity in the UK. In this section the OFT considers whether the LSE's fee increases have (or are intended or likely to have) the effect of requiring or encouraging it to exploit the strength of its market position, so that an adverse effect on competition must be assumed. Exploitation in this way will have occurred if the fee increases required or encouraged the LSE to charge fees for issuer services that exceeded those which it could have charged in the absence of its strong market position. In section 5 the OFT will consider whether any adverse effect on competition that it finds is significant.
- 4.2 In this part the OFT's analysis focuses on the LSE's financial year 1 April 2002 to 31 March 2003, when the increase in issuer fees under investigation took place. However, the OFT also describes the effects of the fee reductions agreed by the LSE during the course of the investigation.

### Levels of issuer fee increases

- 4.3 For the financial year 2002/03, the LSE increased substantially admission to trading fees and annual fees for UK companies on its main market and admission to trading fees on AIM.<sup>43</sup>
- 4.4 Table 2.2 illustrates the increases for 2002/03 in annual fees for UK companies, with different market capitalisations, whose equity was traded on the LSE's main market. It will be seen that the increase in fee varied between 41 and 115 per cent, with annual fees for most market capitalisations increasing by around 100 per cent.

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<sup>43</sup> Annual fees on AIM were increased in the previous year.

- 4.5 The 2002/03 increases for admission to trading fees for UK companies on both the LSE's main market and AIM were also significant with, for example, fees for an IPO on the main market increasing by around 30 to 40 per cent for companies with market capitalisations of between £250 million and £2,000 million (paragraph 2.12). However, admission to trading fees are one-off charges and form only a small part of the total cost of an IPO. Increases in such fees are, therefore, less likely to provoke complaints than increases in annual fees.
- 4.6 Given the LSE's complex issuer fee structure and the fact that not all fees increased by the same amount, the OFT considered how best to assess the overall impact of the increases.
- 4.7 The LSE's revenues from main market annual fees for UK companies were £[...] for 2001/02 and £[...] for 2002/03, an increase of 75 per cent, and those from main market admission to trading fees were £[...] for UK companies in 2001/02 and £[...] in 2002/03, around a 5 per cent increase. On AIM, revenue from admission to trading fees increased by around 167 per cent, from £[...] in 2001/02 to £[...] in 2002/03.<sup>44</sup>
- 4.8 Whilst the actual figures for 2002/03 take into account the changes in the fee structures, they were also influenced by volume outturn. The revenues from admission to trading fees will therefore also reflect the number and size of IPOs (and additional issues) that took place, and the annual fee income will also reflect changes in the profile of the market capitalisation of the companies (upon which the individual fees are based). Thus, for example, the fact that the increases in revenues from admission to trading fees were not significant, despite the increase in fees, is a reflection of the depressed market for IPOs during 2002/03.

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<sup>44</sup> Details for 2001/02 were provided by the LSE to the OFT in attachment 8b of its submission to the OFT dated 1 October 2002 and those for 2002/03 were provided by the LSE to the OFT in November 2003.

- 4.9 An appropriate assessment of the impact of the fee increases would need to take into account any changes in volumes or company profiles. The best measure of the impact of the changes is, therefore, to estimate the difference in LSE revenues when applying the new fee structure, compared to the old one, on the same company profile of market capitalisation (for annual fees) and number and value of IPOs (for admission to trading fees). Although the estimate produced will not correspond to any revenue outturn, the OFT considers that this is the most appropriate way of assessing the increases since it compensates for any changes in company profiles or IPO volumes and allows a like-for-like comparison.
- 4.10 On this adjusted basis, revenue from annual fees for UK companies on the main market was projected by the LSE to rise by 86 per cent, using the 2001/02 company profile, and revenue from admission to trading fees for UK companies on the main market were projected by the LSE to increase by 36 per cent, using a 2000/01 profile of IPOs (paragraph 2.14). These figures contrast with the 5 per cent actual increase for 2002/03 revenue from main market admission to trading fees for UK companies, reflecting the fall off in IPOs for that year, but are close to the 75 per cent actual increase for 2002/03 revenue from main market annual fees for UK companies.<sup>45</sup> Conversely, the costs for the whole Issuer Services business division were budgeted to go up by around only [...] <sup>46</sup> per cent compared to 2001/2002 (paragraph 2.17).<sup>47</sup>
- 4.11 In November 2003, the LSE agreed to reduce its annual fees for UK companies on the main market, and both admission to trading fees and annual fees on AIM from 1 April 2004. If the reduced fees had been in place in 2002/03, the revenue for the Issuer Services

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<sup>45</sup> Main market annual fees for 2002/03 do not seem to have been affected significantly by changes in company profiles, possibly because they were based on market capitalisations in November 2001 and therefore preceded the downturn in stock market prices in 2002/03.

<sup>46</sup> Less than 10.

<sup>47</sup> The LSE's actual 2002/03 results recorded an increase in costs for the whole Issuer Services division of around [...] [below 10] per cent: LSE letter to the OFT (13 November 2003), attachment 2. For the same year, the number of issuers dropped by around 2 per cent: deduced from the LSE's spreadsheets supplied to the OFT on 12 November 2003.

division would have been around £5.8 million lower than the 2002/03 actual revenue,<sup>48</sup> and the annual issuer fees for all UK companies on the main market would have increased by 35 per cent instead of between 41 and 115 per cent (paragraph 2.21). Further, the LSE agreed not to increase UK main market or AIM annual and admission to trading fees, other than to reflect increases in the ONS Services Sector Wages Index, for a further two years until 1 April 2007.

## **Methods of assessment of fee increases**

4.12 The OFT has considered four approaches to establish whether the LSE's increased issuer fees exceeded what it could have charged in the absence of its strong market position:

- *Price comparisons*, comparisons of prices with those of competitors
- *Profitability, measured by return on turnover (ROT)*, which is operating profit before interest and tax as a proportion of turnover
- *Profitability measured by truncated internal rate of return (TIRR)*, which is the method that establishes the internal rate of return (IRR) over a truncated part of the life of the investment (as compared to the traditional IRR which considers the whole life of the investment); and
- *Profitability measured by return on capital employed (ROCE)*, which looks at the return on capital invested.

## **Price comparisons**

4.13 The LSE has argued that the level of its annual fees following the increases for 2002/03 was in line with that of other competitor

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<sup>48</sup> LSE letter to the OFT (13 November), section 2, corroborated by the OFT.

exchanges such as Euronext, Deutsche Börse's Neuer Markt and Nasdaq Europe, and significantly lower than that on the NYSE (Paragraph 2.16).<sup>49</sup> However, the OFT considers that the LSE only competes with these and other exchanges to a limited extent and, since the other exchanges may also be monopolies or have a position of market strength, their pricing of issuer fees might not be an appropriate comparator.

### **Profitability measured by return on turnover (ROT)**

- 4.14 The LSE provided budgeted ROT figures for 2002/03 and actual ROT figures for 2000/01 and 2001/02 broken down between its Broker Services, Issuer Services, Information Services and Other lines of business.<sup>50</sup>

FIGURE 4.1: RETURN ON TURNOVER BY LINE OF BUSINESS  
[...]

- 4.15 The LSE argued that the increase in issuer fees for 2002/03 would bring the profitability of Issuer Services more into line with that of its other lines of business (paragraph 2.16).<sup>51</sup> As Figure 1 shows, following the fee increases, the ROT for Issuer Services was budgeted to rise to a level similar to that of Information Services.<sup>52</sup>
- 4.16 To calculate rates of ROT, the LSE's common costs have to be allocated between its different lines of business. Each line of business's ROT could be sensitive to the choice of cost allocation method used. It is therefore useful to look also at the LSE's ROT.

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<sup>49</sup> Significant factors in the LSE's choice of comparators included reputation, global standing and availability of deep pools of liquidity: LSE submission to the OFT (8 September 2003), paragraph 2.9.

