Market definition

Introduction

1. Defining the relevant market in a market investigation assists the CC to identify the market participants and products that might be central to the identification of features that have an adverse effect on competition. It provides a framework for the assessment of the effects on competition of features of a market.[1] For example, in this investigation the distinction between the FTSE 350 and other types of company was relevant to our approach to gathering evidence, notably the first survey, the Market and Financial Questionnaire (MFQ) and the data request. By enabling comparisons between the audits of FTSE 350 companies and large private companies, as well as those that are listed but of smaller size, it has allowed us to understand better how competition functions in the provision of statutory audits to large listed companies.

2. There are normally two dimensions to the definition of a market: a product dimension and a geographic dimension. Customer types and temporal factors may also be relevant in some markets.

3. In this appendix we:

   (a) describe the approach taken on market definition in previous decisions by the OFT and the European Commission;

   (b) discuss our definition of the product market;

   (c) assess whether there is any segmentation by customer type; and

   (d) assess the relevant geographic market.

[1] This is set out in *CC3, Market Investigation References: Competition Commission Guidelines*, June 2003, paragraph 2.2, as well as in our draft revised market investigation guidelines, which are currently being consulted on. See www.competition-commission.org.uk/publications/consultations-open/cc-review-of-market-investigation-references-guidlines.

Previous decisions

4. This sub-section summarizes previous market definition decisions in two competition cases: the OFT's market investigation into statutory audit services to large companies in the UK and two European Commission merger regulation decisions involving large accountancy firms.

OFT

5. In its decision to refer the market investigation to the CC, the OFT defined the relevant product as statutory audits provided by appropriately qualified auditors in line with the Companies Act.[2] In the UK, the majority of companies are required to have their financial statements audited by a qualified auditor[3] that is a member of one of six professional bodies. As the audit is a statutory requirement, there are no direct product substitutes.

6. The OFT did, however, differentiate between statutory audits for large companies and for small/medium-sized companies due to their scale and complexity.[4] This was a result of: international activity, complexity of operations, and the need for industry-specific knowledge. It also did not rule out differentiation by sector, noting that some industry sectors (for example, banking and insurance) have more complex auditing requirements.[5] The OFT's analysis found that auditor concentration is higher in some industry sectors than others, though it undertook no detailed analysis and reached no definitive conclusion. Ultimately, the OFT reference encompassed companies that 'may be listed from time to time on the London FTSE 100 and FTSE 250 indices'.[6]

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[2] OFT, 'Market investigation reference to the Competition Commission of the supply of statutory audit services to large companies in the UK' (October 2011), paragraph 4.18. Hereafter, this report is referred to as 'OFT Reference'.
[3] See Appendix 8.
[4] OFT Reference, paragraph 4.20.
[5] OFT Reference, paragraph 4.27.
[6] OFT Reference, Annexe C.

7. In terms of the geographic market, the OFT noted that because statutory audit services are described in the Companies Act, these specific services are provided purely within the UK.[7] However, it recognized that there are standards, rules and regulations that have been developed at an EU level as well. Further, audit firms often need a presence in many of the countries in which their clients operate and these countries will have their own legislative framework for statutory audits. The OFT said that large international companies would likely be keen to employ the same audit firm in the different countries in which they operated, whilst smaller listed companies were relatively more likely to engage only a national audit firm.[8] It recommended that further evidence should be gathered on supply-side substitution before reaching a definitive conclusion.

8. The OFT said that it received a small number of responses that argued for an international market in audit. However, the OFT noted that in previous decisions (see paragraphs 9 to 12) the market had been defined as national in scope and did not consider there to have been sufficient changes in regulation, legislation or supply and demand-side substitution which would mean that the geographic market was now wider than previously stated. The OFT also said that it had not analysed the boundaries of possible local and regional markets, noting that it was for the CC to consider whether to undertake a more detailed market definition exercise.[9]

European Commission

9. This sub-section draws on the European Commission's investigation into the merger between Price Waterhouse and Coopers & Lybrand.[10] An investigation was also carried out into the later merger between Deloitte & Touche and Andersen UK[11]

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[7] OFT Reference, paragraph 4.33.
[8] OFT Reference, paragraph 4.35.
[9] OFT Reference, paragraph 4.39.
[10] Case No IV/M 1016—Price Waterhouse/Coopers & Lybrand (20 May 1998).
[11] Case No COMP/M 2810—Deloitte & Touche/Andersen UK (1 July 2002).

although this used the same market definition as the Price Waterhouse/Coopers & Lybrand case.

10. As a merger between two large accountancy firms, the European Commission looked at a range of professional services, one of which was audit and accounting. Within this service, it identified two distinct markets: *(a)* provision of audit and accounting services to medium- and small-sized companies, which consist mainly of national companies; and *(b)* provision of audit and accounting services to quoted and large companies.[12] This distinction stemmed from the fact that only the larger firms (the 'Big 6' in 1998 and the 'Big 5' in 2002) were able to satisfy the requirements of large listed companies,[13] namely to have:

(a) their audit and accounting services provided by a firm with the necessary reputation in the financial markets (in the case of quoted companies);

(b) the geographic breadth to cover their companies' needs worldwide (in the case of multinationals);

(c) the depth of expertise in their particular sector (large companies in general and, in particular, regulated sectors such as banking and insurance); and

(d) significant resources (all large companies required this to complete their audits).

11. The European Commission also considered whether there were relevant product markets in certain sectors given that some sectors appeared particularly complex and required significant specialist expertise. It concluded that there were potentially two sectors with their own relevant product markets: banking and insurance.[14] Further analysis of the demand for audit services in these sectors showed that price considerations were of relatively low importance for companies compared with reputation, sectoral expertise and the auditor's knowledge of the business. Based on

[12] Case No IV/M 1016, paragraph 22.
[13] Case No IV/M 1016, paragraph 32.
[14] Case No IV/M 1016, paragraphs 34 & 35.

this, the European Commission identified two key issues for banking and insurance companies: the time needed for an alternative firm to reach the same level of competence as its incumbent auditor ('start-up' period, estimated to be two to three years); and the company's reluctance to change auditors, which was stronger than in other sectors. The European Commission subsequently decided that both of these issues could be considered within the broader picture of any auditor/client relationship. Similarly, on the supply side, although firms acknowledged that banking and insurance required special expertise and carried a high degree of risk, the European Commission found that all large firms possessed (or could easily acquire) the necessary capabilities to carry out a banking or insurance audit. Thus, the European Commission concluded that there was no separate product market for the banking and insurance sectors.[15]

12. In terms of geographic markets, the European Commission noted that statutory audit services were primarily regulated at the national level but that there was also an important international dimension for multinational companies. It concluded in both merger cases that national markets were the relevant geographic markets, principally due to national regulatory requirements that affected both the demand and supply side and the need for the auditor to have a local presence.[16]

Relevant product market

The product

13. The majority of companies in the UK have a statutory obligation to have their financial statements audited every year.[17] There are some differences in reporting requirements between listed and non-listed companies, for example the former have a shorter reporting timetable and must issue quarterly updates and interim results.

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[15] Case No IV/M 1016, paragraphs 36–49.
[16] Case No IV/M 1016, paragraphs 55–63.
[17] See Appendix 8.

However, for both public and private companies there are no substitutes for a statutory audit.

14. We note that auditors provide a number of services that are categorized as 'audit-related services'. The Auditing Practices Board (APB) defines these as 'non-audit services that are largely carried out by members of the (audit) engagement team and where the work involved is closely related to the work performed in the audit and the threats to auditor independence are clearly insignificant …'.[18] Such services include reviews of interim financial information, reporting on regulatory returns and reporting to a regulator on client assets.

15. The financial information we have on audit fees and hours worked includes those relating to both the supply of statutory audit services and audit-related services. Firms were not able to provide this information for statutory audit services only, ie excluding fees and hours worked for audit-related services.

16. Firms were asked to estimate the proportion of 'full audit service' that is accounted for by audit-related services. All firms said that this varied significantly by client and so it was not possible to produce a reliable figure. Estimates for a small sample of FTSE clients were provided by each firm and the proportion of audit hours and/or fees accounted for by audit-related services ranged from 0 to around 30 per cent, with averages between 10 and 20 per cent.

17. For this reason we were unable to analyse audit engagement fees and hours worked for the delivery of the statutory audit excluding audit-related services unless stated otherwise. Nevertheless we do not consider our provisional findings to be sensitive to the treatment of audit-related services and our analysis of competition would not be

[18] APB Ethical Standard 5 (Revised), paragraph 54.

materially different if we included audit-related services within our market definition. In particular we consider that audit-related services are complementary to the statutory audit and note that, in many cases, companies are likely to find it cost-effective to have their auditor provide both. Further, given that the work is closely related to the work performed in the audit, a company is likely to have a similar choice of suppliers.

Customer segmentation

18. We considered whether markets should be defined according to different types of customer.

FTSE 350 and non-FTSE 350

19. We asked audit firms about the differences between auditing FTSE 350 and other types of company. We were particularly interested in comparisons with large non-listed companies and those which are listed but smaller (eg in the FTSE Small Cap).

20. The Big 4 firms all said that the audit requirements of large listed companies were different from others. They noted that such audits were generally more complicated, often due to: complex business models (eg shared service centres, cross-border operations); the international scope of the audit; scale of the organization and its operations; number of different business activities; different governance structures; complexity of underlying transactions; the need for specialist expertise; the involvement of different stakeholders, and/or; regulatory requirements.[19] Some of the parties also said that an important difference between listed and non-listed companies was that the audit occurred in a different context because there was more

[19] KPMG told us that as a generality, larger clients tended to be more international and had more complex business models and processes, thus requiring more audit resources and specific capabilities. Reporting requirements for listed (including FTSE 350 and FTSE Small Cap) and large non-listed entities may also be more challenging. Deloitte also said that differences in complexity are not necessarily a reflection of the listed status of the companies, but arise from their specific characteristics and circumstances.

distance between shareholders and management in a public company.[20] The latter was also said to be subject to higher levels of public scrutiny and reputational risk. Another difference between the two was that listed companies had shorter reporting timelines and more reporting requirements than non-listed companies.

21. Mid Tier firms said that each company required a specific audit strategy. Some submitted similar views to the Big 4 firms on the nature of audits for FTSE 350 companies. However, responses from BDO and GT indicated that defining a market purely for the FTSE 350 may not be appropriate. BDO said that being listed did not necessarily equate to being large in size or having extensive operations. For example, the firm acts for a number of private companies that are of a much bigger scale than some FTSE 350 companies. GT also made the point that a company's size was not always proportional to complexity and that a number of factors had to be considered, such as: maturity of the company and its finance function; the complexity and location of its IT systems; governance structure; existence of complex financial instruments and capital structures; and the impact of mergers, acquisitions and other reorganizations. GT said that, in some cases, this could mean that a large well-organized and well-run FTSE 350 company could be less challenging to audit than, for example, a smaller AIM company or a large private business because the audit risks were easier to identify.

22. To increase our understanding of the potential differences between the audits of FTSE 350 and non-FTSE-350 companies, we drew on evidence obtained from our survey and the public and engagement data sets on companies in the following

[20] KPMG said that the interaction with stakeholders of large non-listed companies was generally similar to that for listed companies. However, there may be direct interaction with shareholders which would not be the case for listed companies. Such interaction may either arise due to one or more of the shareholders being on the board of the company or involved in the management of the company, or simply as a consequence of their financial interest in the company. Some listed companies may also have representatives of a significant shareholder on the board.

segments: FTSE 100; FTSE 250; FTSE Small Cap/Fledgling; AIM; Top Track 100;[21] and Top Track 250.[22]

23. Analysis of the public and engagement data sets suggests a number of differences between 'FTSE 350'[23] and 'non-FTSE-350' companies with respect to the supply of statutory audit services over the period 2001 to 2010. These included:

(a) FTSE 350 companies were more likely to have a longer relationship with their current auditor. For example, 67 per cent of FTSE 100 companies and 52 per cent of FTSE 250 companies have a tenure of more than ten years compared with 38 per cent of non-FTSE 350 companies.

(b) Audit fees paid by FTSE 350 companies tend to be higher than those paid by other listed companies and larger private companies. For example, in 2010, the median total fee for audit and audit-related services was £579,000 for FTSE 350 companies, compared with £226,000 for non-FTSE 350 companies.

(c) The fee per hour for FTSE 350 audits tends to be higher than for non-FTSE 350 company audits. For example, for audit work conducted in the UK, in the financial year 2011 for FTSE 350 audits the average fee per hour was £81, compared with £69 per hour for non-FTSE 350 companies.

24. The first survey results suggest that FTSE 350 companies are also more likely to require an audit of international scope. In particular, for around a half of FTSE 100 companies, and 33 per cent of FTSE 250 companies over 40 per cent of the audit was accounted for by non-UK activities, compared with 14 per cent for non-FTSE-350 companies.

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[21] The Top Track 100 ranks Britain's biggest private companies by sales. Further details can be found in the 2011 research report www.fasttrack.co.uk/fasttrack/downloads/2011toptrack100rep.pdf whilst historic lists can be found at www.fasttrack.co.uk/fasttrack/leagues/top100programme.html.

[22] The Top Track 250 ranks Britain's leading mid-market private companies by sales. Further details can be found in the 2011 research report www.fasttrack.co.uk/fasttrack/downloads/2011toptrack250rep.pdf.

[23] In both the survey and much of the CC's quantitative analysis, we define 'FTSE 350' as any company that has been in the FTSE 350 during the period 2006–2011. This takes into account the fact that the FTSE 350 is a dynamic index and changes every quarter.

25. The first survey also found differences between FTSE 350 companies and other listed and large private companies in terms of what the FDs and ACCs seek in an audit and their auditor, for example:

(a) FTSE 350 FDs were more likely to consider the following to be important in assessing the quality of the audit: a high degree of challenge by their auditor; an ability to detect mis-statements; and independence of the audit firm;

(b) more FTSE 350 FDs and ACCs considered the strength of the international network and the ability of the auditor to be able to ensure a consistent worldwide delivery to be important; and

(c) fewer FTSE 350 FDs and ACCs considered price to be an important factor when selecting an auditor.

26. Information extracted from the public data set and the survey results also suggest differences in the tendering and switching behaviour of FTSE 350 companies compared with other listed and private companies. In particular:

(a) over the period 2001 to 2010 we estimate that switching rates were lower among FTSE 350 companies (an average of 2.4 per cent a year) than non-FTSE 350 companies (which varied between 2.8 and 8.2 per cent a year);[24] and

(b) the survey results suggest that FTSE 350 companies tender their audit engagements less often than other companies. 23 per cent of FTSE 350 compared with 46 per cent of 'other' companies had tendered their audit in the last five years, and 49 per cent of FTSE 350 and 35 per cent of 'other' companies had either tendered the audit more than five years ago or have never tendered the audit.

[24] These rates exclude switches arising as a consequence of the collapse of Arthur Andersen and where a company moved to/from a joint audit.