<sup>50</sup> LSE submission to the OFT (1 October 2002), attachments 8i, 8ii, 8iii. The LSE does not measure profitability for different products and services within its Issuer Services division.

<sup>51</sup> Issuer Services' revenue had fallen substantially in 2001/02 when there had been a decline in the number of IPOs: LSE submission to the OFT (10 November 2003).

<sup>52</sup> The actual 2002/03 ROT for the Issuer Services division was around [...] per cent: source, LSE letter to the OFT (13 November 2003), attachment 2.

- 4.17 The LSE's ROT was around 34 per cent in 2001/02 and following the increase in issuer fees rose to around 36 per cent in 2002/03.<sup>53</sup>
- 4.18 As a result of the agreement by the LSE to reduce its issuer fees from 1 April 2004, the OFT calculates that had these prices been in place in 2002/03 the LSE's ROT would have been around [...] per cent. Also, the OFT notes that the ROT for Issuer Services would have been around [...] per cent, [...] percentage points lower than the actual 2002/03 ROT for Issuer Services of around [...] per cent and only [...] percentage points higher than the around [...] per cent recorded for 2001/02.
- 4.19 The OFT considers that in this case it is difficult to draw definitive conclusions from rates of ROT as to whether the LSE's profitability exceeds that which might be expected in the absence of a strong market position. First, for the reasons given above in paragraph 4.13 any comparison with other stock exchanges provides only limited guidance. Second, comparisons with other types of business, and other lines of business, are often of limited value because the level of ROT varies significantly with both the type of activity concerned and the level of capital intensity.

### **Profitability measured by truncated internal rate of return (TIRR)**

- 4.20 An investment's internal rate of return (IRR) is a measure of an investment's economic profitability. Competition authorities often need to measure profitability before all cashflows pertaining to the life of an investment have occurred, i.e. over a truncated period of an investment. The TIRR achieves this. The measure uses opening and closing asset values and cashflows generated during the truncated period. For cases assessing price levels and profitability these assets are valued on a net replacement cost basis.

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<sup>53</sup> LSE's Annual Report 2002/03. Calculated from the consolidated profit and loss account using the figures for operating profit before exceptional items divided by net turnover.

- 4.21 The LSE supplied pre-tax TIRR estimates for the five-year period 1998/99 to 2002/03 (Annexe A). However, the OFT has not accepted the LSE's five-year approach to profitability estimates (paragraph 4.28). In addition, following discussion with the OFT, the LSE provided one-year TIRR estimates for 2002/03, the year in which the increase in issuer fees took place, but the OFT considered that further investigation into these one-year estimates would be needed.<sup>54</sup>
- 4.22 The OFT did not carry out further investigation because the main reason for any difference between the TIRR and the return on capital employed (ROCE), when a business is in a steady state, is the time value of money.<sup>55</sup> The OFT considers that the LSE is in a steady state and that in this case the differences due to the time value of money are not material.<sup>56</sup> The OFT has, therefore, used ROCE to assess the LSE's profitability.<sup>57</sup>

### **Profitability measured by return on capital employed (ROCE)**

- 4.23 ROCE is defined in this case as operating profit, before interest and tax, divided by capital employed.<sup>58</sup> ROCE can be thought of as the

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<sup>54</sup> Fax from the LSE to the OFT, dated 26 September 2003, following a conference call on the same date. The LSE stressed that its one-year estimates were not the profitability figures which it was proposing to the OFT.

<sup>55</sup> The time value of money is taken into account by the TIRR but not by the ROCE. The OFT notes that none of the LSE's estimates of its TIRR, albeit over a five-year period, are materially lower than the LSE's ROCE estimates (see Annexe A).

<sup>56</sup> The OFT considered the LSE to be in a steady state because its capital employed value was materially the same at the beginning and the end of the financial year 2002/03 (see Table B.1 in Annexe B).

<sup>57</sup> The CC used the truncated IRR to assess profitability in its investigation of Supermarkets, Cm 4842 10/10/00, when it also used ROCE estimates. In that case, although the IRR exceeded the cost of capital, this was not considered evidence of excessive prices because of the survivorship bias argument. Survivorship bias occurs when some companies earn more than their cost of capital and some less, and if some of the latter group, as a result, stop trading, then the measured average IRR of the surviving companies will exceed their cost of capital, even if all of them are in a competitive market. The OFT does not consider survivorship bias to be relevant in the case of the LSE. In several profitability assessments, the CC has relied on ROCE estimates, see footnote 55 below.

<sup>58</sup> Because the LSE's capital employed includes a significant amount of cash, operating profit after interest received and before tax has been used to capture the interest received on the cash in the capital employed.

return that providers of (equity and debt) finance in a business or activity receive on their capital investment. If ROCE is high relative to the cost of capital, this could indicate that profits exceed those which could be earned in the absence of a strong market position.<sup>59</sup>

4.24 While the focus of the OFT's investigation was the fees charged to UK equity issuers, the OFT has estimated the ROCE for the LSE as a whole. It has done so for two reasons.<sup>60</sup>

4.25 First, like the ROT, the ROCE for a particular line of business could be sensitive to the method used to allocate the LSE's common costs. Intangible assets are particularly difficult to allocate and the LSE itself did not attempt to allocate any material intangible values to individual lines of business.<sup>61</sup>

4.26 Second, the LSE's activities have the characteristics of a two-sided business, i.e. the value to the issuers of the services provided by the LSE is (in part) dependent upon the number of brokers and dealers, who trade on the LSE's exchange, and vice versa (Paragraph 2.5). So, for example, lower charges to brokers in order to encourage trading may be in the interests of the issuers, but this would not be captured by the ROCE for an individual line of business. More generally, in such two-sided businesses, it may be optimal for one set of customers to make a larger contribution to costs than another. Thus a finding that a high or low return had

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<sup>59</sup> ROCE estimates, or similar capital based approaches, have been used to assess profitability in a number of competition cases in the UK. See, for example, the reports of the Competition Commission (formerly the Monopolies and Mergers Commission) on Extended warranties on domestic electrical goods, Cm 6089 18/12/03; Vodafone, O2, Orange and T-Mobile, ISBN 0-11-515503-1 18/02/03 (published by Oftel); The supply of banking services by clearing banks to small and medium-sized enterprises, Cm 5319, 14/03/02; Supermarkets, Cm 4842 10/10/00; Classified directory advertising services, Cm 3171, 21/03/96; Contraceptive sheaths, Cm 2529, 30/03/94; and Soluble coffee, Cm 1459 08/03/91.

<sup>60</sup> The LSE as a whole is considered, for the purposes of the ROCE section of this report, to be the combination of the LSE's Issuer Services, Broker Services and Information Services lines of business. Table B.2 in Annexe B includes adjustments required to the LSE's reported consolidated operating profit before exceptional items to calculate consolidated operating profit after interest received and before tax and exceptionals for these combined lines of business.

<sup>61</sup> Material intangible values are those for reputation and relationships with market participants (see Annexe D).

been earned on services to issuers may need to be seen in the context of the returns earned by the LSE as a whole.

- 4.27 The OFT has estimated the ROCE for the LSE as a whole for the financial year 2002/03, when the increase in issuer fees took place. The LSE, however, contended that the 'OFT must consider the question of the persistency of profits, instead of transient profitability.'<sup>62</sup> Accordingly, the LSE provided the OFT with a ROCE (and pre-tax IRR) for the five-year period between 1998/99 and 2002/03 (Annexe A). This resulted in significantly lower figures for the ROCE (and pre-tax TIRR) than the OFT's one-year figure (Annexe B).
- 4.28 The OFT has not accepted this approach. The LSE's figures are lower because they take into account exceptionals and reflect lower returns in the earlier years of the five-year period, for part of which the LSE was still operating as a mutual organisation.<sup>63</sup> Considering returns over a five-year period might imply allowing the LSE to earn future profits in excess of those that could be earned without a strong market position, to compensate for low returns in the past. Firms in competitive markets would not be able to raise prices to compensate for lower returns in this way. In this case, the OFT considers that the relevant test of profitability is that for the year in which the fee increase under investigation took place and that the ROCE should be estimated taking into account only that year.
- 4.29 The OFT's approach to the valuation of the LSE's capital employed, including tangible and intangible assets, is set out in Annexe D. The OFT's net replacement cost estimates for both capital employed and operating profit after interest received and before tax for the LSE are set out in Annexe B. The LSE argued that its capital employed included a number of intangible assets. The OFT has not,

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<sup>62</sup> LSE submission to the OFT (8 September 2003), paragraph 2.15.

<sup>63</sup> Annexe C covers the OFT's approach to exceptionals. The OFT considered whether any of the expenditure recorded as exceptional in the LSE's annual reports during the five years up to and including 2002/03 was of an investment nature which could require capitalisation and consequent amortisation/ depreciation and therefore affect its ROCE estimates (see Annexe B and Table B.3 for estimates). The OFT concluded that none of the expenditure was of an investment nature that should be paid for by the customer.

with the exception of 'workforce', been persuaded by the LSE's arguments for the capitalisation of intangible assets (see Annexe D). The OFT's estimates in Annexe B, and in scenario 1 below, do not therefore include any capital value for brand, regulatory standing or relationships with market participants, but do include an amount for 'workforce'. However, the OFT recognises that capitalisation of intangibles is a matter which is open to differing interpretations and assessments, and has therefore considered several scenarios based on different valuations (see Annexe E).<sup>64</sup>

- Scenario 1: based on capitalisation of workforce but no other intangible assets
- Scenario 2: based on capitalisation of workforce and a further £40 million of intangible assets ([...])<sup>65</sup>
- Scenario 3: based on capitalisation of workforce and a further £100 million of intangible assets (the mid-point of scenarios 2 and 4)
- Scenario 4: based on capitalisation of workforce and a further £160 million of intangible assets ([...]).

TABLE 4.1: ROCE ESTIMATES FOR 2002/03 BASED ON INCREASED ISSUER FEES AND DIFFERENT INTANGIBLE VALUATIONS

Intangible valuation	Scenario 1 £0m	Scenario 2 £40m	Scenario 3 £100m	Scenario 4 £160m
ROCE percentages	[...]	[...]	[...]	[...]

4.30 The OFT has estimated, using the same capital asset valuations as had been used for the estimates in Table 4.1, that had the reduced

<sup>64</sup> All scenarios include the same estimate for tangible assets, working capital, cash and own shares as set out in Annexe B.

<sup>65</sup> [...] figures to the nearest £million, [...] million.

fees which will apply from 1 April 2004 been in place in 2002/03, the ROCEs for the LSE as a whole would have been as follows:

TABLE 4.2: ROCE ESTIMATES FOR 2002/03 BASED ON REDUCED ISSUER FEES AND DIFFERENT INTANGIBLE VALUATIONS

Intangible valuation	Scenario 1 £0m	Scenario 2 £40m	Scenario 3 £100m	Scenario 4 £160m
ROCE percentages	[...]	[...]	[...]	[...]

4.31 In addition, the OFT has estimated what the ROCEs for the LSE as a whole would have been in 2002/03 on the basis that no increase in annual fees for issuers on the main market had taken place.<sup>66</sup>

TABLE 4.3: ROCE ESTIMATES FOR 2002/03 HAD THERE BEEN NO INCREASE IN ANNUAL FEES FOR ISSUERS ON THE MAIN MARKET

Intangible valuation	Scenario 1 £0m	Scenario 2 £40m	Scenario 3 £100m	Scenario 4 £160m
ROCE percentages	[...]	[...]	[...]	[...]

### Assessment of the LSE's ROCE

4.32 In order to determine whether the OFT's ROCE estimates for the LSE indicate that its increases in issuer fees have the effect (or are intended or likely to have the effect) of requiring or encouraging the LSE to exploit the strength of its market position by charging more than it could have done in the absence of its strong market position, it is necessary to compare the OFT's ROCE estimates with an appropriate benchmark or comparator.

4.33 The most widely used and accepted benchmark for ROCE estimates is the weighted average cost of capital (WACC). Equity and debt holders each require a return on their investment. These are,

<sup>66</sup> These ROCE estimates also assume that the reduced fees on AIM would have been in place in 2002/03.

respectively, the firm's cost of equity and its cost of debt. The WACC can be calculated as the weighted average of the cost of equity and cost of debt. In practice, however, the LSE has had no debt finance since 2000/01, so its WACC is equal to its cost of equity.

- 4.34 The LSE produced low and high estimates for its WACC of [...] per cent and [...] per cent. This gives a mid-point of [...] per cent (rounded to [...] per cent).<sup>67</sup> The OFT has reviewed the LSE's methodology for calculating these estimates and considers it unlikely that the LSE's cost of capital would have fallen materially outside the range proposed by the LSE.
- 4.35 Comparing the [...] per cent mid-point cost of capital estimate with the results in Tables 4.1 and 4.2, the ROCEs for 2002/03 based on the original 2002/03 increases in issuer fees exceed the LSE's WACC by [...] percentage points (scenario 1), [...] percentage points (scenario 2), [...] percentage points (scenario 3) and [...] percentage points (scenario 4); and those based on the reduced issuer fees exceed the LSE's WACC by [...] percentage points (scenario 1), [...] percentage points (scenario 2), [...] percentage points (scenario 3) and [...] percentage points (scenario 4).<sup>68</sup>
- 4.36 The OFT notes that its ROCE estimates for the LSE as a whole in Table 4.1 appear high in comparison with the mid-point of the LSE's estimate of its WACC, particularly in relation to scenario 1 (ROCE exceeds WACC by [...] percentage points), which the OFT regards as the most likely estimate, and scenario 2 (ROCE exceeds WACC by [...] percentage points).<sup>69</sup> The OFT also notes that the

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<sup>67</sup> LSE submission to the OFT (1 October 2002), page 46.

<sup>68</sup> The intangible asset values in Annexe E have been estimated using high and low estimates of the LSE's WACC, and the ROCE estimates in scenarios 2 and 4 are based on capital employed values that include these intangible asset values. Although these ROCE estimates have been compared with a mid-point estimate of the WACC, there would only have been an immaterial change in value to the intangible assets, and to the consequent ROCE estimates, had the intangible values been calculated using a mid-point estimate of the WACC rather than high and low estimates. Moreover, the different scenarios reflect indications of intangible values rather than precise values calculated using a precise method.

<sup>69</sup> The excised figures are in the range 7-10.

CC found that the four main clearing banks in England and Wales had earned excess profits<sup>70</sup> with returns that were 9-12 percentage points higher than their cost of equity.<sup>71</sup>

4.37 However, the OFT also notes that the ROCE for the LSE as a whole in 2002/03, based on the reduced fees, is only [...] percentage points (scenario 1), [...] percentage points (scenario 2), [...] percentage points (scenario 3) and [...] percentage points (scenario 4) higher than if there had not been any increase in annual fees for issuers on the main market (differences between Tables 4.2 and 4.3).

4.38 The LSE contended that the OFT should compare the LSE's profitability with other companies and sectors in the economy over the same period, and supplied average ROCEs for a range of constituent sectors of the FTSE 350 but with particular focus on the manufacturing and financial services sectors.<sup>72</sup> The LSE's conclusion was that a 'comparison of the LSE's profitability estimates with the average ROCE of the sample of comparator companies shows that the difference between the former and latter is not statistically significant.'<sup>73</sup>

4.39 The OFT accepts that comparators can be useful but considers that information which has as its source companies' annual accounts prepared, at least in part, on a historical rather than net replacement cost basis, does not offer a reliable comparator to the OFT's ROCE estimates. The OFT also considers that comparison with the sector average ROCE of a range of constituent sectors of the FTSE 350, and even with the average ROCE of the financial services sector, is not meaningful. Any given company within a given sector of the FTSE 350 will have characteristics sufficiently

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<sup>70</sup> By setting prices so that they more than adequately financed an efficient SME banking business, such as would emerge under competitive conditions. The supply of banking services by clearing banks to small and medium-sized enterprises, Cm 5319, 14/03/02, paragraph 2.431.