27. Table 1 gives the shares each audit firm has of audit clients by company type in 2010. In terms of listed markets, the Big 4 firms' share of the market increases as one moves from smaller listed to FTSE 250 and then to the FTSE 100. The table also shows that the provision of audit services to large private companies, defined as the Top Track 100, is less concentrated than it is for the FTSE 350 (though the Big 4 are still the largest suppliers).

TABLE 1 **Percentage share of audit clients by company type (2010)**

Firm	*FTSE 100*	*FTSE 250*	*Non-FTSE 350*
PwC	38	29	27
KPMG	22	23	25
Deloitte	21	27	20
EY	18	17	13
BDO	1	2	5
GT	0	2	5
Others	0	0	6
Big 4	**99**	**96**	**85**

Source: CC.

Segments within FTSE 350

28. We also considered whether certain segments of the FTSE 350, based on size and sector, constitute separate markets.

29. On the supply side, the CC asked audit firms to provide an assessment of their ability to carry out audits in each sector, in particular asking which sectors they are active in and whether they would be able to expand into those sectors where they are not currently active.

30. All of the Big 4 firms said that they organized their activities to some extent according to sectors.[25] They acknowledged that certain sectors required particularly complex audits, for example banking and certain utilities. Generally, however, each of the Big 4 firms stated that they were able to provide audit services to companies in all

[25] KPMG does not use any standard sector classifications to manage its business—no specific sector classification is fully informative of client characteristics nor an audit firm's ability to compete for clients in that sector.

industry sectors. Where a firm is currently not active in a sector in the FTSE 350, the skills developed from auditing other large companies were transferrable (particularly those in a similar sector[26]) whilst the specialist knowledge could be obtained via non-audit staff or from within the firm's international network. Further, sector expertise would most likely be available given that firms will audit smaller or non-listed companies in the same sector.

31. Other auditors responded that they could audit companies across a broad range of sectors. However, most acknowledged that, in the short term at least, they would not be able to audit the largest firms in certain sectors. BDO said that it could not currently audit the largest financial institutions, pharmaceutical companies and oil companies in the FTSE 100 whilst GT told us that auditing the 'dozen or so' systemic banks and insurance companies would represent an unreasonably large portion of the firm's audit practice. Mazars said that it would currently be difficult to accept an audit appointment for FTSE 350 companies in the pharmaceuticals and oil & gas sectors on a sole audit basis. PKF stated that it could not audit companies in certain highly specialized sectors where it was not currently represented, eg banking.

32. Using the public data set, we estimated the shares that audit firms have had of FTSE 350 audit engagements in each of ten industrial sectors, by the number of clients and audit fees, over the period 2001 to 2010. We found that each of the Big 4 firms has had a presence in each of these sectors over a number of years. We also found that there are several sectors where non-Big-4 firms have had no presence (or, at least, a very limited presence) over this period, in particular in health care, telecommunications, utilities and technology companies.

[26] For example, using expertise in fixed-line telecommunications to win work in the mobile telecommunications sector.

33. On the demand side, our survey found that FTSE 350 FDs and ACCs in the finance industry were more likely to value an auditor's sector-specific expertise than counterparts in other sectors including industrial, consumer good, consumer services and technology sectors.[27] Generally, however, the sample sizes are not sufficient for us to investigate differences in demand-side behaviour and preference by sector using the survey data.

34. Our case studies included a bank (Company G) and insurance company (Company C), both of which expressed a view that one of the large four firms was weaker than its competitors. If this is a representative view, it would mean that the choice available to firms in these sectors is different to others in the FTSE 350, though we note that the ACC of Company C still thought that all the four largest firms could compete for its audit.

35. In addition to potential segments by sector, we note that there is significant variation in the FTSE 350 in terms of company size and complexity. In particular, we estimate that in 2010:

(a) the average turnover of FTSE 350 companies was £4,473 million with a minimum of £0.3 million to a maximum of £207 billion.

(b) the average value of total assets of FTSE 350 companies was £24 billion with a minimum of £0.3 million to a maximum of £1,359 billion.

36. Table 2 shows the share that each Big 4 firm had in 2010 of audit clients among the largest 20 per cent of FTSE 350 companies, measured by company turnover, and then the next 20 per cent etc. These results show that each of the firms had a substantial share of audits in each segment. The only exception to this is EY, which

[27] CC first survey results: see tabulations, sheet FD/CFO only, question B3_03, line 1282; CC survey tabulations, sheet AC only, question B3_03, line 1302.

had a smaller share of the largest companies compared with the other Big 4 firms and its own share of the smaller companies.

TABLE 2 **Percentage share of FTSE 350 audit clients segmented by total company turnover (2010)**

	Total company turnover quintile (1=smallest, 5=largest)				
	1	2	3	4	5
PwC	24	25	34	31	44
KPMG	26	22	24	18	25
Deloitte	19	34	24	25	25
EY	21	16	19	24	6
Other	10	3	0	3	0

Source: Public data set.

37. In this respect, we note that BDO and GT have said that they would currently be unable to audit every company in the FTSE 350. BDO suggested that there were around 35 FTSE 100 companies that it would currently be unable to audit due to the companies' significant international and global dimensions and/or the degree of specific-sector knowledge required.[28] Mazars identified a similar number (30) of FTSE 350 companies which it would currently find it difficult to accept an audit appointment on a sole audit basis, particularly companies with UK audit fees in excess of £5 million and a geographic presence in over 50 countries.[29] GT indicated that there were around 60 companies for which the firm would presently be unlikely to tender.[30] The firm also accepted that the very largest global organizations, with operations in more than 150 countries, were of a scale currently beyond GT.[31]

38. The survey results showed that around three-quarters of FDs and ACCs in the FTSE 350 would only consider the Big 4, with size and geographical coverage being the most important reason for excluding Mid Tier firms as an option.[32] Of those FTSE 350 companies that had tendered their audit in the last five years, 30 per cent had invited at least one Mid-tier firm to tender. Our case studies found similar evidence,

[28] BDO response to MFQ, question 69.
[29] Mazars response to the 'Market definition' working paper.
[30] GT presentation to the CC, 30 January 2012.
[31] GT hearing summary, paragraph 10.
[32] Appendix 3, Table 23.

with seven of the ten firms we interviewed believing that only a Big 4 firm could audit their accounts.

39. BDO stated that there was evidence of separate relevant markets within the FTSE 350, referring to the perceived weakness of one of the Big 4 firms with regard to the financial sector and evidence from the Association of Financial Markets in Europe (AFME) to the CC that choice in some parts of the market was virtually eliminated, at least in the short run. It also noted that the median audit fee for FTSE 100 companies was £2.8 million, eight times higher than the median audit fee for FTSE 250 companies (£342,000), as an example to demonstrate that, depending on the starting point for calculating averages, it was possible to find various large differences in the characteristics of different candidate markets, which led to a potential element of circularity in using company characteristics to define the relevant market.[33]

40. While Mazars agreed in general terms with a market definition comprising the supply of audit services to FTSE 350 companies, it thought it appropriate to segment between the FTSE 100 and 250, and within the FTSE 100 those leading 20 to 30 or so companies at the top end of the FTSE 100 in terms of market capitalization and/or the leading companies in sectors such as banking, insurance, infrastructure and utilities.[34]

[33] BDO response to the 'Market definition' working paper.
[34] Mazars response to the 'Market definition' working paper.

41. With regard to the choice between Big 4 firms, our analysis suggests that whilst some firms may have a stronger position than others in certain sectors, generally all the Big 4 firms have broad-based experience across the FTSE 350.[35]

42. With regard to Mid Tier firms, the evidence suggests that Mid Tier firms may be an option for some FTSE 350 companies. Mid Tier firms said that they had the capability to audit the majority but not all FTSE 350 companies.[36] We have not, however, identified particular segments of FTSE 350 companies that can only be audited by the Big 4 and others that have the option of a Mid Tier firm.

Relevant geographic market

43. With regard to geographic market, it is relevant that the statutory framework is set by UK legislation. The Companies Act sets out the requirements as to accounts and reports in relation to each financial year of a company and it also provides for the auditing of those annual accounts.[37] Further, audit firms that wish to be appointed as a statutory auditor must be registered with a Recognised Supervisory Body and individuals responsible for audit must hold an audit qualification from a Recognised Qualifying Body. This makes it very difficult for a non-UK firm to audit the UK operations of a company, and vice versa.

44. However, whilst the statutory framework is set by UK legislation, the actual audit sometimes needs to be delivered across a number of countries. This particularly applies to FTSE 350 companies, many of which have extensive international operations. For some of these, the UK audit fee represents less than half of the total. However, many companies prefer to have the same auditor for the parent and

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[35] In the survey we asked FDs and ACCs whether there were factors that would limit choice between the Big 4 firms. For FTSE 350 companies, 60 per cent of FDs and 65 per cent of ACCs said that there were no factors limiting choice between Big 4 firms. For those that did, the most frequently mentioned factor is conflict of interest arising from the provision of non-audit services. Although this is more of an issue in the financial services sector, this is not a consideration that would exclude particular firms from supplying audit services to particular segments of FTSE 350 companies.
[36] See paragraph 9.15 of provisional findings.
[37] See Appendix 8 for further details.

subsidiaries and evidence from our survey shows that FTSE 350 FDs and ACCs value the strength of an auditor's network.[38] This suggests that companies with international operations generally require an auditor presence in many of the countries in which they operate, a point reinforced by our case studies. This is consistent with the fact that countries have different legislative frameworks for statutory audits and, as such, the audit will need to take account of this.

[38] CC first survey results: see published tabulations, sheet FD/CFO only, question B3_05, Table 30, CC survey tabulations, sheet AC only, question B3_05, Table 30.

Switching costs

Introduction

1. This appendix presents the evidence we have obtained in relation to switching costs for companies, primarily via:

   (a) the case studies;[1]

   (b) the CC's first survey;

   (c) the firms' submissions (including responses to our working paper, 'Evidence on switching costs (and implications for barriers to entry)';[2] and

   (d) other (including: academic literature, company interviews, engagement data set[3], internal documents, tender documents).

Switching costs

2. Broadly, we considered any factor that discouraged a company from considering switching auditors to be a switching cost. These included factors with a time or monetary cost implication, and also disadvantages that companies might anticipate in switching auditor.

3. KPMG said that for switching costs to be relevant they must be material enough to allow incumbent audit firms to decrease the relative competitiveness of their offerings and that our broad definition was only valid if we recognized that switching costs as defined did not necessarily mean that competition was not working effectively.[4]

4. PwC said that our approach in theory included those costs associated with switching from an auditor that was efficient (charging competitive prices and providing a high-

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[1] Appendix 2.
[2] www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/switching_costs.pdf.
[3] See Appendix 6 'Datasets in the market investigation for statutory audit services appendix', paragraphs 4–8.
[4] KPMG response to CC working paper 'Evidence of switching costs', paragraphs 2.5 & 2.6.

quality service) to one that was of poor quality and charging excessively. PwC considered that switching costs should be defined as the one-off costs incurred by a company in switching auditors and that these costs would be balanced against a future stream of potential and actual benefits of switching auditors.[5]

5. We identified the following switching costs for companies:

(a) management, AC and Finance Department staff time required to run a tender, select a new auditor and to educate that new auditor with respect to the company;

(b) timing issues including:

(i) the logistical difficulties of appointing an auditor so that it could form its opinion conveniently within the annual reporting cycle;

(ii) the scarcity of management time during certain business activities; and

(iii) a risk to a company's reputation from switching auditor at certain times (if, for example, this might signal an issue at the company or a dispute with the auditors, or more generally if the company wished to portray stability);

(c) the perceived increased risk of a new auditor making mistakes before it was fully familiar with a company, compared with the risk of mistakes by an incumbent auditor;

(d) the risk to the company that the new auditor took a different view of an accounting treatment from the previous auditor and that this resulted in a less favourable financial position for the current management and/or shareholders;

(e) the loss of other advantages of long-term relationships (for example, confidence in the auditor's ability to highlight business recommendations in the course of the audit); and

(f) the loss of a new auditor as an existing provider of non-audit services (NAS) (if this proved necessary to comply with independence requirements).

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[5] PWC response to CC working paper 'Evidence on switching costs', fn 2.

6. We also considered *(g)* how audit firms responded to such company switching costs, to reduce the company's cost of switching. This had two aspects: the audit firm's ability to mitigate client costs; and its willingness and/or ability to be able to incur these costs.

7. For each of the items in paragraph 5, the evidence is presented (by topic) in paragraphs 8 to 93 below.

Management time and other costs

8. In this section, we set out the evidence we have gathered in relation to management time and other costs gathered from: case studies, our first survey, an interview with a FTSE 350 company that had switched auditor recently and from the firms (including their responses to our switching costs working paper).