<sup>71</sup> Ibid. Table 2.23 and paragraph 2.425. The CC included customer acquisition, workforce and IT software in calculating the banks' intangible asset base but excluded brand – see paragraphs 2.333 and 2.339 to 2.341.

<sup>72</sup> LSE submission to the OFT (8 September 2003), paragraphs 2.25-28.

<sup>73</sup> LSE submission to the OFT (8 September 2003), paragraph 2.27.

different from other companies in the same sector that its returns can be significantly different from the sector average.

4.40 In November 2003, at the time that it proposed to make its fee reduction, the LSE estimated a ROCE of [...] per cent for the Issuer Services division in 2002/03 based on the fee reductions proposed for 2004/05 and assumptions the LSE made regarding capital employed and common cost, including capital, allocations to Issuer Services.<sup>74</sup> The LSE excluded for the purposes of this estimate any capital value for either reputation or relationships with market participants (see Annexe D for discussion).<sup>75</sup>

4.41 As noted in paragraph 4.25, the ROCE for a particular line of business will be sensitive to the method used for allocation of common costs, including capital. However, the OFT notes that the estimated ROCE for Issuer Services of [...] per cent after the proposed fee reductions, is significantly lower than the WACC of [...] per cent for the LSE as a whole. Although there may be more appropriate methods of allocating the LSE's common costs, including capital, than the ones used, and the WACC for a stand-alone Issuer Services division may be below [...] per cent, it seems unlikely that the ROCE for Issuer Services after the proposed fee reductions would exceed the relevant WACC to a significant extent.

4.42 Employing the assumptions regarding capital employed and common costs, including capital allocation, that the LSE used at the time of the fee reductions proposal in relation to Issuer Services, the OFT has calculated that the actual ROCE for Issuer Services for 2002/03 was around [...] per cent.

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<sup>74</sup> LSE spreadsheet submission to the OFT dated 12 November 2003. The capital employed for the whole exchange, from which the LSE allocated a share to Issuer Services, did not differ materially from the OFT's estimates for capital employed in Annexe B.

<sup>75</sup> LSE spreadsheet submission to the OFT dated 12 November 2003. Although the LSE excluded any capital value for either reputation or relationships with market participants the LSE did not agree that these intangibles had no value.

## Conclusion on the LSE's ROCE

4.43 The increases in issuer fees for 2002/03 were large, did not appear to be justified by an increase in costs, and took place in a context where, with the exception of scenario 4 in Table 4.1, the estimated ROCE for the LSE as a whole for 2002/03 appeared high when compared with the mid-point of the LSE's own estimate of its WACC. In addition, the actual ROCE for Issuer Services for 2002/03 based on certain capital employed values and common cost, including capital allocation, assumptions was around [...] per cent. The OFT concludes, therefore, that the increase in issuer fees for 2002/03 had the effect of requiring or encouraging the LSE to charge fees for issuer services that exceeded what it could have charged in the absence of its strong market position. The increase in issuer fees for 2002/03 must therefore be taken to have an adverse effect on competition.

## 5 CONCLUSION

- 5.1 Under section 304 FSMA 2000 and section 302 FSMA 2000, the OFT has considered whether the LSE's issuer fee increases, as regulatory provisions or practices of a recognised body have, or are intended or likely to have, a significantly adverse effect on competition. The issuer fees in question are the annual fees and the admission to trading fees for UK equity on the LSE's main market and corresponding fees on the AIM market.
- 5.2 In part 3 of this report the OFT concluded that the LSE holds a position of market strength in the market for the provision of issuer services for the issuing and public trading of UK equity. In part 4 of this report the OFT concluded that the LSE's original increase in issuer fees for 2002/03 had the effect of requiring or encouraging the LSE to exploit the strength of its market position by charging prices that were higher than those it might otherwise have charged in the absence of its strong market position. Under section 302(3) FSMA 2000, the original increase in issuer fees must therefore be taken to have had an adverse effect on competition.
- 5.3 Under section 304(2) FSMA 2000, an adverse effect on competition has to be significant before the OFT is required to publish a report and ask the CC to investigate the subject matter of the report. The OFT considers that if the original increases in issuer fees for 2002/03 had been maintained, the adverse effect on competition would have been significant. The increases in issuer fees for 2002/03 were large, did not appear to be justified for other reasons, such as an increase in costs, and took place in a context where the estimated ROCE for the LSE as a whole for 2002/03, particularly in scenarios 1 and 2 in Table 4.1, appeared high when compared with the mid-point of the LSE's own estimate of its WACC (paragraph 4.36); and where the OFT has calculated that the actual ROCE for Issuer Services for 2002/03 was around [...] per cent (paragraph 4.42).

- 5.4 However, in determining whether the adverse effect on competition of the increase in issuer fees for 2002/03 was significant, the OFT has taken into account the LSE's agreement to reduce issuer fees on both its main market and AIM from 1 April 2004.
- 5.5 The OFT notes that even taking account of the reduction in issuer fees, its ROCE estimates for the LSE as a whole for 2002/03 appear high in comparison with the mid-point of the LSE's estimate of its WACC where no or limited intangible assets are capitalised (scenarios 1 and 2 in Table 4.2). The OFT recognises though that the capitalisation of intangibles may be open to varying interpretations and assessments. In addition, the OFT has estimated that the ROCE for the LSE as a whole in 2002/03, based on the reduced fees, is only between [...] percentage points and [...] percentage points higher (depending on the relevant scenario) than if there had not been any increase in annual fees for issuers on the main market (paragraph 4.37).
- 5.6 The reduction in issuer fees agreed by the LSE was substantial and reversed most of the increase that had taken place. In respect of the Issuer Services division, the LSE has estimated that on the basis of the reduced fees the ROCE for the Issuer Services division in 2002/03 ([...] per cent), would have been lower than the WACC for the LSE as a whole ([...] per cent). Also, the OFT has estimated that on the basis of the reduced fees the ROT for Issuer Services for 2002/03 would have been only [...] percentage points higher than the ROT of around [...] per cent recorded for 2001/02, and well below the 2002/03 ROT levels budgeted for the LSE's other lines of business (paragraph 4.18).
- 5.7 In addition, the LSE has agreed not to increase annual and admission to trading fees on the main market or AIM, other than to reflect increases in the ONS Services Sector Wages Index, for a further two years until 1 April 2007.
- 5.8 In view of the LSE's agreement to reduce its issuer fees from 1 April 2004, and not to make any substantial increase for a further two years, and the estimated effect of that reduction on the LSE's

issuer fees, the OFT concludes that any adverse effect on competition resulting from the increase in issuer fees for 2002/03 was not significant. Accordingly, the OFT has published this report under section 304(6) FSMA 2000, and is not asking the CC to investigate the LSE's pricing of issuer services with reference to the increase in issuer fees for 2002/03.

# ANNEXES

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## A LSE'S ROCE AND TIRR SUBMISSION

A.1 The LSE provided the OFT a ROCE and a pre-tax IRR for four different scenarios for the five year period between 1998/99 and 2002/03 (see paragraph 4.21).<sup>76</sup> These are tabulated below in respect of actual profitability and simulated<sup>77</sup> profitability.

TABLE A.1: ACTUAL PROFITABILITY 1998/99-2002/03 <sup>78</sup>

Scenario	Modern equivalent asset (MEA) valuation approach	TIRR per cent	Average ROCE per cent
1	Net replacement cost (NRC) of tangible assets only	[...]	[...]
2	NRC of tangible assets and £[...] of cost capitalization	[...]	[...]
3	NRC of tangible and intangible assets, assuming valuation of costs capitalized	[...]	[...]
4	NRC of tangible and intangible assets, applying proxy based valuations	[...]	[...]

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<sup>76</sup> The cost valuation and proxy based approaches in the Tables above are explained in paragraphs D.17 to D.23 in Annexe D. The £[...] cost capitalisation in scenario 2 is a valuation for intangibles that the OFT had calculated in a spreadsheet scenario given to the LSE and approximates to the £[...].

<sup>77</sup> The simulated approach assumes that 2002/03 prices had been in place throughout the five year period.

<sup>78</sup> LSE's fax to the OFT dated 25 September 2003.

TABLE A.2: SIMULATED PROFITABILITY 1998/99-2002/03 AT CURRENT PRICE LEVELS <sup>79</sup>

Scenario	MEA asset valuation approach	TIRR per cent	Average ROCE per cent
1	NRC of tangible assets only	[...]	[...]
2	NRC of tangible assets and £[...] of cost capitalization	[...]	[...]
3	NRC of tangible and intangible assets, assuming valuation of costs capitalized	[...]	[...]
4	NRC of tangible and intangible assets, applying proxy based valuations	[...]	[...]

<sup>79</sup> LSE's fax to the OFT dated 25 September 2003.

## **B CAPITAL EMPLOYED, OPERATING PROFIT AFTER INTEREST RECEIVED AND BEFORE TAX AND ROCE ESTIMATES**

- B.1 The OFT's approach to the valuation of the LSE's capital employed, including tangible and intangible assets, is set out in Annexe D. The OFT's net replacement cost (NRC) estimates for capital employed and operating profit after interest received and before tax are set out in Tables B.1 and B.2 below. The OFT has used the estimates and the scenarios in paragraph 4.29 to calculate the ROCEs set out in Table B.3.

TABLE B.1: NRC CAPITAL EMPLOYED VALUES (£MILLIONS)

	2002/03 Opening	2002/03 Closing	2002/03 Average
Freehold land and buildings <sup>80</sup>	[...]	[...]	[...]
Leasehold land and buildings <sup>81</sup>	[...]	[...]	[...]
Plant and equipment including(information technology systems) <sup>82</sup>	[...]	[...]	[...]
Cash <sup>83</sup>	[...]	[...]	[...]
Debtors <sup>84</sup>	46.8	64.3	55.6
Creditors <sup>85</sup>	(62.7)	(64)	(63.4)
Own shares <sup>86</sup>	11.7	9.7	10.7
Workforce <sup>87</sup>	[...]	[...]	[...]
Financing creditors <sup>88</sup>	21	21.1	21.1
Total	[...]	[...]	[...]

Averages have been rounded up.

<sup>80</sup> LSE submission to the OFT (8 September 2003), Table A1.2 records the values, which have been averaged as per Annexe D, paragraph D.5.

<sup>81</sup> LSE submission to the OFT (8 September 2003), Table A1.2.

<sup>82</sup> LSE spreadsheet e-mailed to the OFT on 25 September 2003.

<sup>83</sup> The FSA waived the normal RIE requirement early in 2002/03. In light of the buffer above the £[...] RIE requirement, the OFT allowed the LSE (Annexe D, paragraph D.13), the OFT considers that £[...] can be considered the opening and average value for the whole year.

<sup>84</sup> LSE spreadsheet to the OFT, dated 8 September 2003 for 2002/03 closing and LSE annual report 2001/02 for opening. Opening debtors include immaterial amounts belonging to the line of business 'other.' Closing debtors may also include such amounts but the OFT does not have a breakdown of the closing debtors value to confirm this.

<sup>85</sup> LSE spreadsheet to the OFT, dated 8 September 2003 for 2002/03 closing and LSE annual report 2001/02 for opening. Opening creditors include immaterial amounts belonging to the line of business 'other.' Closing debtors may also include such amounts, but the OFT does not have a breakdown of the closing debtors value to confirm this.

<sup>86</sup> LSE submission to the OFT (8 September 2003), Table A1.2.

<sup>87</sup> LSE submission to the OFT (8 September 2003), Table A1.3.

<sup>88</sup> LSE submission to the OFT (8 September 2003) for 2002/03 closing and LSE's Annual Report 2001/02 for opening.

TABLE B.2: NRC OPERATING PROFIT AFTER INTEREST RECEIVED AND BEFORE TAX (£MILLIONS)<sup>89</sup>

Operating profit before exceptionals and before interest and tax <sup>90</sup>	81.7
Licence <sup>91</sup>	[...]
Land and buildings	[...]
Plant and equipment	[...]
FTSE royalties	(3.4)
Proquote acquisition	[...]
Sub-total	[...]
Interest received from cash balance	[...]
Operating profit before exceptionals, after interest received and before tax	[...]

TABLE B.3: ROCE ESTIMATES FOR 2002/03 BASED ON INCREASED ISSUER FEES AND DIFFERENT INTANGIBLE VALUATIONS

	Scenario1	Scenario2	Scenario3	Scenario4
Intangible valuation	£0m	£40m	£100m	£160m
ROCE percentages	[...]	[...]	[...]	[...]

<sup>89</sup> LSE submission to the OFT (14 March 2003), page 10. The figures for land and buildings, plant and equipment, and FTSE royalties were amended subsequently to take account of immaterial adjustments raised by the LSE during meetings and conference calls with the LSE. The Proquote acquisition adjustment figure was advised during a conference call with the LSE. The interest received amount is an adjustment (rounded to the nearest £0.1 million ) of the interest received figure from the spreadsheet 'LSE March response abridged' provided to the OFT on 23 September 2003, adjusted to take into account a cash balance of £[...], rather than the £[...] in the spreadsheet.

<sup>90</sup> LSE's Annual Report 2002/03.

<sup>91</sup> See paragraph D.19 in Annexe D.

## C THE OFT'S APPROACH TO EXCEPTIONAL COSTS

C.1 The operating profit figures that the OFT has used in its ROCE estimates (see Annexe B) and in ROT estimates in paragraphs 4.14 to 4.19 are before 'exceptional' items, because of the distortionary effect that 'exceptionals' can have on measurements of profitability of a company.<sup>92</sup> The OFT however considered whether any of the expenditure recorded as 'exceptional' in the LSE's listing particulars and subsequent annual reports<sup>93</sup> which together cover the five years up to and including 2002/03 was of an investment nature which could require capitalisation and amortisation/ depreciation, and therefore affect the capital employed and operating profit before exceptionals and after interest received and before tax estimates in Annexe B.

C.2 The 'exceptionals' recorded were:

- year 2000 rectification costs and expenditure to prepare for European monetary union (EMU) in 1998/99 of £17.6 million
- professional fees in 1999/2000 of £5.1 million in connection with the proposals, approved in March 2000, to demutualise the LSE
- professional fees in 2000/01 of £18.9 million in connection with the proposed merger with Deutsche Börse, and the defence of the bid from OM Gruppen
- fees of £3.6 million in 2001/02 in respect of the LSE's introduction to the Official List

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<sup>92</sup> Exceptionals are defined as 'material items which derive from events or transactions that fall within the ordinary activities of the reporting entity and which individually or, if similar in type, in aggregate need to be disclosed by virtue of their size or incidence if the financial statements are to give a true and fair view': Reporting financial performance definition 5, Financial Reporting Standard 3, Accounting Standards Board, issued in October 1992 and amended in June 1993.

<sup>93</sup> The Listing Particulars cover exceptionals for 1998/99, 1999/00 and 2001/02.

- VAT repayment in 2002/03 of £10.4 million in respect of VAT overpaid between 1990 and 2001, and
- £22 million in 2002/03 in respect of space to be sublet in the LSE's new headquarters at Paternoster Square.