Case studies

9. From a company's viewpoint, we did not identify a significant monetary cost of holding a tender. However, the time cost (and hence opportunity cost of staff time) involved in changing auditors was highlighted. Many individuals (both FDs and ACCs) told us that the tender process was quite straightforward and that it was educating a new auditor which took time:

   (a) At Company A, the CFO said that switching costs would not affect a decision to change auditors. He said that the cost fell mainly on the audit firm. The internal time from the company's perspective in terms of getting the auditors up to speed would be spread across a number of companies and offices and so the burden on any one team would not be excessive.[6]

   (b) At Company B, the FD said that the biggest cost of running a tender and switching auditor was the time spent in the first year answering questions put to the

[6] See Appendix 2, 'Case studies', Company A, paragraph 35.

company by the new auditor. It was not the tender that took the time but getting the auditor up to scratch. This was a big factor at the company as the group (ie head office) finance team was small.[7] The ACC thought that tendering was not a process to be taken lightly as it was a 'hugely expensive exercise' for both the company and the audit firms. For the company, time was spent planning the tender brief and explaining the company to new auditors.[8]

(c) At Company C, the CFO said that the largest costs of switching were time and disruption. The selection process itself was somewhat onerous and time consuming but the real issue was educating the new audit team.[9]

(d) At Company D, the ACC thought that switching costs amounted to management time, as the first year of an auditor's appointment required significant input from both the executive management and the non-executive directors (NEDs).[10]

(e) At Company E, the ACC thought that there would be very little monetary cost of holding a tender and that the tender process would cause minimal disruption to the business.[11]

(f) At Company E, the FD (who had not switched auditors) had been told that it was a real upheaval. However, his understanding of the process at Company E (which had occurred before he assumed the role) was that this was not too difficult.[12]

(g) At Company F, the FD thought transitioning auditor was hard work but fairly straightforward. The costs of switching were internal time costs, ie the FD's, AC's and the finance team's time spent bringing the audit team up to speed.[13] The ACC thought that switching auditors was a hassle. The process required considerable work and preparation, and there was time spent for the auditors to build

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[7] See Appendix 2, 'Case studies' Company B, paragraph 20.
[8] See Appendix 2, 'Case studies' Company B, paragraph 43.
[9] See Appendix 2, 'Case studies' Company C, paragraph 29.
[10] See Appendix 2, 'Case studies' Company D, paragraph 63.
[11] See Appendix 2, 'Case studies' Company E, paragraph 52.
[12] See Appendix 2, 'Case studies' Company E, paragraph 22.
[13] See Appendix 2, 'Case studies' Company F, paragraph 27.

up their knowledge of the business. However, this was not a reason not to tender.[14]

(h) At Company G, although the auditor had never been switched, given the global structure of the group, potential bidders would have to meet several hundred members of senior management.[15] The ACC said that for a bank in particular, switching auditor would be a huge exercise and had a huge risk associated with it. Switching auditor would be a major disruption to the company and would divert significant amounts of management time. For complex organizations (such as Company G), switching auditors was an enormous task that needed to be undertaken effectively.[16]

(i) At Company H, a tender involved significant management time of 25 to 30 individuals. Aside from the management time, the FD was not so worried about the risk associated with the auditor getting to know the business and the technical issues, as part of the tender addressed the ability of the audit firm to do this. The FD did not mind incurring the additional management costs in bringing a new auditor up to speed, as it was valuable to the company to ensure that the accounts were thoroughly scrutinized.[17] The ACC thought that he would double the number of days he spent on AC business during a tender year.[18]

(j) At Company I, the FD said that the biggest cost to a company of holding a tender was the time cost, particularly for the finance function. There was a substantial amount of time needed to meet all the key operational executives and to get to know the business. The company had experienced these costs to an extent when partners had changed, and although it was not as dramatic a change as changing the whole audit team, the FD thought that changing a partner was not a trivial

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[14] See Appendix 2, 'Case studies' Company F, paragraph 51.
[15] See Appendix 2, 'Case studies' Company G, paragraph 23*(a)*.
[16] See Appendix 2, 'Case studies' Company G, paragraph 67.
[17] See Appendix 2, 'Case studies' Company H, paragraphs 34 & 35.
[18] See Appendix 2, 'Case studies' Company H, paragraph 69.

exercise.[19] The ACC said that an important factor in deciding whether to switch auditors was the management time required to conduct the tender and the time needed for the new auditors to get up to speed. The ACC highlighted the distraction and disruption to management as a general cost of switching auditor.[20]

Survey evidence

10. In the CC's first survey, we asked respondents for companies that had not tendered their audit in the last five years why this was the case.[21] We analyse the responses in Appendix 3, 'CC first survey results'. The responses suggest the main switching costs being the opportunity cost of the management time involved in a tendering process; the opportunity costs of management time required in educating a new auditor; and the increased audit risk in the first two or three years of an engagement (see Appendix 3, 'CC first survey results', paragraph 61).

11. For those companies that had switched auditor in the last five years, we asked respondents for their views on the effect this had had on fees, quality of the audit and internal costs. With regard to the latter, the majority of the FTSE 350 companies (of which there were 33) said that there was no material impact on internal costs (15 per cent said that there was an increase in internal costs and 15 per cent said that there was a reduction in internal costs after the first year).

[Anonymous 1] plc[22]

12. In its tender process, [Anonymous 1] plc had used an external consultant (Boston Consulting Group) to provide support to the tender process, but the majority of the work was carried out as part of the finance team's normal work. [Anonymous 1] plc

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[19] See Appendix 2, 'Case studies' Company I, paragraph 22.
[20] See Appendix 2, 'Case studies' Company I, paragraph 49.
[21] 77 per cent of FTSE 350 companies and 53 per cent of other companies responding to the survey had not tendered in the last five years (including those who did not know).
[22] Published summary: www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/summary_of_conference_call_25_january_2012.pdf.

estimated that the cost of the external consultant was £[✂] (plus VAT) in the context of a £[✂] million audit fee (ie less than [✂] per cent of the annual audit fee). Both the tender and auditor transition were disruptive processes, as the company needed to educate the audit teams about the company worldwide. Accordingly, it did not want to undertake these processes very frequently.[23]

13. This interview provided the only example we identified of an external cost for a company in running a tender process (although it was possible that the work companies undertook on benchmarking fees (see Appendix 2 'Case Studies' and Appendix 3 'CC first survey results) was completed externally).

Submissions from firms on switching costs

BDO

14. BDO considered that customer switching costs could be overstated. It said that the main costs of switching for a company were:

(a) the additional time of the AC and management in selecting an audit firm; and

(b) the time of staff, generally in the finance department, in explaining the operations and systems of the company to prospective auditors, and in more depth when a new auditor carried out its first audit.[24]

Ernst & Young

15. In EY's UK&I Assurance FY11/12 Pricing Guidance (an internal document for its staff and partners to consider when negotiating fees), there was a section on 'handling difficult questions'. It advised that if a client said it needed to put the audit out to tender, partners/staff should 'highlight the internal time absorbed in a tender process'.

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[23] Paragraph 18 of published summary.
[24] BDO response to the issues statement (public version), paragraph 5.3.3.

PricewaterhouseCoopers

16. PwC identified a number of costs associated with switching which were significant for the company, while not being so high as to prevent the company from moving if it were dissatisfied with the level of service, including:

    (a) the management time and distraction of (i) setting up a tender process; (ii) participating in the process itself (including having meetings with each audit firm); and (iii) introducing a new audit team to the company, was likely to be relatively significant; and

    (b) direct costs incurred in running a tender process. These would vary depending on the procedure utilized but might be material, particularly if external procurement specialists were involved.[25]

17. Deloitte said that none of the case study participants indicated that management time would be a deterrent to switching and the survey showed that two-thirds of respondents faced equivalent or lower internal costs following a switch.[26] It said that the public data set showed that among the 678 companies on which data had been collected and had been listed in the FTSE 350 at some point over the period, there were 267 auditor switches (and a further 262 auditor change events). Deloitte said that there was therefore significant experience of actual switching and that switching costs had not deterred switching.[27] See also Appendix 5, 'Descriptive statistics' in this regard.

[25] PwC response to issues statement (public version), paragraph 5.35.
[26] Deloitte response to CC working paper 'Evidence on switching costs', paragraph 4.
[27] Deloitte response to CC working paper 'Evidence on switching costs', paragraph 4.2.

18. Deloitte said that the survey showed that companies that had not tendered had most commonly not done so because they were happy with the quality of service and value for money received from their current auditor.[28]

19. KPMG said that case study evidence did not suggest that the management time involved would put companies off switching audit firm were their incumbent to cease to meet its needs. In the survey, 75 per cent of FTSE 350 companies did not mention disruption or costs as a reason for not switching and over 80 per cent of survey respondents did not mention 'disruption/getting auditor up to speed' as a reason for not tendering in the last five years. [29]

20. PwC said that the fact that some companies in the FTSE 350 had undertaken a switch of auditor and reported that the costs involved were not significant, or as great as they might have expected, should not lead us to the conclusion that this was the reality for all large companies. In relation to the survey, it said that survey respondents' suggestion that internal costs changed little as a consequence of undertaking an audit tender appeared to be because respondents replied based on ongoing costs rather than one-off costs (otherwise it was difficult to explain those that reported that costs fell).[30]

Timing issues

21. We identified a number of different factors related to timing that might create or increase the costs of switching auditors for a company. Our principal evidence for this came from our case studies. We also considered the firms' responses to our switching costs working paper.

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[28] Deloitte response to CC working paper 'Evidence on switching costs', paragraph 4.3.
[29] KPMG response to CC working paper 'Evidence on switching costs', paragraph 3.2.2.
[30] PwC response to CC working paper 'Evidence on switching costs', paragraph 9.

Window of opportunity

22. It appeared that there were only certain times of the year when a large company could consider running a tender process, as it took time to select and introduce a new auditor, and for the auditor to conduct sufficient investigations for it to be able to give its opinion. For example:

    (a) *Company A*. In [✂], the previous auditor took over the full audit of the Scandinavian business and the audit of the full UK business. This appointment occurred shortly before the year end and so the previous auditor had undertaken its usual interim procedures later than would otherwise have been the case in relation to the newly transferred audits in Scandinavia and the UK. The previous auditor raised a series of issues in relation to the lack of reconciliations for certain balances in the UK business. The previous auditor accepted management assurances—on the basis that high-level logic checks (proof in total) performed by management had been reviewed by the previous auditor, and had in previous years been reviewed by the parent company auditor who had been satisfied that there was no significant issue, and the previous auditors had discussed this with the parent company auditor—that this would not affect the company materially, but made clear that a full reconciliation was expected for the following year's audit.[31]

    (b) *Company B*. The FD said that the tender process itself was straightforward, but needed to be run efficiently so the decision could be announced and the new auditors could start in a timely way for the new reporting year.[32]

    (c) *Company C*. The former AEP explained that if the company wanted to appoint new auditors for the year end, it must run the tender process in sufficient time to allow new auditors time to work on that year's audit. If the company had waited until the summer, then the new auditors would only have been appointed for the

[31] See Appendix 2, 'Case studies' Company A, paragraphs 116 & 117.
[32] See Appendix 2, 'Case studies' Company B, paragraph 20.

following year end.[33] The CFO said that Company C was never very far away from issuing results to the market as it reported quarterly, therefore it was a logistical exercise in appointing the auditors in time to conduct the audit: it required D-Day-style planning.[34]

(d) *Company H*. The FD said that the most feasible time to conduct a tender was after the year-end audit or after the interim review.[35]

Effect of regulation: increased time involved in switching

23. A further timing effect we noted was that for certain companies the lead time required in order to switch auditors was increased by some of the independence regulations.

24. Company G was SEC[36] registered. The Group Finance Controller (GFC) said that, in its case, switching auditor would require significant work for the audit firm to be considered independent. For example, the audit firm's employees would need to change their banking arrangements if they were customers of the company, and other non-audit work provided by the firm would need to be suspended. He noted that in many cases consulting contracts were global and multi-year, so facilitating this would be complex.[37] The ACC said that the independence requirements for the SEC added significant hurdles to switching auditor.[38]

25. [Anonymous 1] plc explained that the SEC independence regulations meant that a new auditor would need time to become 'independent'.[39]

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[33] See Appendix 2, 'Case studies' Company C, paragraph 136.
[34] See Appendix 2, 'Case studies' Company C, paragraph 29.
[35] See Appendix 2, 'Case studies' Company H, paragraph 29.
[36] The US Securities and Exchange Commission (SEC) has particular rules that companies and auditors must comply with in order to be considered independent.
[37] See Appendix 2, 'Case studies' Company G, paragraph 23(b).
[38] See Appendix 2, 'Case studies' Company G, paragraph 71.
[39] www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/summary_of_conference_call_25_january_2012.pdf, paragraph 17.

26. In addition to increasing the lead time required to switch auditor, the SEC regulations also had implications for companies in terms of the loss of a provider of NAS: the auditor might have been the best choice for those contracts, and there might be termination penalties etc in addition to the disruption, timing issues. We note the potential cost to companies of losing a provider of NAS below (see paragraphs 72 and 73).

Certain business activities increase the opportunity cost of management time

27. A related issue that prevented companies switching at times was the business activities of the company. For companies undertaking significant restructuring, re-financing or acquisition/disposal activities, diverting management attention on to an (optional) tender process and/or education of a new auditor was considered to be a significant cost (ie the opportunity costs of these individuals' time was particularly high at certain periods). Generally the internal time costs of running a tender process and switching auditors fell on the finance team.

28. The ACC of Company H said that if there was a major change to the business, then this was not the time for the AC and the board to 'disturb the ship'. In this situation it was more important to have continuity of people who really understood the business.[40]

29. We were told that whilst ordinarily a tender/switch might be considered, such a decision was or could be delayed:

    (a) At Company B, the FD said that in evaluating the positives and negatives of holding a tender process, he would consider whether the company had time.[41]

[40] See Appendix 2, 'Case studies' Company H, paragraph 70.
[41] See Appendix 2, 'Case studies' Company B, paragraph 20.

(b) Company C had been through an enormous transformation in recent years. During this period the company changed all of its advisers, but it was not thought sensible to change auditors at this time as there was so much going on in the group.[42]

(c) The FD of Company H said that changing auditors whilst conducting a major acquisition would not be feasible.[43]

(d) In the case of Company I, issues with the auditor had occurred at a time when management needed to be focused on other strategic priorities.[44]

Switch timing and company reputation

30. Company H floated its Indian business in 2006. The company was advised by the book-runners that the Indian market would find it strange if the auditor that signed the prospective accounts was not in place for at least three years after flotation.[45]

31. Of our case study companies, [✂] was another example of a company that thought it had been constrained from switching auditor for signalling reasons for a time. [✂][46]

Firms' responses to switching costs working paper

32. Timing issues were not a switching cost that audit firms generally recognized. PwC said that:

> To suggest as the CC seems to, that deferring such decisions [ie decisions to tender] may be inappropriate, fails to recognise: (i) that such a decision was likely to be commercially rational; (ii) that existing

[42] See Appendix 2, 'Case studies' Company C, paragraph 58.
[43] See Appendix 2, 'Case studies' Company H, paragraph 29.
[44] See Appendix 2, 'Case studies' Company I, paragraph 49.
[45] See Appendix 2, 'Case studies' Company H, paragraph 28.
[46] [✂]

audit firms cannot and do not take advantage of such situations; and

(iii) such periods did not last for any length of time.[47]

33. Other firms expressed a similar view that timing issues were short term and that incumbents would not take advantage of this as it was not in their long-term benefit. For example:

(a) Deloitte said that it did not believe any audit firm would exploit short-term situations, as this would result in a significant increase in the risk of losing the client.[48]

(b) KPMG said that timing issues were not a continuous barrier and so would not enable an incumbent to reduce the competitiveness of its offering, since if it did so companies would switch audit firm once short-term constraint on tendering and switching were relaxed.[49]

34. With regard to the constraints of the corporate reporting cycle, firms noted the ability of companies to work effectively within the constraint to plan the tender process for the most convenient time in the year.

35. KPMG challenged our evidence base for reputational issues discouraging switching; it said that we had presented only very few examples and had not presented evidence that this would be an issue for more than a handful of companies. In KPMG's experience, this was not an issue that would prevent companies from switching, or credibly threatening to do so.[50]

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[47] PwC response to CC working paper 'Evidence of switching costs', paragraph 11.
[48] Deloitte response to CC working paper 'Evidence of switching costs', paragraph 3.2.
[49] KPMG response to CC working paper 'Evidence of switching costs', paragraph 3.3.
[50] KPMG response to CC working paper 'Evidence of switching costs', paragraph 3.3.6

36. BDO pointed to the role of the book-runners in the case of Company H, and said that the role of intermediaries was important.[51]

Increased risk of audit error

37. In this section, we consider evidence relating to concerns that there is an increased risk of audit error following a change in auditor. We set out evidence from: the case studies, academic literature, the first survey and from the firms (including comments on our switching costs working paper).