- C.3 The OFT considers that the year 2000 and EMU expenditure costs relate to the LSE's information technology (IT) systems. The OFT does not know the split between these respective costs. The LSE supplied net replacement cost valuations of its IT systems for 2002/03. IT systems valued on a net replacement cost basis in 2002/03 will necessarily be millennium compliant and should therefore have the cost of millennium functionality built into their capital value. The OFT also considers that systems valued on a net replacement cost basis in 2002/03 are likely to have EMU functionality built into their capital value. However, the OFT notes that had it capitalised and depreciated the year 2000 and EMU expenditure over the LSE's estimate of the useful life for its IT of [...] years<sup>94</sup> the ROCE estimates in Table 4.1 for 2002/03 would fall only by between approximately [...] and [...] percentage points depending on the scenario.
- C.4 The OFT considers that the demutualisation and subsequent official listing costs are an example of financial restructuring and should not be paid for by the customer.
- C.5 The OFT considers that the costs of defending a takeover bid and the costs of a proposed merger should also not be paid for by the customer. These transactions are for the benefit of shareholders and should be paid for by them.
- C.6 The LSE has excluded sublet space from its property valuations so any provision relating to sublet space needs to be excluded.

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<sup>94</sup> The LSE in its spreadsheet to the OFT dated 25 September specified the useful life of its IT systems for the purposes of its depreciation and net replacement costs valuations to be [...] years.

- C.7 The VAT repayment is in respect of VAT overpayments for periods preceding 2002/03 and therefore does not affect 2002/03.
  
- C.8 The OFT has not, therefore, made any changes to its ROCE estimates in Annexe B in respect of the LSE's exceptional expenditure.

## **D VALUING THE LSE'S CAPITAL EMPLOYED**

- D.1 The valuation of capital employed requires detailed assumptions about what should be included and how it should be valued. Net replacement cost valuations are required for an investigation entailing prices that exceeded what could have been charged in the absence of a strong market position. During this investigation the LSE supplied the OFT with valuations for its capital employed.
- D.2 With a business such as the LSE, it is important to consider not just tangible assets (such as capital equipment, land and buildings), but also the possibility that intangible assets, such as branding, relationships and staff skills may be present.
- D.3 The OFT sets out below its approach to the valuation of both tangible and intangible assets.

### **Tangible assets, working capital, cash and own shares**

- D.4 The principal tangible assets that the LSE wished to have included in its asset base were land and buildings, information technology (IT) plant and equipment, working capital and a proportion of its cash reserves.
- D.5 The LSE has stated that its freehold land and buildings in 2002/03 dropped significantly in value.<sup>95</sup> In order to adjust for the commercial property cycle, the OFT has, for the 2002/03 freehold land and buildings valuation, taken the average of the six annual valuations supplied by the LSE, which gives a valuation of around £63.9 million. The LSE has also supplied estimates for its leasehold land and buildings.<sup>96</sup> The OFT considers that the LSE's figure of £1 million may be too low, but sees any difference as immaterial for a ROCE estimate, and has therefore accepted this £1 million.
- D.6 The OFT examined the LSE's analysis of the valuation of its IT systems. The valuation of the LSE's IT systems is a complex area,

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<sup>95</sup> LSE submission to the OFT (8 September 2003), paragraph 2.40.

<sup>96</sup> LSE submission to the OFT (31 October 2002), attachment 7.

but the OFT considers the LSE's valuation to be plausible. It is therefore unlikely that the LSE has significantly understated the value of its IT, which would have led to an overstatement of its ROCE. The OFT has therefore used the LSE's valuations in this case (see Annexe B for the values).

D.7 The OFT questioned the LSE's proposed treatment of the following working capital balances (all other working capital values were accepted, see Annexe B for these values):

- dividends payable and corporation tax payable, and
- pension pre-payment.

D.8 The LSE considered that the OFT should include the LSE's creditor balances for dividends payable and corporation tax payable in its capital employed figures,<sup>97</sup> as per an approach to capital employed in the CC's report on mobile phone network operators.<sup>98</sup> The OFT notes that it does not appear that this approach had been followed in previous CC reports, but it also notes that certain companies have followed similar treatments in their annual reports.<sup>99</sup> Since both dividends and corporation tax payable are classified as current liabilities, they are often excluded from capital employed. However, the OFT recognises that: first, these are recurring balances in the LSE's year-end balance sheet<sup>100</sup>; second, dividends payable are shareholders' funds; and third, it can be argued that the tax authorities are, albeit involuntarily, providers of finance to the business. The OFT has in this case included these two amounts in the LSE's capital employed figures (see Annexe B for these values, referred to as 'financing creditors').

D.9 The LSE also considered that its annual pension costs in 2002/03 should be increased by £[...] and the pension prepayment of £15 million at the end of 2002/03 should be excluded from capital

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<sup>97</sup> LSE submission to the OFT (8 September 2003), paragraph 2.36.

<sup>98</sup> Vodafone, O2, Orange and T-Mobile, ISBN 0-11-515503-1 18/02/03, paragraphs 5.55-102 (published by Oftel).

<sup>99</sup> For example BT's Annual Report 2003.

<sup>100</sup> The LSE has only paid dividends since it demutualised.

employed, because the LSE's defined benefit pension scheme had gone into deficit since the last actuarial valuation in 2000.<sup>101</sup> The LSE said that such proposed treatments would be consistent with both the CC's and Ofgem's pension cost principles.<sup>102</sup> The OFT considered that it would have required extensive research into *inter alia* the LSE's current and past pension fund valuations and contributions and accounting treatments of these valuations and contributions before it could agree to the LSE's proposed adjustments. The OFT also considers that had the proposed adjustments been made the LSE's ROCE would not have changed materially.

D.10 The LSE's 2002/03 Annual Report shows that its cash reserves, which totalled £211 million at the year-end, comprised £4 million cash and £207 million term deposits. The LSE stated that £[...] of its cash reserves were required in 2002/03 to operate its exchange.<sup>103</sup> The balance of its cash reserves (£[...]) were held for 'strategic reasons' and were therefore excluded from capital employed in this instance.<sup>104</sup> The LSE's estimate of £[...] included amounts for regulatory requirements, a working capital buffer to cover, for example, cash flow problems following a 'disaster', sensitivity reserves in case of a market downturn and ongoing capital expenditure.<sup>105</sup>

D.11 The OFT's approach is as follows:

- regulatory (£[...]). This amount is accepted since it is a regulatory requirement
- working capital buffer (£[...]). The OFT considers that, in the event of a short-term cash flow problem arising from, for example, a disaster, the FSA would consider very closely the

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<sup>101</sup> LSE submission to the OFT (8 September 2003), paragraph 2.37 and 2.41 and Appendix 2.

<sup>102</sup> LSE submission to the OFT (8 September 2003), paragraph 2.41 and Appendix 2.

<sup>103</sup> LSE letter to the OFT dated 31 October 2002, attachment 12.

<sup>104</sup> LSE letter to the OFT dated 31 October 2002, attachment 12.

<sup>105</sup> LSE letter to the OFT dated 31 October 2002, attachment 12.

implications of revoking the LSE's licence.<sup>106</sup> The OFT has not been persuaded that the LSE needs a buffer, arising from these reasons, to avoid falling below the £[...] regulatory requirement

- sensitivity (£[...]). The LSE stated that this amount is needed to cover a 'protracted market downturn' (defined by the LSE as a [...] per cent fall in business).<sup>107</sup> However, during the recent downturn, LSE activity, except for new issues, has held up well and the LSE has grown its revenues. The LSE is a highly profitable business, so that even with a [...] per cent drop in volumes it would still be likely to be able to cover outgoings with receipts. The LSE could also be expected to manage down its costs, both operating and capital, during a protracted market downturn. It is difficult, therefore, to see that there needs to be a significant buffer for this purpose, and
- ongoing capital expenditure (£[...]). The LSE has not advised the OFT of the split of this figure between replacement capital expenditure and new capital investment to expand the LSE's exchange capacity. The latter would not be allowed for these purposes because this would be investment in new activities whilst the OFT is interested in the cash requirement to maintain current operational requirements. The OFT also considers that, if all of the £[...] was replacement expenditure, this could be expected to be covered by receipts.