Case studies

38. At Company A, the ACC (a former audit firm partner) thought that changing auditor was risky, especially in the first year of appointment where the auditor had to familiarize itself with the business and management issues. He described first-year audits as 'scary' due to the auditors' lack of knowledge of the particular company and its management.[52]

39. The ACC at Company D said that as long as the auditors were independent it was good to have auditors who understood the business and who were able to identify the risks. The risk of switching auditors was that they did not immediately understand the business.[53]

40. The ACC at Company F said that to do a good job, auditors had to understand the fundamentals of the business. Overly rapid rotation risked losing this understanding.[54]

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[51] BDO response to CC working paper 'Evidence of switching costs', paragraph 2.4
[52] See Appendix 2, 'Case studies' Company A, paragraphs 61 & 76.
[53] See Appendix 2, 'Case studies' Company D, paragraph 64.
[54] See Appendix 2, 'Case studies' Company F, paragraph 51.

41. At Company G, the ACC (also a former audit partner) considered that switching auditor for a bank had a huge risk associated with it. He considered that the risk of audit failure was higher when an auditor was changed, and referred to the empirical research undertaken by Bocconi University.[55] The GFC also raised the risk of auditors missing something that management either did not want to share or that they had not fully understood as being the 'most significant downside' to switching auditor.[56]

Academic literature

42. The academic literature primarily considered the effect of tenure on quality and not the cost of switching per se. However, the two are related.

Effect of tenure on audit quality

43. Professor Vivian Beattie (whom we instructed to conduct an academic literature review[57] for us) suggested that the evidence in relation to the impact of long tenure on audit quality (and perceptions of audit quality) was mixed, although she concluded that most evidence did not support mandatory rotation to reduce tenure periods:

> For example, Gul et al. (2009) find that short tenure is associated with lower earnings quality (consistent with a lack of client-specific knowledge), especially for non-industry specialists. Jenkins and Velury (2008) find that reported earnings are more conservative in cases of long tenure (US study). Li (2010) extends this analysis, reporting that the result holds only for large companies or companies strongly monitored by their auditors. Ruiz-Barbadillo et al. (2009) investigate a period when audit firm rotation was mandatory in Spain, finding no evidence of a higher propensity to issue going-concern qualifications. Jackson et al.

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[55] See Appendix 2, 'Case studies' Company G, paragraph 67.
[56] See Appendix 2, 'Case studies' Company G, paragraph 24.
[57] www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/initial_review_of_relevant_academic_literature_in_the_audit_market.pdf.

(2008) find that audit quality (measured as the propensity to issue a going-concern opinion) increases with audit firm tenure and is unaffected when measured as discretionary accruals (Australian study). Lim and Tan (2011) find that the relation between audit tenure and audit quality is conditional on auditor specialisation and fee dependence (archival US study). The positive link between tenure and quality is stronger in the presence of specialists and lower economic dependence. By contrast, Joe et al. (2011) use a proprietary US Big4 audit firm working paper data set from 2002 to find evidence that audit adjustments are more likely to be waived for clients with whom the firm has had a longer association.[58]

Switching auditors and effect on the cost of capital

44. The Cardiff Business School report[59] highlighted that in some cases there was a tenure effect associated with the cost of debt, and hence there may be a cost implication associated with switching auditor:

> There are some suggestions in the academic literature that debt providers are concerned by the identity and/or quality of borrowers' auditors. Pittman and Fortin (2004) found, based on a sample of 371 newly public US firms, that the cost of debt capital is lower if the firm appoints a (then) Big 6 auditor. This effect was, however, found to subside over time and to be most pronounced for younger firms, for which less financial information is available. Furthermore, this study relied on a 'noisy' measure of the cost of debt estimated from interest payments in the financial statements, rather than directly on lending agreements.

[58] Initial review of relevant academic literature prepared by Professor Vivian Beattie Section 2.6 (pp20 & 21).
[59] See Appendix 7, 'The role of city institutions: Auditor clauses in loan agreements, IPO advisors and Private Equity Houses', Annex A.

45. Professor Beattie's review[60] noted that a study of the impact of audit tenure by Boone et al (2008) proxied investors' perceptions of audit quality using the ex ante equity risk premium (the company cost of equity capital minus the risk-free rate of interest). Boone et al found that the premium fell in the early years of tenure (indicating higher perceived audit quality consistent with learning effects), and rose thereafter (consistent with independence impairment). Mansi et al (2004) found that longer tenure was associated with a lower cost of debt. Both of these studies were based on US data.

46. Professor Beattie's review[61] reported that in their synthesis of the (mainly US) auditor switching literature, Stefaniak et al (2009) concluded that auditor change generally resulted in negative share price reaction.

Survey responses

47. In response to the CC's first survey, the increased audit risk in the first two or three years of an engagement was mentioned as a switching cost. See Appendix 3, 'CC first survey results', paragraph 61.

Submissions from firms on switching costs

Deloitte

48. Deloitte considered the benefits of a long-term relationship with audit clients including: developing a more in-depth understanding and knowledge of the client, its business and markets, systems, controls, processes, personnel, culture, tone from the top, values and transactions.

49. It said that these in turn led to:

(a) a much greater appreciation of the risks inherent within the client's business;

(b) being able to deliver a more robust and challenging audit;

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[60] Professor Beattie's review, section 2.11.1, p26.
[61] Professor Beattie's review, section 2.11.2, p26.

(c) being able to provide more insights of value to the client; and

(d) a more efficient audit.

50. Deloitte said that the benefit could be demonstrated by the length of time taken to perform certain tasks in the first year of an audit when compared with the time required in subsequent years. For example, one client for whom Deloitte had now completed two audits, the group audit team's activities to understand the client's systems and processes and establish and coordinate component audit teams around the world took around 10,000 man hours in the first year. In the second year audit, these tasks took around 6,000 man hours.

51. Deloitte said that possible adverse outcomes in terms of audit quality (and cost) might arise from switching due to an auditor's inevitable initial lack of knowledge, understanding and familiarity with the company, its operations and people. Its greatest concern was the possibility that frequent switching could lead to a reduction in the reliability of financial statements. In the first few years of an audit relationship, the auditor's knowledge and understanding of the business would naturally not be as developed as in later years. There was, therefore, a greater chance that the auditor would not identify that certain transactions were unusual for the business. With greater knowledge and experience of the company gained over a period of time, the auditor would be better placed to identify such transactions and to challenge management as to their purpose. Deloitte said that this meant that even if the auditor conducted the audit entirely properly, there was an increased risk in the earlier years that material errors in the financial statements would go undetected.[62]

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[62] Deloitte response to issues statement (public version), paragraph 6.4.

52. Deloitte cited the following academic literature/research in support of its view that in the earlier years of an audit relationship, there was an increased risk of unreliability of the financial statements:

(a) Ghosh and Moon (2005) conducted some research into the relationship between auditor tenure and audit quality. Their results were generally consistent with the hypothesis that reported earnings were perceived as being more reliable as auditor tenure increased.

(b) Myers, Myers and Omer (2003) suggested that in the then current environment, longer auditor tenure, on average, resulted in auditors placing greater constraints on extreme management decisions in the reporting of financial performance.

(c) The Public Company Accounting Oversight Board (PCAOB) reviewed several studies on the relationship between auditor tenure and audit quality between 2002 and 2010. It found that 'Many, though not all [of the studies], tend to support the view that engagements of short tenure are relatively riskier'.[63]

EY

53. We note that EY, in a tender proposal where it was the incumbent auditor, emphasized the risks associated with a new auditor including a view that allegations of failure occurred more frequently when a firm was in its first years of an audit engagement (Appendix 23, 'The tender process', paragraph 93).

PwC

54. PwC said that 'the more familiar the auditor is with the client's business, the better it will be at identifying potential areas of concern for the audit, and in effectively and efficiently carrying out the audit'.

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[63] Deloitte response to issues statement (public version), fn 41.

55. PwC identified a number of costs associated with switching which were significant for the company, while not being so high as to prevent the company from moving if it were dissatisfied with the level of service, including 'increased risks for the company in the first few years of the new audit firm, as the new audit team strives to get to know and understand the business to be able to exercise informed judgement on those issues particular to the company and the industry'.[64]

Firm's responses to switching costs working paper

56. KPMG considered that the inherent risk of an audit error might be lower for an incumbent audit firm (compared with any other rival firm) to the extent that incumbency was associated with better knowledge of the company. It was for this reason that it considered frequent switching to be inefficient as it would lead to duplication in learning. Further it noted that:

(a) any risk differential could be minimized by a (non-incumbent) audit firm by deploying the necessary resources; and

(b) the extent to which such differentials existed was a function of incumbent firms seeking to provide as good a service as possible in the face of competitive pressures.[65]

57. KPMG said that intense competition led to high-quality audits provided by incumbent audit firms. If this translated to a differential between the quality of incumbents and competitors (and a difference in the actual or perceived risk of errors), then this might reduce the incentive to switch—but this was a reflection of intense competition rather than a factor that gave rise to competition concerns. Therefore KPMG said that the risk that changing audit firm would increase the likelihood of an audit error did not allow the incumbent firm to be less competitive to its existing customers and on that

[64] PwC response to issues statement (public version), paragraph 5.35.
[65] KPMG response to CC working paper 'Evidence of switching costs', paragraphs 2.1–2.3.

basis could not be considered as switching costs in the sense that it might have the effect of increasing an audit firm's market power or allowing it to reduce the competitiveness of its offer.[66]

58. KPMG said that our definition of switching costs risked missing this crucial distinction and that it was not correct to characterize the increased risk of an audit failure as a switching cost, as this fact was not an exogenous one that allowed incumbents to exploit market power but rather was a reflection of the competitiveness of the incumbent firm's offering.[67]

59. Mazars and BDO questioned the relevance of the Bocconi University research cited by the ACC at Company G. Mazars' understanding was that this had not been published in a peer-reviewed academic journal and it did not know whether the research was funded or supported by dominant audit firms directly or indirectly.[68] BDO said that the Bocconi research referred to related to switching auditors following mandatory rotation; and that subsequent research by Bocconi University into switching auditors voluntarily (ie after tendering rather than mandatory rotation) showed that such changes produced enhancements in service and audit quality. BDO therefore considered that it was important to distinguish switching after a mandatory tender from mandatory rotation.[69]

60. BDO noted the reference in Professor Beattie's review to Jackson et al (2008). It considered that the propensity to issue a going-concern opinion was not an appropriate measure for audit quality. The propensity to issue such an opinion might depend on other factors, such as the quality of a firm's client base, the economic activities undertaken by those clients, the spread of industries or sectors in which those clients

[66] KPMG response to CC working paper 'Evidence of switching costs', paragraph 2.4.
[67] KPMG response to CC working paper 'Evidence of switching costs', paragraphs 2.5 & 2.6.
[68] Mazars response to CC working paper 'Evidence of switching costs', paragraph 6.
[69] BDO response to CC working paper 'Evidence of switching costs', paragraph 2.5.

operated and/or general economic trends, rather than the quality of the auditor alone.[70]

61. BDO said that it was in the Big 4 firms' interests to emphasize and exaggerate switching costs. It noted EY's advice to partners and staff as a demonstration of this.[71] Mazars said that EY placed a different emphasis on the challenges of switching, depending on whether it was the incumbent or a bidder.[72]

Change in auditor's opinion of an accounting treatment

Case studies

62. We considered whether there was evidence that a new auditor might take an alternative view of a company's accounting treatment from the previous auditor; or might approach the audit in a manner that unearthed something new/unexpected. This might be a cost (or in some cases a benefit) that management and/or the company contemplate when considering switching auditor.

63. We note that the AEP at Company I said that it was important to ensure a 'seamless transition' when audit partners rotated from a relationship and judgement point of view.[73] This indicated that a change in approach may be less likely when companies continue with the same firm.

64. The evidence we found related to where a company had changed auditor following a disagreement in accounting treatment, rather than where a disagreement followed the appointment of a new auditor. For example:

[✂][74,75]

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[70] BDO response to CC working paper 'Evidence of switching costs', paragraph 2.6.
[71] BDO response to CC working paper 'Evidence of switching costs', paragraph 2.3.
[72] Mazars response to CC working paper 'Evidence of switching costs', paragraph 5.
[73] See Appendix 2, 'Case studies' Company I, paragraph 88.
[74] [✂]
[75] [✂]

Main party hearings

GT

65. GT told us that it was only when a company changed its audit provider that it obtained a completely fresh perspective in terms of approach and technical issues.[76] It said that the benefits of a fresh pair of eyes could be seen from the example of one large audit client, [✂]. During the tendering process, GT flagged that there was something that looked odd in the financial instruments in the balance sheet. After winning the audit and before starting work, GT began to receive further information and flagged that the financial instrument had been wrongly included so the balance sheet was fundamentally mis-stated. There was then concern over what would happen with respect to FSA regulations. GT could not accept the mistreatment of the accounts and advised the company what it should do in terms of the financial reporting arm of the FRC and the FSA.[77]

PwC

66. As a new auditor, PwC occasionally found itself in the position of having to explain to an AC changes it was seeking to a company's accounting policies or practices, or changes to its planned audit approach.[78]

Firms' responses to switching costs working paper

67. KPMG said that we had presented no evidence to support the hypothesis that management and/or the company might factor in as a cost, when considering switching audit firm, that a new audit firm might take an alternative view of a company's accounting treatment to the previous auditor. It said that the example in relation to Company I did not directly relate to the hypothesis and that examples of companies changing auditor following a disagreement over an accounting treatment

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[76] GT hearing summary, paragraph 30.
[77] GT hearing summary, paragraph 31.
[78] PwC hearing summary, paragraph 26.

referred to a different set of circumstances. KPMG said that there was no incentive not to switch audit firm because of concerns about a change in the approach to accounting practices. The fresh pair of eyes that a new audit firm could bring was often a key benefit and one that 27 per cent of FTSE 350 companies in the CC survey had cited as a reason for switching ('reviewing keeps things fresh/avoids complacency/policy to switch regularly'). It said that the AC had no incentive to ensure that the same view of accounting treatment was given by a new audit firm, and in KPMG's experience ACs were keen to hear about alternative views and approaches.[79]

Quality of advice

Case studies

68. Some companies thought that the quality of advice received from the auditors increased over time. If the quality of advice to a company deteriorated following a switch, then there was a potential cost in changing auditors. For example:

(a) At Company B, the AEP said that it was not 'completely unfair' to categorize him as being 'at the top of his game' when he did his fifth audit of the company, although he said that there were benefits to having a fresh look.[80]

(b) At Company F, the ACC thought that there was a time for fresh eyes but five years was too short a period before switching, as the company lost the benefit of knowledge acquired by the auditors.[81]

Evidence from audit firms in relation to switching costs

Deloitte

69. Deloitte said that a long-term relationship with an audit client allowed it to provide more insights of value to the client—see paragraphs 48 and 49 above.