D.12 The OFT has, nevertheless, considered whether some buffer over the £[...] regulatory requirement might be required. The starting point for cash held above the regulatory requirement should be that the LSE is a profitable business which would expect to meet cash outgoings from receipts and therefore hold little cash for operational reasons. It is, however, possible that a sizeable amount of expenditure for different purposes could coincide and that the LSE, with its £[...] regulatory cash balance, might not be able to

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<sup>106</sup> The OFT notes the supportive actions of various authorities in the United States of America following the terrorist attacks on 11 September 2001. The OFT also notes that the FSA relaxed certain life assurance rules during the equity bear market in 2003.

<sup>107</sup> LSE letter to the OFT dated 31 October 2002, attachment 12.

fund this heavy level of expenditure out of cash receipts without dipping below the minimum regulatory requirement.

D.13 The OFT therefore asked the LSE to supply it with a list of its ten largest payments, excluding salaries, in each of the last three years. These were generally payments for corporation tax, VAT, bonuses and suppliers. These payments were reasonably spread out over the year.<sup>108</sup> The OFT considers that a figure of £[...] would more than cover the possibility of sizeable expenditure for different purposes coinciding and, given that the large payments had been reasonably spread out, that this is a generous figure. The OFT has included a cash figure of £[...] (£[...] regulatory, plus a further £[...] for large payments making £[...] but rounded to £[...] in total). The OFT is not convinced of the need to hold further cash to cover a market downturn or an additional regulatory buffer.

D.14 The LSE has said in further discussions with the OFT that it thinks there is an economic case for its cash balance to exceed £[...] and notes that financial institutions regularly hold cash balances in excess of the regulatory requirement. The LSE stated that:

'[it] strongly believes that the Board approved estimate of cash required of £[...] is appropriate. However, the LSE proposes that the OFT agrees the minimum estimate of c£[...] long-term cash levels required to be maintained under the standard FSA capital adequacy approach. [...].'<sup>109</sup>

D.15 The relevant period for the OFT's investigation is however 2002/03, not when these provisions take effect. The OFT has not, therefore, been persuaded to use a figure higher than £[...].

D.16 Lastly, the LSE argued that its assets should include shares held through an Employee Benefit Trustee, for the purposes of satisfying share awards and options held by around 400 employees.<sup>110</sup> As share awards and options are in place to sustain operational

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<sup>108</sup> LSE letter to the OFT, dated 14 March 2003, page 12.

<sup>109</sup> LSE submission to the OFT (8 September 2003), paragraph 2.43.

<sup>110</sup> LSE submission to the OFT (1 October 2002), paragraph 5 page 37.

performance, for the purposes of this report, the 'own shares' are considered an operational asset (see Annexe B for these values).

## Intangible assets

D.17 The LSE commissioned PriceWaterhouseCoopers (PwC) to estimate the value of its intangible assets.<sup>111</sup> PwC considered four intangibles:

- licence
- workforce
- reputation, and
- relationships with market participants.

D.18 PwC noted that the LSE has approximately 520 employees and that 'this represents an intangible asset in which a business invests through recruitment and training.'<sup>112</sup> PwC considered 'that the replacement cost would involve establishing a workforce that has reached a similar level of productivity to that of the existing workforce'<sup>113</sup> and that this asset is worth between £[...] and £[...], equivalent to between [...] per cent to [...] per cent of total staff costs. The OFT considers, as has the CC, that there is a case for capitalising workforce using this approach and has consequently included a value for workforce in its capital employed estimates.<sup>114</sup>

D.19 'Licence' is an estimate of the value of the renewable 5-year agreement that the LSE has with the Johannesburg Stock Exchange to provide it with technology services, including access to the SETS trading system.<sup>115</sup> The LSE proposed to capitalise the discounted cashflow value of future licence revenue. However, the OFT considers that capitalisation of future revenue

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<sup>111</sup> London Stock Exchange: conclusions in relation to the value of intangibles (October 2002).

<sup>112</sup> Page 7.

<sup>113</sup> Page 7.

<sup>114</sup> The supply of banking services by clearing banks to small and medium-sized enterprises, Cm 5319, 14/03/02, paragraph 2.295.

<sup>115</sup> SETS has been capitalised in the LSE's valuation of its information technology.

is not appropriate in this case. SETS has already been capitalised and the OFT also considers that income from licensing activities overseas falls outside of the scope of this investigation. In this case, the OFT has decided both not to include the LSE's licence income in its operating profit and not to allow the capitalisation of the licence income, both of which are in any case very small amounts.

- D.20 PwC stated that the LSE had established its reputation through the creation and maintenance of two intangible assets, regulatory standing and brand. The net replacement cost of each of these intangible assets was valued on two different bases: new entrant and 'pure-cost' basis. PwC used proxies to the LSE, e.g. Nasdaq's marketing and regulatory expenditure, for new entrant values. The 'pure-cost' approach used the LSE's own marketing and regulatory expenditure.<sup>116</sup> Both approaches assumed that the LSE's own brand and regulatory standing are in a steady state, each with a life of between 20 and 30 years, and that current and future marketing and regulatory expenditure do no more than maintain these assets.<sup>117</sup> Projected costs for future marketing and regulatory expenditure over periods of 20 and 30 years respectively were discounted at the LSE's cost of capital to give a present value (PV). This PV was then used as the capital value for the intangible asset.
- D.21 PwC defined brand as: 'the creation and maintenance of the [LSE]'s brand which is protected by trademark and recognisable in the global financial community.'<sup>118</sup> PwC used as its new entry proxy the amount of marketing expenditure that Nasdaq incurred globally to promote itself during the technology boom in 1999-2000. The estimate arrived at was between £[...] (20-year life) and £[...] (30-year life). PwC's estimate was between £[...] (20-year life) and £[...] (30-year life) on a pure-cost basis.

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<sup>116</sup> London Stock Exchange: conclusions in relation to the value of intangibles (October 2002).

<sup>117</sup> Each year's expenditure is assumed to be of the same value as yearly depreciation and therefore to offset it.

<sup>118</sup> Page 8.

D.22 PwC defined regulatory standing as 'maintaining a robust regulatory structure in which companies are required to meet high standards for admission and trading is conducted in an orderly transparent market free from manipulation'.<sup>119</sup> PwC used Nasdaq's current regulatory expenditure, considered to reflect the 'superior' surveillance spending that Nasdaq had to incur following allegations in 1994 of collusion between dealers, to determine the new entrant value.<sup>120</sup> Nasdaq's expenditure was adjusted to reflect the fact that the LSE has a lower number of issuers than Nasdaq. The estimate arrived at was between £[...] (20 year life) and £[...] (30 year life). On a pure cost basis, PwC's estimate was between £[...] (20 year life) and £[...] (30 year life).

D.23 Relationships with market participants was defined by PwC as 'relationships with brokers and market makers that bring liquidity to the [LSE's e]xchange, and also relationships with analyst and regulatory authorities'.<sup>121</sup> PwC estimated that, using the valuation of the Swiss Stock Exchange's interest in virt-x as a proxy, this asset would have a value of £[...].<sup>122</sup> The LSE did not consider that the PwC valuation for 'relationships with market participants' should be included in the capital base. This was because the LSE considered that conceptually, on a proxy basis, there could be some overlap between this asset and brand and regulatory standing and that this overlap would be hard to estimate. The LSE wished therefore to be prudent and exclude the asset from its capital employed base.<sup>123</sup> The LSE said it considered that there was not any conceptual overlap when intangible assets are valued using the

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<sup>119</sup> Page 8.

<sup>120</sup> Page 10. The figure was adjusted to reflect the LSE's lower number of issuers than Nasdaq's.

<sup>121</sup> Page 5.

<sup>122</sup> Page 16. The Tradepoint consortium and the Swiss Stock Exchange agreed to form a new joint venture, virt-x, in July 2000. In exchange for a stake in virt-x, the Swiss Stock Exchange ceased offering trading facilities for all Swiss blue chips in favour of virt-x's offering. The transaction was constructed to give virt-x a 'critical mass' of European liquidity.

<sup>123</sup> LSE submission to the OFT (31 October 2002), attachment 6.

pure-cost approach. On a 'pure-cost' basis the valuation would be between £[...] and £[...].<sup>124</sup>

## OFT approach to intangible assets

D.24 In considering the LSE's valuation of its intangible assets, the OFT has, where possible, followed the approach used by the CC in its report on the supply of banking services to small and medium-sized enterprises, which provides a recent, detailed approach to the valuation of intangible assets for the purpose of assessing profitability in the financial sector.<sup>125</sup> The CC said:

'(a) whether the expenditure on any given intangible should be capitalised will depend on the nature of the specific intangible identified and the context; and

(b) If the revenue cost of a specific identified intangible is to be capitalised for the purposes of our inquiry, it must meet three conditions:

- (i) it must comprise a cost incurred now, primarily to obtain earnings in the future
- (ii) the cost must be additional to those necessarily incurred at the time in running the business, and
- (ii) it must be identifiable as creating such an asset separate from any that arises from the general running of the business.'

D.25 The OFT considers that in this case a 'pure-cost' approach to intangible valuation is conceptually more appropriate than a new entrant approach, because the 'pure-cost' approach reflects the actual cost incurred by the LSE in a market in which it has had

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<sup>124</sup> LSE letter to the OFT dated 14 March 2003, page 16; LSE submission to the OFT (8 September 2003), paragraph 2.32.

<sup>125</sup> The supply of banking services to small and medium-sized enterprises, Cm, 5319 14/03/02, paragraph 2.271.

market power for a very long time. This is not to say, however, that the OFT agrees with the actual examples of 'pure-cost' capitalisation of intangible expenditure that the LSE is proposing (see paragraphs D29 to D37 below).

### *Nasdaq proxy for brand and regulatory standing*

- D.26 The OFT does not consider that the Nasdaq proxies are suitable for the LSE. First, Nasdaq specialises in the technology sector, whilst the LSE has no such specialisation.
- D.27 Second, the OFT does not consider that Nasdaq's global marketing expenditure is a suitable proxy for the amount of expenditure required to enter the UK. The OFT also notes that PwC did not adjust, as it did for regulatory standing, Nasdaq's marketing expenditure to reflect the difference in the number of issuers between Nasdaq and the LSE.
- D.28 As regards regulatory standing expenditure, the LSE has not suffered the same collusion allegations as Nasdaq. The OFT considers that expenditure necessary to recover from collusion allegations would be higher than that necessary to build the standing from scratch.

### *Brand*

- D.29 The OFT considers that the LSE's brand cannot be valued on a stand-alone basis because expenditure on marketing does not create an asset that can be separated from any that arises from the general running of the business. In addition, capitalisation of the brand could imply a double count with other areas of expenditure. For example, IT, workforce and regulatory standing all contribute to any brand value but IT and workforce have already been included in the LSE's capital base (see paragraphs 6 and 18 above) and the LSE has argued for the capitalisation of regulatory standing (see paragraph D.22 above).

D.30 The OFT also considers the following points are relevant and militate against brand capitalisation:

- benefits from marketing expenditure are not generally considered to have a life as long as 20-30 years (see paragraph D.21 above), and
- the CC in its report on banking services for small and medium-sized enterprises allowed part of the bank's customer acquisition costs to be capitalised, but the LSE has said that none of its marketing spend counts as customer acquisition spend.<sup>126</sup>

D.31 PwC stated that current marketing expenditure maintains the LSE brand which has been built up over its long history. This brand has been built up in the UK, but the OFT notes that a significant proportion of the LSE's current expenditure is focused outside the UK, and because of this overseas focus, this part of the marketing expenditure cannot be considered to be maintaining the LSE's brand in the UK.

D.32 The LSE has a strong market position, and as a result should not need to spend extensively to attract business in the UK.

### *Regulatory*

D.33 The OFT asked the LSE to break down its annual regulatory expenditure between the amount necessary to meet the FSA's ongoing RIE requirements and other expenditure (referred to as discretionary because it is not RIE related expenditure). The LSE said that any such breakdown is inherently subjective, but it estimated that the former represents [...] per cent of all regulatory expenditure.<sup>127</sup> The OFT considers that the expenditure for ongoing regulatory requirements cannot be capitalised since it is necessary to maintain the LSE's RIE status.<sup>128</sup> The OFT also

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<sup>126</sup> LSE letter to the OFT, dated 16 March 2003, page 13.

<sup>127</sup> LSE letter to the OFT, dated 14 March 2003, page 11.

<sup>128</sup> LSE submission to the OFT (8 September 2003), Table A 1.3, which did not capitalise regulatory expenditure incurred to retain its licence.

considers that discretionary expenditure (the balancing [...] per cent), although not required to maintain the RIE status, both brings significant benefit in the current year and also is necessary for running the business in the current year.

- D.34 The OFT considers that expenditure on regulatory standing does not create an asset that can be separated from any that arises from the general running of the business.

### *Relationships with market participants*

- D.35 The OFT does not consider a valuation based on virt-x to be a suitable basis for a proxy because such a valuation could reflect profits that the Swiss Stock Exchange gained from a position of market power.
- D.36 The OFT considers that, although the LSE offers a liquid market, this position evolved naturally due to the LSE's market power in the supply of services for exchange-based equity trading in the UK. The OFT notes that the LSE's IT systems also contribute significantly to the exchange's ability to offer liquidity and that these systems have been capitalised already. The OFT also considers that expenditure on relationships with market participants brings significant benefit in the current year and also is necessary for running the business in the current year.

### **Conclusion on intangibles**

- D.37 In this case, the OFT has not been persuaded by the LSE's arguments for the capitalisation of brand, regulatory standing or relationships with market participants. However, the OFT recognises that the capitalisation of intangibles may be open to varying interpretations and assessments.

## E INTANGIBLE ASSET VALUATIONS 2002/03

- E.1 The OFT recognises that the capitalisation of intangibles may be open to varying interpretations and assessments. Table E.1 below shows the 'pure-cost' intangible asset values which are the basis for the scenarios in paragraph 4.29.
- E.2 Each intangible has two values, a low value calculated by using the higher estimate of the LSE's weighted average cost of capital (WACC) range and a higher estimate calculated by using the lower estimate of the LSE's WACC range.

TABLE E.1: INTANGIBLE ASSET VALUES<sup>129</sup>

Asset Values 2002/03	Brand High WACC	Brand Low WACC	Market Participants High WACC	Market Participants Low WACC	Regulatory Standing High WACC	Regulatory Standing Low WACC
	£m	£m	£m	£m	£m	£m
	[...]	[...]	[...]	[...]	[...]	[...]

<sup>129</sup> These are pure-cost values given to the OFT by the LSE in a spreadsheet submitted on 23 September 2003. These pure-cost valuations differ from the pure-cost valuations calculated by PwC (see Annexe D, paragraphs D.20 to D.23) *inter alia* for the following reasons. First: only the discretionary part ([...] per cent) of regulatory expenditure identified in Annexe D, paragraph D.33 is capitalised. Second: brand excludes an actual overlap that occurs when relationships with market participants is capitalised. Third: the cashflows have been discounted on a mid-year cashflow basis.