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[79] KPMG response to CC working paper 'Evidence of switching costs', paragraph 3.4.
[80] See Appendix 2, 'Case studies' Company B, paragraph 107.
[81] See Appendix 2, 'Case studies' Company F, paragraph 53.

PwC

70. PwC said that while there were switching costs, these were not the main reason that companies did not tender—rather there were enhanced quality benefits accruing from the knowledge and experience gained over time by the existing auditor, and companies could take advantage of these benefits while the threat of tender ensured that competitive pressure was placed on the audit firm.[82]

71. It said that a thorough knowledge of the business allowed the auditor to 'provide insight and advice on issues such as: the effectiveness of the company's operating and financial management systems; the design and implementation of its internal controls; and recommendations for improvement'.

Provision of non-audit services

[Anonymous 1] plc[83]

72. [Anonymous 1] plc noted that one Big 4 firm decided not to tender for its audit work as this would mean terminating its significant consulting contracts with the company. It also explained that the audit firm that was selected as a result of the tender would lose some consulting work as a result.[84] The company had strong relationships with all the Big 4 firms and had to weigh up the loss of the preferred auditor providing NAS in selecting the preferred auditor as the auditor.[85]

73. This example highlights a potential cost to companies of switching auditors as they may not be able to continue with their preferred provider of NAS (see also paragraph 26 above).

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[82] PwC response to issues statement (public version), paragraph 1.11(c).
[83] www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/summary_of_conference_call_25_january_2012.pdf.
[84] Paragraphs 14 & 21 of published summary of call with Anonymous 1.
[85] Paragraph 16 of published summary of call with Anonymous 1.

How firms respond to company switching costs

74. We considered how audit firms respond to such potential company switching costs, in order to minimize them and so facilitate switching. We note that PwC considered the costs incurred by firms to be independent of the costs of switching for companies.

75. We set out the evidence gathered from the case studies, the firms, our analysis of the engagement database and the firms' responses to our switching costs working paper.

Case studies

76. Companies and firms expected the time cost of auditors becoming familiar with a new company to be absorbed by the audit firm. Managing the transition was mentioned as a feature of the tender process by Company H (see paragraph 9*(i)* above).

77. A number of AEPs told us that their recovery rates in the first year were poor, but increased in subsequent years once their knowledge of the business and efficiency increased. In summary, Company E's AEP told us that in the first year of an audit there were inevitably set-up costs which affected the recovery rate. The AEP wanted to understand the business properly and therefore the review time was longer. He needed to have more meetings with more people.[86]

78. Our case studies indicated that both firms and companies viewed provision of NAS as a way of developing a working relationship with one another. If firms already had a working relationship with the company, this might reduce some of the time costs involved in building an understanding of the company. However, this was likely to be limited as the same individuals were unlikely to be closely involved in audit and non-audit work.

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[86] See Appendix 2, 'Case studies' Company E, paragraph 99.

Evidence from audit firms in relation to switching costs

Tender documents

79. Our review of the tender documents (Appendix 23, 'Tender process', paragraphs 86 to 99) showed that audit firms tended to set out detailed transition plans to minimize costs and disruption to a company when changing auditor. Details of the transition plan included:

    (a) identifying a 'transition partner' who would help the company and the firm during the beginning of the relationship;

    (b) defining a precise timetable for the transition period; and

    (c) defining relevant meetings and deliverables concerning transition.

80. Knowledge of the company through previous relationships was often emphasized by the audit firm as a reason why transition should be smooth. The review of tender documents showed that the Big 4 firms tended to have thorough transition plans, and also were able to point to a broader range of experience in transitioning companies, sometimes even being able to point to firms transitioned specifically from the company's incumbent auditor. Mid Tier firms also mentioned transition experience although they had fewer and smaller clients.

EY

81. EY considered that some of the costs of switching were met by the incoming audit provider as an initial cost of delivering the service to reduce the costs to the client and to induce switching. For example:

    (a) EY had in the past offered to complete initial work at reduced rates, and had agreed to absorb initial costs associated with understanding the business and setting up the audit approach. These costs were normally built into EY's commercial pricing decisions, and in the majority of cases the fee quote would be fixed, subject to material change within the client, for a period of up to three years.

(b) Good project management by EY could significantly reduce companies' switching costs.

(c) When establishing a new audit relationship, EY would take positive steps to ensure that the risk of 'making mistakes initially' was minimized. For example, EY:

(i) would work with the client to put in place an appropriate audit strategy and methodology;

(ii) would ensure that the team conducting the audit had the requisite industry knowledge and expertise, to the extent possible; and

(iii) was required to liaise with the outgoing auditor in order to understand all relevant facts.[87]

PwC

82. PwC said that the significant client-specific investments that audit firms made during a tender process and in the early years of an audit were effectively sunk costs. It considered these costs necessary to ensure that an appropriate quality of audit service could be provided in the first year (and so reduce the likelihood of failure) and increase the effectiveness and efficiency of performing the audit in future years. PwC said that the only way for an auditor to recoup these costs was by offering an ongoing attractive price and service proposition which ensured that it maintained the audit appointment from the company for at least a few years to recoup these investments.[88]

KPMG

83. KPMG said that its pitch and proposal documents referred to insights it had already gained about a prospective client at the point of an audit tender, in an effort to illus-

[87] EY response to issues statement (public version), paragraph 55.
[88] PwC response to issues statement (public version), paragraph 5.36.

trate the minimal management time that would be involved in getting KPMG 'up to speed' with that potential client's business.[89]

84. KPMG said that prior to a tender it would have invested substantially in order to become a more credible alternative to audit clients of other audit firms. This investment included learning about the business of target clients and developing the relationship with management. It might involve offering informal advice on financial reporting, perspectives on corporate governance, assurance and accounting standards, and other informal advice all aimed at demonstrating the credibility and knowledge of the firm and individual audit partners and staff.[90]

Data analysis

85. We analysed data from the 'engagement database' to see if there was evidence of increased time costs incurred by firms in early years of an audit. Table 1 sets out the percentage change in total hours worked by an audit firm following its appointment compared with the previous auditor (ie in years 1 to 4 it is compared with the total hours worked by the previous auditor in year 0). We considered FTSE 350 engagements where data was available pre- and post-change in auditor.

TABLE 1 **Percentage change in total hours worked by an audit firm in the years following appointment compared with hours worked by previous auditor**

Number of years after appointment	*No of companies in sample*	*% change in total hours*
0	19	0.0
1	19	24.3
2	13	31.5
3	6	14.3
4	5	8.2

Source: CC analysis.

Note: Year 0 represents the previous auditors' financial year ending prior to the *start* of the company's financial year audited by the new auditor

[89] KPMG response to CC working paper 'Evidence of switching costs', paragraph 3.6.3.
[90] KPMG response to issues statement (public version), section 7.1.

86. Table 1 shows that across all engagements the number of hours worked in the first year of appointment was 24.3 per cent higher than the hours worked on the companies' audits by the previous auditors. In the second year of appointment, the number of hours worked increased again to 31.5 per cent more than the previous auditors. In the third year, the number of hours worked by the audit firm reduced but remained higher than the hours worked by the previous auditor.[91]

87. We reviewed the share of hours by grade and found that across all engagements the share of senior audit staff time increased in the year following a switch compared with the previous auditor, as set out in Table 2.

TABLE 2 **Share of hours by grade, by year following appointment compared with previous auditor**

per cent

No of years following appointment	*Partner*	*Director*	*Senior manager*	*Manager*	*Other qualified*	*Unqualified*	*Administrative*
0	3.9	2.0	8.7	13.5	23.2	46.8	1.8
1	4.7	4.4	10.3	13.7	23.4	42.7	0.7
2	4.6	5.2	10.2	16.2	18.9	44.2	0.6
3	4.9	2.9	10.8	16.0	17.9	46.9	0.5
4	4.5	2.6	10.0	15.7	14.8	51.8	0.5

Source: CC analysis.

88. Table 2 shows that compared with the previous auditor, the proportion of hours spent on the audit by senior staff (ie senior manager, director and partner) increased in the first year following a change in auditor. The proportion of hours spent by managers and other qualified staff remained broadly the same in the year following a change in auditor and the proportion of total hours spent by unqualified and administrative staff reduced.[92]

[91] We reviewed the data on the basis of 'Year 0 represents the previous auditors' financial year ending prior to the *end* of the company's financial year audited by the new auditor', and also found that the total hours worked increased in the three years following the switch compared with auditor hours worked prior to the switch.

[92] Again looking at this data on the basis of 'Year 0 represents the previous auditors' financial year ending prior to the *end* of the company's financial year audited by the new auditor', and found similar results with a reduced proportion of hours spent in the first year by unqualified and administrative staff and an increase in qualified and above staff/partners.

89. As explained by PwC (see paragraph 92), the data analysis of hours was complicated by possible scope changes after a switch and the need to standardize year ends. Fee and hours data had been presented according to the audit firm's accounting year. Using such data would not necessarily relate to the time spent performing a full year's audit, and fees and hours relating to more than one year could be intermingled and therefore misrepresent the extent of changes in fees and hours following a switch being analysed correctly.[93] However, whilst we cannot be specific as to exact inputs in a given year, we considered that for the purposes of exploring high-level trends as to audit hours employed by new audit firms (either across all staff or segments of staff), the data presented was appropriate.

Firms' responses to switching costs working paper

90. Deloitte said that for the purposes of understanding the incentives for companies to switch auditors, the relevant costs were those that were faced by the companies and not the costs to the audit firms of acquiring the knowledge of the company necessary in order to undertake the audit to the necessary standards.[94]

91. Deloitte said that the evidence base for a conclusion that top tier firms appeared better able than Mid Tier firms to signal their ability to manage auditor transition was not clear. BDO considered our view that 'Big 4 firms tended to have more thorough transition plans, and were also able to point to a broader range of experience in transition companies' as unjustified. It said that non-FTSE 350 clients were more likely to switch auditors than FTSE 350 clients and BDO managed transitions on a daily basis.[95]

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[93] PwC response to CC working paper 'Evidence of switching costs', paragraph 10.
[94] Deloitte response to CC working paper 'Evidence of switching costs', paragraph 2.1.
[95] BDO response to CC working paper 'Evidence of switching costs'.

92. PwC said that we should be careful in interpreting our analysis of the number of audit hours undertaken three to four years after a switch because of the time elapsed since the tender and the small sample of data available. PwC could identify clients which had required a growing amount of auditing hours after a switch, and as a result considered the reduction we found in the third year after a switch to be not always the case. Sometimes the reduction in hours did not occur until year 4 to 5.[96]

93. KPMG said that its own evidence supported our finding that there was increased work by the auditor in the early years of audits. [✂][97]

[96] PwC response to CC working paper 'Evidence of switching costs', paragraph 10.
[97] KPMG response to CC working paper 'Evidence of switching costs', paragraph 3.7.

Price concentration analysis

Introduction

1. This appendix outlines the reasons why the CC does not propose to proceed with a price concentration analysis (PCA) in the market for audit services. There is a substantial academic literature in this area, mainly using US data but with some work on UK data also. Having reviewed this literature and considered the evidence available to us from other sources (such as surveys), we do not believe that the current UK audit market is a good 'fit' for a PCA. That is, given the data and the context, we see no path to developing an analytical framework capable of providing firm conclusions about the *causal* relationship between changes in concentration and changes in audit fees. This is for two main reasons: *(a)* doubts about whether the problem of 'endogenous competition measures' can be adequately resolved; and *(b)* the difficulty of defining a sufficient number of distinct audit markets.

2. We do not argue that a PCA or related approach can never be usefully applied to any audit market. Indeed we provide an example of a published US study which is able to overcome the above problems by looking at the effect on municipal audits of changes in regulations at the state level.[1] Rather we argue that it is difficult to translate such methodologies into the UK context.

3. The general objective of a PCA is to investigate how concentration is related to market power, ie the ability of firms to price above cost. To this end, there needs to be a number of independent product or geographic markets in the supply of relevant

[1] See paragraph 22.

goods or services where concentration varies sufficiently while other parameters remain relatively constant or can be accounted for with reasonable accuracy.[2]

4. In this case we are interested in investigating the relationship in the supply of audit services between audit fees and market concentration: in particular, whether there is evidence that higher concentration in the supply of audit services to some or all FTSE 350 and Top Track 100 companies has resulted in these companies paying higher audit fees, controlling for other factors that may explain differences in observed audit fees.

5. An analysis of this type was prepared for the Department of Trade and Industry and the Financial Reporting Council by Oxera in 2006. The impact of concentration on audit fees has also been the subject of a number of academic studies. A short review of these studies is in Annex A. We note that some studies concluded that higher concentration had been associated with higher audit fees. In 2006, PwC prepared a critique of the Oxera study. PwC said that the FAME data used by Oxera was not reliable and that the specification of the model failed to adequately control for endogeneity and omitted variable bias.

6. In 2012, Deloitte published its own critique of the Oxera study, and of a subsequent update to that study produced by the Office of Fair Trading.[3] Like PwC, the Deloitte paper criticized the quality of the FAME data used by Oxera. Deloitte also raised further methodological problems with the Oxera approach. Oxera responded to the

[2] Beckert and Mazzarotto (2010).
[3] Deloitte, *Audit pricing analysis*, 27 February 2012. Another price-concentration analysis was prepared by London School of Economics researchers on behalf of BDO Stoy Hayward LLP. See Kittsteiner and Selvaggi (2008).

Deloitte critique and pointed out several shortcomings in Deloitte's alternative approach.[4]

7. The structure of this appendix is as follows: first, we explain the specification of a PCA that we considered and the data that was available to us; we then set out the conceptual and practical problems that we would have faced had we decided to proceed with such an analysis; and finally, we give the reasons why we decided not to proceed with this analysis.

8. We concluded that a PCA analysis would be unlikely to give sufficiently robust findings for the CC to be able to draw conclusions from this analysis on the relationship between fees and concentration in the supply of audit services. This was chiefly because of *(a)* the need to address the potential for endogeneity in the concentration measures, and *(b)* the difficulty of defining a sufficient number of markets that were truly distinct in terms of audit competition.

Model specification and data

9. Building on previous studies, we considered estimating the relationship

$$audit\ fee_{it} = const + \alpha\, CM_{st} + [\beta\, audit\ fee_{it-1}] + \gamma\, x_{it} + \\ \delta\, sector + \kappa\, capm + \lambda\, year + \varepsilon_{it}$$

with i indexing the audited company, t the year and s the sector; CM is the concentration measure, capm index designation (dummies).[5] Sector and year denote the dummies for sector and year. x is a vector of other explanatory factors that affect the audit fee. We also considered the inclusion of the lagged audit fee, $audit\ fee_{it-1}$.

[4] Oxera, *Comments on Deloitte's audit pricing analysis*, 24 May 2012.
[5] 'Index designation' refers to the distinction between FTSE 100, FTSE 250, and other listed and private companies. In the first instance, the 'index designation' indicator variables refer to the distinction between listed and non-listed companies, but can be allowed to vary with index membership (distinguishing FTSE 100 from FTSE 250 and other listed companies). Hence, depending on the context, 'index designation' in the following might also be used to denote a combination of listing status *and* index membership.

10. Concentration is typically measured with a Herfindahl-Hirschmann Index (HHI), based on auditors' revenue shares within each sector-index designation combination, in each year. In any given year, this measure is constant for all auditees in the same sector and index designation.

11. The data gathered during this investigation is discussed in Appendix 6. The key points to note were that we had an engagement data set of around 650 companies identified as being a FTSE 350 and/or Top Track 100 company in one or more years over the six-year period 2006 to 2011. For each client, for each year in which they were audited, we had information on the auditor, the audit team, and the fees for audit and non-audit services, as well as client characteristics such as sector, index designation, and financial performance. This data came from parties' responses to our data request, supplemented with information from publicly available sources where necessary. The data had a panel structure, in that each client typically appeared multiple times—once for each year in which it was audited.

Potential problems

12. In this section, we set out certain conceptual and practical difficulties that we identified in estimating, via the model in paragraph 9, the causal effect of concentration on the audit fee. In particular:

    (a) the limited number of candidate product markets within the supply of audit services to FTSE 350 and Top Track 100 companies across which we could explore the effect of variation in market concentration;

    (b) insufficient variability in concentration over time; and

    (c) further complexity and data limitations associated with addressing potential endogeneity in the concentration measures.

13. We deal with each of these below. We first present a broad overview of two key methodological problems—endogenous competition measures and market definition—couched in econometric terms. We then discuss particular complicating features of the present application in more detail, with reference to survey data and other evidence.

Endogeneity in the competition measure

14. In the model in paragraph 9, in order to infer that the coefficient α on CM_{st} represented the causal effect of competition on audit fees, it was necessary to assume that CM_{st} was uncorrelated with the random error ε_{it}. So, it was necessary to assume that there was no unobserved factor which simultaneously affected both the level of competition in a sector-index designation, and the level of audit fees. If such factors existed, then they confounded any inference about the causal effect of CM_{st} on audit fees. An observed correlation between the two variables could arise not from a causal link, but simply because both were simultaneously influenced by unobservable factors captured in the error term ε_{it}. This was known as the problem of 'endogenous competition measures'. It was standard practice in price-concentration analyses to address this problem.

15. Here, as in many other contexts, it was plausible that confounding unobserved factors of the type referred to in the previous paragraph were in fact present. For example, our analysis may not measure all the factors which affected the cost of performing an audit. Unmeasured influences on costs would then be present in the error term ε_{it}. Clearly such cost factors might affect audit fees. However, they could also affect the level of competition in a sector-index designation, by making entry into that specialization less profitable. Therefore unmeasured cost factors could produce a correlation between ε_{it} and CM_{st}, in violation of the necessary assumption referred to previously.

16. Several approaches to this problem were available in the present context. The first was to assume that any confounding unobservable factors comprised solely things that were specific to a given sector (and fixed across time), specific to a given index designation (and fixed across time), or specific to a given year (and fixed across index designations and sectors). That is, we assumed that the unobservable factors were picked up by a set of 'sector effects', 'index designation effects', and 'year effects'. Such effects were already included in the model of paragraph 9 (in the form of dummy variables), so under this assumption the analysis could proceed without any amendments.

17. Given the underlying assumption, this approach worked by taking within-sector differences in auditing concentration between FTSE 350 and Top Track 100 companies, comparing these to within-sector differences in average audit fees, and seeing if the two differences were correlated. It assumed that the within-sector differences in any unmeasured 'confounding factors' were constant across sectors.

18. While not entirely unreasonable, the plausibility of this assumption was certainly open to speculation. It seemed possible that the change in unmeasured auditing costs as we moved from Top Track 100 to FTSE 350 companies might be steeper in some sectors than in others.[6] If so, then the cross-sector variation in this unobserved change could explain the cross-sector variation in differences of both concentration and audit fees. In that case the endogeneity problem had not been solved, because the underlying assumption was incorrect.

19. Without specialist knowledge of auditing practices in each sector, it was difficult to debate further the merits of this assumption. Therefore we chose to avoid this approach, and move on to consider other ways of possibly solving the endogeneity

[6] By 'steeper', we mean 'greater in percentage terms'.

problem. (Even if this approach were to be pursued, it would still run into other problems discussed below, such as those of market definition.)

20. A second approach to the endogeneity problem would employ an 'instrumental variables' method of dealing with confounding unobservables. Instrumental variables (or simply 'instruments') are auxiliary variables which are used to 'filter out' the unwanted correlation between the unobservables in ε_{it} and the competition measure CM_{st}. To fulfil this role, these auxiliary variables should be *(a)* correlated with CM_{st}, but *(b)* uncorrelated with ε_{it}. Since ε_{it} is by definition not observable, the latter property is maintained at least in part as an assumption, rather than an observed property of the data.

21. Unfortunately, in the present context there were no obvious candidates for suitable instruments—it was hard to think of observable variables which might shift around concentration in a sector-index designation without having a direct effect on audit fees. Echoing this, in our reading of the extensive academic literature on the determinants of audit fees, we came across almost no studies which used this method to deal with endogenous competition measures. Therefore we set aside this approach as being infeasible in the present context.

22. In other jurisdictions and/or for other types of audit it may be possible to find instruments for competition. Certain types of regulatory change could function in this way, changing competition without otherwise having a direct effect on audit fees. An example was the study of US municipal audits by Jensen and Payne (2005), who studied how fees changed in states which relaxed restrictions on competition for such audits.[7] It was not clear how to find and exploit similar 'natural experiments' in the UK

[7] In this case the instrument for competition was whether a given state relaxed its regulations.

context. Any such regulatory change would need to be something which affected some sectors but not others, but which did not have any direct effect on audit fees.[8]

23. A third approach to endogeneity recognized the point made in paragraph 18—that confounding unobservables may vary between index designations in a sector in arbitrary ways. For example, in some sectors there may be not much difference between unobserved costs as we moved from the Top Track 100 to the FTSE 350, while in other sectors there may be a large change. To allow for such arbitrary unobserved influences, the approach amended the model in paragraph 9 by extending the sector and index designation effects ('*sector*' and '*capm*') to include a dummy variable for every distinct *combination* of sector and index designation. Thus if we had 30 sectors and 2 index designations, where the original model used 30 + 2 = 32 dummy variables to capture sector and index designation effects, the amended model would use 30 x 2 = 60 dummy variables.

24. The new dummies were assumed to be fixed over time, and 'soak up' any time-constant factors (both observed and unobserved) that characterized a given sector-index designation combination. They therefore went a long way towards accounting for unobservables that may simultaneously determine concentration and audit fees.

25. In econometrics this was known as a 'fixed effects' approach to endogeneity. It was one of the approaches employed, for example, in Deloitte's (2012) recent analysis of audit pricing. It was also employed in Kittsteiner and Selvaggi (2008).

[8] In econometric terms, the approach of Jensen and Payne was a 'difference-in-differences' methodology. That is, fees at a 'treatment group' of auditees, affected by the change in regulations, were compared with those at a 'control group' of firms, unaffected by such changes. We understood that instances of regulatory changes which affected *all* auditees were not uncommon in the UK, but these were not good candidates for a 'difference-in-differences' methodology, because of the lack of a control group for comparison.

26. A problem with this approach was that it left us less variation in the data with which to study the effect of concentration on fees. The original model (with fewer dummy variables) allowed us to use differences in concentration between index designations in the same sector. Including the additional dummy variables took away this source of variation. The estimate of the coefficient α on CM_{st} was now driven solely by intertemporal changes in fees and concentration. That is, within a given sector and index designation, the estimate measured the correlation between changes over time in CM_{st}, and changes over time in audit fees.[9]

27. While there will certainly be variation over time in CM_{st}, it was not clear how much of this variation represents meaningful changes in concentration. Given that clients rarely switched auditors, one would expect that in many sectors CM_{st} would be fairly stable over time. What variation there was from year to year arose in part from, for example, differences in the rate of change in audit fees for different clients in the same sector.[10] (And some variation arose just from random fluctuations in the error with which audit fees were measured.) It was unclear whether such changes constituted genuine shifts in concentration, of the kind which might be argued to have a *causal* effect on audit fees.

28. This was an illustration of a problem common to all fixed-effects models. When the fixed effects (ie the additional dummy variables) were included, the signal-to-noise ratio in the explanatory variable (CM_{st} in this case) may drop substantially. This

[9] More precisely, it measured the correlation in the deviations of CM and fees from their respective averages over time within each sector-index designation.
[10] This assumed that CM_{st} was calculated from an HHI in revenue shares, a typical approach in the literature.

biased the econometrics against finding a significant effect of this variable on audit fees.[11]

29. Historically there have been some major shifts in concentration over time as a result of the consolidation of audit firms. The cross-sector average effect of such consolidations on audit fees would be captured by the year dummies in our model, and were therefore indistinguishable from simultaneous changes in the regulatory environment. Nevertheless there were sector-specific deviations from this average effect, which provided a source of intertemporal variation with which to study effects on audit fees. However, the last major such consolidation was the Andersen event around 2002, so the data would need to extend back beyond that date in order to use variation of this type.[12]

30. In summary, while this third approach had some merit as a solution for endogeneity, it essentially threw out all the cross-sectional variation in the concentration measure and focused just on intertemporal variation. We were not confident that the data, when handicapped with this restriction, would enable us to get an accurate estimate of the causal effect of concentration on fees.

31. In comments on the draft working paper on PCA, Oxera noted that the CC had collected data on audit costs at the engagement level, and emphasized the value of using such information as controls in a PCA model.[13] Certainly this would go part of the way towards controlling for any unobserved factors mentioned above. However

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[11] In the literature this is referred to as 'attenuation bias'. Deloitte (2012) found no effect of concentration on audit fees in its fixed-effect model. While this could mean that there is truly no fee-concentration relationship, it could also reflect the attenuation problem referred to in the text.

[12] The data for Deloitte's study starts in 2002, the same year that Deloitte acquired or merged with the UK assets of Arthur Andersen. Therefore it would seem that its data is not able to capture the before-and-after concentration effects of the Andersen event. A PCA study on UK data which spans both the pre- and post-Andersen periods is Kittsteiner and Selvaggi (2008). Over the whole period of their data (1998–2006), those authors find a positive correlation between fees and concentration for listed firms, but a negative correlation for private firms. This contradictory finding for private and listed firms is not very conducive to drawing a firm conclusion about the effect of increased concentration on fees. Another study which covers the pre- and post-Andersen periods is Oxera (2006). However, that study is subject to methodological criticisms mentioned above in paragraph 6.

[13] See Oxera, *Price-concentration analysis in the audit market investigation*, 2012, p3.

we were not confident that it fully controlled for such factors. For example, the engagement-level data only contained information on the labour component of audit costs. CC analysis of accounting data received from auditors suggested that for the Big 4 firms labour costs in the assurance service line comprised around 50 to 60 per cent of total costs in that line.[14] Even after controlling for the labour costs of an audit, a substantial unmeasured component could remain to contribute to endogeneity in the competition measure.

32. Other comments on the working paper pointed out that in industries characterized by a relatively small number of customers, such as that of statutory audit services for FTSE 350 companies, it was important to consider concentration on the buyer side as well. KPMG suggested that the level of concentration on the buyer side provided a lower bound for the level of supply-side concentration, and that an analysis relying on concentration as an explanatory variable should take this into account.[15] Furthermore, buyer-side concentration was likely to affect both price and seller-side concentration, and was therefore an additional factor contributing to the endogeneity of the concentration measure. However, the exact nature of bargaining between buyers and sellers was very hard to model, which once more spoke against a traditional PCA.

The problem of market definition and the number of markets

33. As noted previously, the competition measure CM_{st} was typically defined as an HHI index based on auditors' revenue shares within a market. Key to this construction was the definition of a 'market', a term which had different usages in different contexts. Here we used the term to refer specifically to the set of clients over which revenue shares were calculated, for input into the HHI calculation.

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[14] See Appendix 28, paragraph 2.
[15] See KPMG response to 'Price concentration analysis working paper', paragraph 4.

34. In some other applications, eg retail, market definition was a fairly straightforward matter of identifying distinct towns and conurbations within which consumers were likely to confine their purchase activity.

35. Things were less clear-cut in the present application, where we could not use spatial differentiation among sellers to define markets. The approach adopted in the literature on audit fees was to define a market as a combination of an industrial sector and an index designation. While pragmatic, this approach was not without shortcomings.

36. An important question was how narrowly to define industrial sectors. This involved a trade-off. Key to understanding this trade-off was to note that the basic model compared company-level outcomes (audit fees) with a market-level explanator (concentration—see paragraph 10). In econometric terms this represented measurement of a micro response (company-specific fee) to an aggregate (or 'group') variable (market concentration). Recent literature points out some difficulties in these measurement problems when there were only a small number of groups over which to calculate the aggregate variable. These difficulties related specifically to the calculation of the standard error (ie the statistical significance) of the average effect of the group variable. The essential problem was that when the number of groups was small, it may no longer be possible to employ the regular large-sample theory which underpinned statistical significance in most current econometric applications.[16]

37. To illustrate the trade-off, consider two extremes of market definition. First, suppose that industrial sectors were narrowly defined, giving us perhaps 30 such sectors. While not especially large, this number of markets may be of a magnitude sufficient

[16] See Donald and Lang (2007) and Wooldridge (2006).

to at least ameliorate some of the statistical problems referred to in the previous paragraph.

38. While a narrow market definition therefore had some apparent statistical virtues, it was not clear that this construction accorded with the evidence on how customers and auditors viewed audit markets, discussed below in paragraph 47 to 51. That discussion suggested that there were substantial opportunities for auditors to compete across industrial sectors. If that was true, then restricting the HHI calculation to a single narrow sector resulted in an incorrect measure of the true extent of competition faced by a given auditee. That is, there would be an 'omitted variable bias' in the model of paragraph 9, resulting from a failure to measure potential competition from sectors related to that of the auditee.

39. Consider then a second extreme of market definition, using highly aggregated industrial sectors. For example, suppose that we used just two sectors: 'Banking and Other Financial Services', and 'All Other Industries'. This broad classification makes it less likely that the resulting concentration measures excluded market shares of auditors who could have genuinely competed for a given company's audit.

40. At this level of aggregation, the number of groups over which audit fees were compared was obviously very small. In that case the statistical issues mentioned in paragraph 36 needed to be explicitly addressed. For example, one needed to consider whether it was feasible to employ some of the methods and assumptions mentioned in Donald and Lang (2007).[17]

[17] Two such possible assumptions were that the random errors were homoscedastic and normally distributed, and that the number of auditees in each sector (group) was large.

41. Notwithstanding these statistical considerations, an additional concern arose when very broad sectors were used. The potential problem of endogenous competition measures discussed earlier became more serious. This was because sectors now comprised many heterogeneous firms, and therefore aggregated many heterogeneous 'confounding unobservables' (eg unobserved cost factors). It therefore became more difficult to analyse the circumstances under which these unobservables were or were not correlated with the concentration measure.

42. For example, suppose that it was found that, when moving from the Top Track 100 to the FTSE 350 categories, concentration and fees both increased by more in 'Banking and Other Financial Services' than in the 'All Other' sector. Given the great variety of firms included in the 'All Other' category, it would be difficult to maintain that this could not have been caused by some quirk of how the mix of firms in 'All Other—Top Track 100' differed from that in 'All Other—FTSE 350', driving both the change in concentration and the change in fees.

43. Earlier we discussed fixed effects as a potential solution to these endogeneity problems. We also noted that this approach placed a higher burden on the data because it only used intertemporal variation in fees and concentration measures. With very broad industrial sectors this burden increased—the broader the sector, the more likely it was that the HHI showed little variation over time.

44. Since these two extreme approaches each had substantial drawbacks, the question remained as to whether there was some acceptable middle ground. Given the discussion below of survey and other evidence, it would seem that the number of sectors probably could not exceed ten without raising questions as to whether concentration measures unnecessarily excluded revenue shares in related sectors. (See paragraph 38 above.)

45. With fewer than ten sectors, the issues of small group numbers raised in Donald and Lang (2007) needed to be explicitly considered. Those authors provided inferential procedures for two special cases: *(a)* when there was a large number of observations in each group, and *(b)* when the number of observations in each group was identical and the random errors ε_{it} were assumed to be normal and homoscedastic. Unfortunately neither of those fitted the present application.

46. It therefore remained unclear how to define markets in a way that simultaneously mitigated the problem of endogenous competition measures, and also allowed the correct calculation of statistical significances. As market definition was fundamental to the model, the validity of the empirical exercise was called into question.

Further comments on market definition

47. As discussed above, the problem of market definition was addressed in the academic literature and the studies by Oxera (2006) by proxying the 'true' markets with markets based on company sector. It was said that such a 'market definition' could be justified by the need for particular expertise to audit companies in certain sectors and other characteristics which meant that they had more complex audit requirements. Oxera stated that only a few sectors were specifically identified by interviewees as not having any specific complex requirements, namely basic manufacturing, manufacturing of clothes and consumer goods, and property.[18]

48. The European Commission's Directorate General of Competition (DG Comp) defined markets for audit services in its merger reviews in 1998 (Price Waterhouse/Coopers & Lybrand (PwC & L)) and 2002 (Deloitte & Touche/Arthur Andersen (DT & AA))

[18] Oxera 2006, section 4.2.2.

based on criteria other than industry sectors. In particular, the DG Comp concluded that auditor services fell into the following product markets:

(a) audit and accounting services to quoted and large companies (using the index designation and company turnover to delineate 'large');

(b) audit and accounting services to small and medium-sized companies; and

(c) several other non-audit services.

49. The DG Comp did not exclude the possible existence of narrower markets for the provision of audit and accounting services in some sectors, in particular the banking and insurance sectors, but concluded that these did not constitute separate relevant product markets for the purposes of assessing the PwC & L merger and did not consider narrower markets in DT & AA.[19]

50. We considered whether candidate markets might be defined by reference to the characteristics of the company being audited. Relevant characteristics could include the size of the company, sector in which it operated, whether it was a listed or private company, the complexity of the organization structure and the extent of its international operations. The supply of audit services to companies with particular characteristics, for example banks and financial institutions, would comprise a separate market if audit firms that did not have experience of auditing such companies were not considered by these companies to be potential substitutes for the audit firms that did. This in turn depended on how quickly and easily an audit firm that did not have the required sector experience was able to build or acquire the credibility to compete for this business.

[19] See the decision on Case No *IV/M.1016 (PwC & L)*, paragraphs 20 and 22/3 and 49, and the decision on *COMP/M.2810 (DT & AA)*, paragraphs 21–25 and 33/4.

51. We gained some information on the client-based substitutability of audit firms from the following: the customer survey; the case studies; and the responses to the MFQ. The relevant results are set out below.

Customer survey

52. In the customer survey we asked questions about which auditor the respondent would consider if its current auditor would cease trading, where relevant, why it would consider only Big 4 auditors and whether there were any reasons why choice would be limited within the Big 4.[20]

53. The survey methodology and results are summarized in Appendix 3. For FTSE 350 companies, the key results were:

(a) Both FDs and ACCs predominately listed Big 4 firms when asked which auditors they would consider if their current auditor ceased trading. Overall 23 per cent of both FDs and ACCs said that their company would formally consider a non-Big-4 firm.[21]

(b) For those FDs and ACCs who identified only Big 4 firms, the most frequently mentioned reason for this was the size and geographic coverage of the Big 4 audit firms (59 per cent and 69 per cent respectively). Sector knowledge and experience (27 per cent and 45 per cent), reputation (23 per cent and 11 per cent), better calibre/trained staff (15 per cent and 19 per cent) and size and complexity of the audit (16 per cent and 20 per cent) were other frequently mentioned reasons.[22]

(c) 60 per cent of these FDs and 65 per cent of these ACCs also said that there were no factors limiting choice between Big 4 firms. For those who said that there

[20] Competition Commission first survey, questions C9, C10, and C11.
[21] See Appendix 3, paragraph 80.
[22] See Appendix 3, Table 23.

were, the most frequently mentioned factor was the provision of non-audit services.[23]

54. Generally sample size was not sufficient for an analysis of these results by industry sector or other characteristics of the company such as size or scale of international operations.

Case studies

55. In the case studies we spoke to the FD (or equivalent) and ACC for each company and engagement partner from the company's auditor. We discussed with them their views on the capabilities of Mid Tier firms in providing audit services to FTSE 350 companies and whether in their current position they would consider appointing a Mid Tier firm. We also asked for their views on the choice they had within the Big 4 firms.

56. With regard to Mid Tier firms, the key results were:

(a) For three of the ten case study companies, both the ACC and the CFO said that they would consider a non-Big-4 audit firm.[24] Of these, Company E and Company J were mainly UK-based (Company J was audited by a non-Big-4 firm), whereas Company I had European operations.

(b) Three of the companies would not consider, or had not considered, a Mid Tier firm:[25] Company H, Company D and Company B had relatively small audit fees (under £[✂]), but geographically diverse businesses.

(c) Company F had an audit fee of £80,000 to £90,000. It was previously audited by a Mid Tier firm and had invited the firm to participate in the recent tender. The

[23] See Appendix 3, Table 24.
[24] See Appendix 2, Company E, paragraphs 23 & 54; Company J, paragraphs 17 & 46; and Company I, paragraphs 23 & 52.
[25] See Appendix 2, Company B, paragraph 44; Company D, paragraph 28; Company H, paragraph 22.

current auditor was a Big 4 firm and both the FD and ACC had concerns about using a Mid Tier firm in the future.[26]

(d) The investors we spoke to (BlackRock and L&G) were broadly happy for any of the Big 4 firms plus other internationally recognized auditors to provide audit services to FTSE 350 companies, except for particularly large companies.[27]

(e) For companies with large global operations, the need for consistency and quality across locations was given as a reason as to why they felt limited to using a Big 4 firm. The companies wanted their auditors in each territory to have relevant sector and FTSE experience. There was a concern that Mid Tier firms did not have the required geographic coverage or the ability to ensure quality in those locations where they did undertake work.[28]

57. The case studies also provided further evidence on the barriers faced by Mid Tier firms to supplying audit services to FTSE 350 companies. As above, some of the points applied to all FTSE 350 companies (for example, the perception that the quality of staff was better in Big 4 firms, pressure from shareholders to appoint a Big 4 firm, and the market perceptions that the Big 4 firms were more capable and provided a better-quality product), and some applied to particular FTSE 350 companies (for example, the high audit risk of auditing large FTSE 100 companies and the international capability required by global companies).

58. With regard to choice between the Big 4 firms, three of the seven companies that said they would consider only a Big 4 firm said that realistically their options were limited to less than four firms. Of these:

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[26] See Appendix 2, Company F, paragraphs 26 & 54.
[27] See Appendix 2, BlackRock, paragraphs 15 & 17, and Legal & General, paragraph 15.
[28] For example, see Appendix 2, Company A, paragraph 64; Company B, paragraphs 44 & 45; and Company H, paragraph 31.

(a) Company G said that it would not use one Big 4 firm. EY provided significant non-audit services but was not considered a significant player in the global bank audit market.[29]

(b) The CFO of Company C said that he could instruct most of the Big 4 firms (some were perceived to be stronger than others, given the company's specific requirements),[30] although the ACC thought that all the Big 4 firms could compete for the audit.[31]

Responses to the MFQ

59. We asked the six largest audit firms to provide an assessment of their ability to compete to carry out audits for FTSE 350, other listed and Top Track companies. In particular, we asked them *(a)* which FTSE 350 companies they could currently not audit, *(b)* which sectors they were and were not active in, *(c)* whether they would be able to expand into these sectors where they were currently not active and *(d)* specific challenges and systematic differences between audits of companies by index designation and size (distinguishing FTSE 350, FTSE SmallCap, large non-listed companies).

Sector

60. All Big 4 auditors said that they organized their activities to a greater or lesser extent according to sectors: Deloitte used eight industry groups; EY used [✂] sectors which were managed on a global basis; KPMG's FTSE 100 and FTSE 250 clients were spread across 12 and 13 sectors respectively;[32] and PwC 30. However, in relation to an analysis of current KPMG FTSE 350 clients by ICB sector, KPMG also stated that it did not use any standard sector classifications to manage its business and that no

[29] See Appendix 2, Company G, paragraph 72.
[30] See Appendix 2, Company C, paragraph 34.
[31] See Appendix 2, Company C, paragraph 66.
[32] KPMG analysis in response to the issues statement, Figures 5 & 6.

specific sector classification was fully informative of client characteristics nor an audit firm's ability to compete for clients in that sector.

61. One sector which appeared to be 'protected' from competition to some extent was financial services companies. An audit firm, its staff and close relatives of staff involved in audits could not bank with institutions they audited and could not hold investments in those companies. Tendering and supplying audits to financial services companies (banks and insurance companies) which were not already clients therefore required the rearrangement of corporate finances, insurance arrangements and pension plans as well as changes in the personal finance arrangements of staff and their relatives to avoid 'reverse conflicts' arising from financial ties.[33] However, EY stated that it could change existing financial business relationships in order to tender for audits of financial services companies whose services it was currently using.

62. In addition to the financial sector being specific due to independence rules, this and some other sectors appeared to require particularly complex audits. PwC said that banking, mining and utilities were among the sectors that required the most complex audit services. EY said that regulated sectors had specific compliance and reporting requirements which added additional complexity.

63. PwC also said that all the largest firms could offer a competitive audit service if opportunities arose, even for companies in the most complex sectors, albeit that some might have a stronger offering than others based upon recent experience. PwC explained that the time and cost of acquiring the necessary capability and credibly to

[33] Deloitte explained that the necessary changes would lead to a longer 'lead time' for tenders for audits of financial services companies it had significant business with. PwC said that it would not tender for audits of three financial institutions because of the services it supplied to PwC. KPMG could not audit three financial institutions and one insurance company without major rearrangements, which might even prove impossible.

offer statutory audit services within an industry sector would not be prohibitive for any of the four largest audit firms in relation to any particular industry sector.

64. Generally, each of the Big 4 firms stated that they were able to provide audit services to companies in all industry sectors. PwC stated that it was active in all industry sectors and considered itself able to provide audit services for any sector or size of company because skills required to audit large companies would be to some extent transferable, and specialist knowledge needed, but not available locally, could be obtained by seconding partners and staff from within its international network. Moreover, sector expertise might also be available within PwC since it may audit smaller or non-listed companies in the same sector or UK subsidiaries of companies in the relevant sector where the lead firm was another member of the network. Similarly, Deloitte said that it was active in all industry sectors and would see itself well placed to provide audit services to any of the FTSE 350 companies regardless of size and sector. Regarding the relatively long list of 57 FTSE 100 and 60 FTSE 250 companies which it could currently not audit (this list being compiled assuming a theoretical immediate start date of an audit for the current financial year), Deloitte pointed out that it would be able to do so in almost all cases from the start of the following year—the typical start date for tenders—since impediments to independence might have fallen away or arrangements could be changed in time to be able to accept if the tender would be won, such as transition relief afforded to incoming auditors as prescribed in paragraph 172 of Ethical Standard 5. KPMG said that given transferability of specialist knowledge between audits in different sectors (eg tobacco and alcoholic beverages) and its wide presence across sectors, it would be able to and interested in supplying audit services to companies in all sectors including those where it was not currently active. EY said much the same.

Index designation and size

65. Big 4 firms said that whilst the complexity of an audit was not directly linked to the size of the audited company, factors contributing to the complexity of the audit appeared to feature more strongly in larger clients. In particular, they said that the audits of FTSE 350 companies were typically more complex than those for FTSE SmallCap and non-listed companies, because as a general rule large listed companies had wider geographical interests and more complex financial arrangements, business models and IT systems, and required additional AC meetings, compliance with additional regulatory frameworks, interim reporting and shorter reporting deadlines. As a result, large listed company audits typically required larger audit teams which included more staff with specialist knowledge and which were often partly located overseas. In addition, Deloitte used additional internal quality control mechanisms to account for the higher risk and higher market profile of the FTSE 350 companies. PwC also said that the assurance provided by an audit report was particularly important for large FTSE companies because of the necessary and inevitable distance between the broader body of shareholders (owners) and the management.

Conclusion

66. Based on the above, it appears to us that whilst it might have been possible to define separate candidate markets for FTSE 350 and Top Track 100 companies and for a small number of sectors where the auditor required particular expertise, the number of candidate markets would have been small and certainly in single figures.

Lack of variation in the data

67. To investigate the relationship between audit fees and concentration would have required variation in the data, in particular in concentration between index designations within each sector, and/or over time for each sector-index designation.[34]

68. We looked at concentration measured by HHI for the following potential candidate markets defined by sectors and index designations:

(a) FTSE 100, FTSE 250, FTSE 350 and private companies;

(b) FTSE 100, FTSE 250, FTSE 350 and private by sector; and

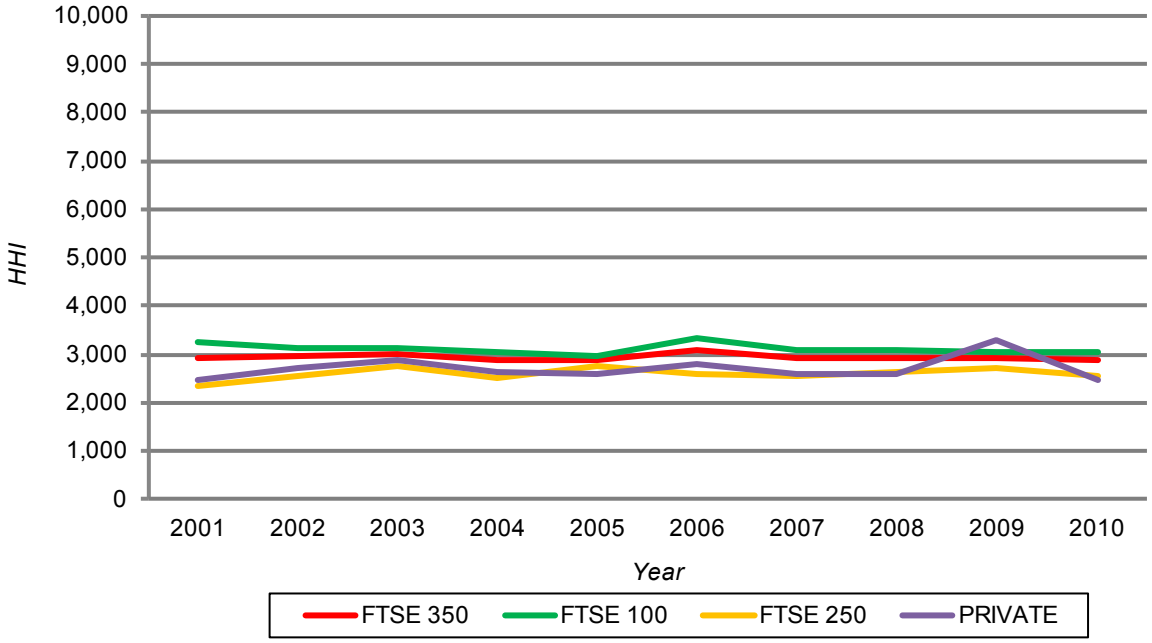
(c) FTSE 100, FTSE 250, FTSE 350 and private companies excluding banking, insurance and financial service companies.

69. Figure 1 below shows the annual HHI for FTSE 100, FTSE 250, FTSE 350 and private companies. Annex B, Table 1, reports the HHI figures underlying Figure 1.

[34] Hereafter and in the annexes we use 'index designation' as shorthand to refer to a combination of listed/non-listed status and, in the case of listed firms, index membership. Simply for convenience of terminology, FTSE 100 and FTSE 250 firms are regarded as different 'index designations' in a narrow sense, both belonging in a broader sense to the FTSE 350 'index designation'.

FIGURE 1

Annual HHI figures by index designation



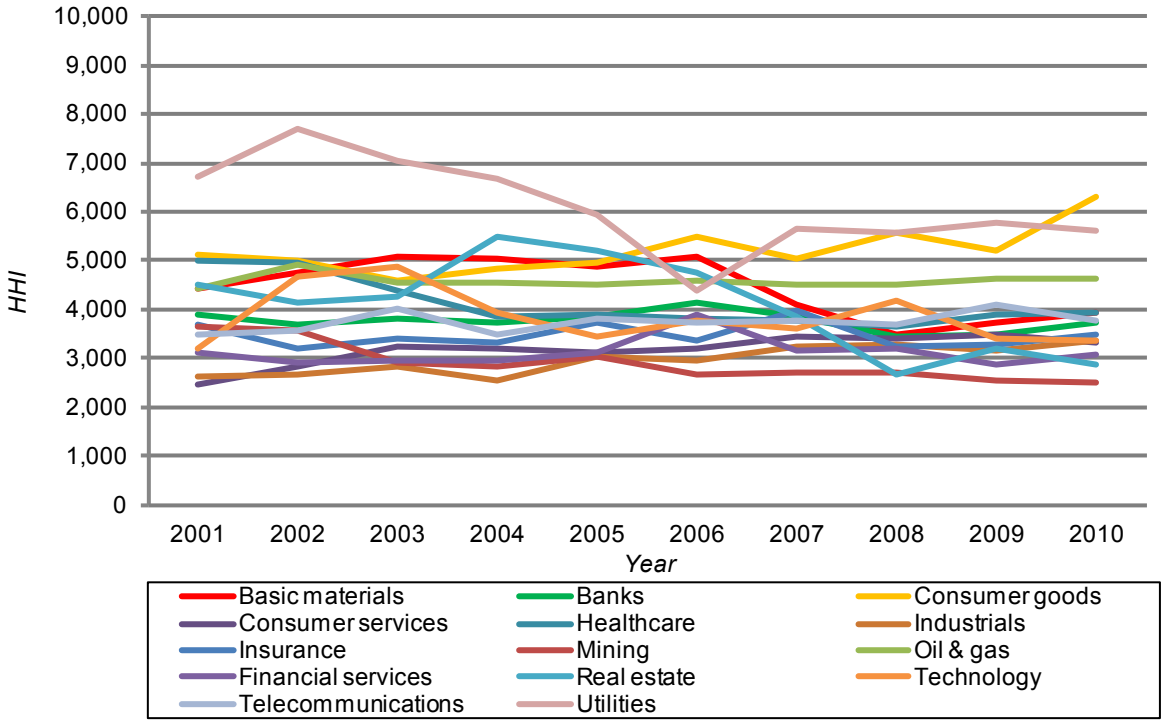
Source: CC.

70. Figure 1 illustrates that concentration within each index designation has remained relatively constant over time. We observed more variation across index designations, but the level was still low. Annex B, Figure 1, shows the annual HHI for FTSE 100, FTSE 250, FTSE 350 and private index designations excluding banking, insurance and financial services companies. Compared with Figure 1 above, we observed slightly more variation across index designations but a similarly low level of variation within index designation over time.

71. In the case of the fixed-effects model discussed earlier, we would rely on the variation in concentration for each sector-index designation over the six years for which we had data. Figure 2 below shows the annual HHI within each sector for FTSE 350 companies. Annex B, Figures 2 to 4, show the annual HHI within each sector for FTSE 100, FTSE 250 and private companies. Annex B, Table 3, reports the HHI figures underlying Figure 2 below and Annex B, Figures 2, 3 and 4.

FIGURE 2

Annual HHI figures by sector for FTSE 350 companies



Source: CC.

72. In Figure 2 we observed more variation across sectors, but for the majority of sectors we observed limited variation over time. Figures 4 to 6 showed more variation within sector over time, particularly among FTSE 250 and private companies. Although variation in HHI over time appeared higher when looking at sector-index designations, we must consider the question of the appropriateness of defining a market based on sector (see paragraphs 47 to 66).

73. We must also consider the meaningfulness of the observed changes in concentration (see paragraph 27). For some sector-index designations, the number of companies was small and the auditor switching rate was low. Changes in concentration might therefore be driven by a company moving into or out of an index designation and different rates of change of audit fees rather than a genuine shift in capital market concentration.

74. The evidence above demonstrated limited variation in index designation concentration over time. Among FTSE 350 companies we also observed limited variation in concentration over time for a number of sectors. This reduced the feasibility of a fixed-effects approach (see paragraph 26).

Potential importance of the past audit fee in explaining the current audit fee

75. Some studies found that the previous audit fee was an important driver of the present audit fee. Deloitte suggested that this was because it was used as a starting point in negotiations.

76. However, apart from possible 'inertia' in the audit fee, the lagged audit fee may also capture the effect of unobservable factors not included in the specification. Since the unobservable factors were likely to affect the previous audit fee and market concentration in the previous period in the same way as in the present period, the previous audit fee may have been a good proxy for unobservable factors affecting both the fee and concentration which could not be directly included in the specification. For that reason, the previous audit fee might appear significant only in specifications which omitted one or more (possibly unobservable) explanatory variables. By the same token, inclusion might prove to be unnecessary if we could control sufficiently for all factors that affected the audit fee (so that their effects were no longer captured by the lagged audit fee).

77. The inclusion of the previous audit fee in the specification also introduced an additional source of endogeneity if the unobservable factors were not fully controlled for.[35,36] Again suitable regression techniques had to be used to account for this

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[35] As we explained in paragraphs 14–30 above, we did not expect to be able to mitigate the problem of omitted unobservable factors completely.

[36] Since the past audit fee was partly explained by the unobservable factors (those not accounted for by dummies) which were included in the error term, the previous audit fee was necessarily correlated with the present error term which included the same unobservable factors, ie it was endogenous in the specification. Moreover, if we used a fixed effects approach to take

(cont)

endogeneity.[37] It was worth noting that the relevant literature on dynamic panel data methods was quite recent and that it would require some time to devise the appropriate model.[38]

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care of time-invariant, company-specific unobservables, we effectively demean the variables and thereby introduced correlation between the transformed dependent variable and the transformed error; see, for example, Baltagi (2005, Chapter 8), or Wooldridge (2002, p256).

[37] Since previous studies which included the lagged audit fee in the model typically did not appropriately account for this problem, the reported results and statistical tests are flawed. This included some of the specifications studied in Oxera 2006 and, by extension, in PwC's 2006 critique of Oxera. This flaw has been recognized in discussions with parties for the present Inquiry: firstly in Oxera's comments in the data meeting on 17 January 2012, secondly in Deloitte (2012), and most recently in PwC (2012).

[38] Arellano and Bond (1991). Blundell and Bond (1998).

Summary of literature on PCA in supply of audit services

Introduction

1. In this annex we give a short review on previous studies of the relationship between fees and competition in supply of audit services.

Oxera (2006)

2. Oxera sought to test the impact of industry concentration and auditor market share on fees. The model specification was as follows:

$$Audit\_fee_{it} = const + \alpha \cdot Audit\_fee_{it-1} + \vec{\beta} \cdot Year\_\vec{d}ummies + \delta \cdot Turnover_{it} + \phi \cdot Auditor\_market\_share_{it} + \lambda \cdot HHI_{it} + \vec{\xi} \cdot International\_turnover_{it} + \vec{\psi} \cdot Switches_{it} + \gamma \cdot Sector\_\vec{d}ummies + \mu \cdot Market\_\vec{type}\_dummies + \upsilon \cdot Mergers_{it} + \varepsilon_{it} \quad (1)$$

Where → indicates that the variable is a vector and the subscript *it* denotes an observation for audited company *i* in year *t*.

Variable	*Description*
$Audit\_fee_{it}$	Audit fee (log) paid by the company to the auditor at 1995 prices (NB this will include both the statutory audit and audit-related services).
$Audit\_fee_{it-1}$	Audit fee (log) in the previous year at 1995 prices. This is included because fees for any given year are often closely related to the agreed audit fee for the last year (and amended for any new factors during the negotiation).
$Turnover_{it}$	Turnover (log) at 1995 prices. This controls for the size of the company and therefore the required size and scale of the audit.
$Auditor\_market\_share_{it}$	Market share (log) of the company in total audit fees in a given sector in a given year, reported as a ratio.
HHI_{it}	Sum of the squared audit firms' market shares (log) in a given sector in a given year.
$International\_turnover_{it}$	Ratio (log) of the company's international turnover to total turnover for 2004 (constant across years). This controls for the additional costs arising from the company's international presence outside the UK.
$Switches_{it}$	Cumulative sum of the number of times the company changed auditor from 1996 to the year of observation. This controls for the impact of changes of auditor on the average audit fee.
$Sector\_\vec{d}ummies$	12 sector dummies were included and were constant across the years.
$Market\_\vec{type}\_dummies$	The type of listing market where the company's shares are traded, eg FTSE 350, Small Cap, unlisted (constant across the years).
$Mergers_{it}$	Cumulative sum of the number of times the company's turnover has increased by more than 40% in any given year between 1996 and the year of observations. This controls for the impact of M&A involving the audited company, as mergers often increase the scale of the audit.

3. The data set was constructed using the FAME database. Companies were included if they appeared in the FTSE 350 index, the FTSE Small Cap index or the FTSE

Fledgling index in 2004.[39] The 100 largest private companies (by turnover) were also included. The final data set included 739 companies covering the years 1995 to 2004.

4. Oxera found a statistically significant coefficient for both auditor market share and HHI, suggesting that high concentration has been associated with high audit fees.

Kittsteiner and Selvaggi (2008)

5. LSE Enterprise published a study in 2008 which suggested that increases in the joint market share held by the largest four auditors in 2002 to 2006 (post Arthur Andersen) were strongly correlated with higher audit fees paid by UK-listed clients. It also found a fee premium being charged by the largest auditors and that switching auditor was associated with a significant fee reduction, though this did not persist over time. The study also used the FAME database for the period 1998 to 2006 and the data set included 5,764 publicly listed and 3,052 private companies with an annual turnover of at least £1 million each year.

6. The main difference between this and the Oxera study was that it attempted to control for the riskiness and complexity of the audit by including a number of financial control variables, including: whether the company made losses; current assets divided by current liabilities; tangibility ratio (fixed assets divided by total assets); short-term leverage; and trade debtors dividing by operating profits. It did not control for mergers or switching. Explanatory variables included concentration measures (C4/C5 and HHI), a dummy to indicate whether or not the auditor is a Big N firm and a dummy to indicate whether or not the company switched auditor. The study did not use the market share variable constructed by Oxera.

[39] Companies listed on AIM were excluded because reliable data over a sufficiently long period was not available for enough observations.

US Government Accounting Office (2008)

7. This was a study of US public companies. The database was compiled by Audit Analytics, an online intelligence service that provided information on audit fees and other financial information for public companies. The data included more than 12,000 companies over the period 2000 to 2006. The econometric model took the following form:

$$y_{it} = \theta + X_{it}\beta + Z_i\delta + \varepsilon_{it} \qquad (2)$$

8. The dependent variable was the audit fee paid by the company and X and Z represented controls that are respectively time variant and invariant. The primary variables of interest were two industry concentration variables: the share of the market held by the company's auditor in a given year (in a given industry); and the HHI for the industry sector. Industries were defined by two-digit NAICS codes, which gave 23 industries. Both concentration variables were based on the total audit fees collected. The control variables were:

   (a) dummy variables: company experienced a loss; going concern issue raised; restatement was filed; non-timely filing was made; company completed SOX section 404 review; company's internal controls were found inadequate; company's financial year-ends during the busy season (December); audit firm audits 10 per cent or more of all company clients in a particular industry sector (controls for auditor's expertise); company paid audit-related fees to a second auditor; Mid Tier auditor; audit firm specific dummies for top eight firms; and years, region and industry;

   (b) assets of the audited company (to control for size);

   (c) audit fees relative to total fees paid by all clients audited by the auditor in a given industry (to control for client influence); and

   (d) number of switches over the 2000 to 2006 period.

9. The market share coefficient was found to be statistically significant.

McMeeking et al (2007)

10. McMeeking et al (2007) looked at the impact of audit firm mergers on audit fees paid by 7,255 companies listed on the London Stock Exchange in the period 1985 to 2002. This covered the period where the 'Big 8' became the 'Big 4'. The variables of interest in this case were dummy variables associated with merging firms. For example, to capture audit fee variation for the PwC & L merger, the following equation was estimated for clients of these firms:

$$LAF_i = \alpha_0 + \beta_1 PWpre_i + \beta_2 PostPWC_i + \beta_3 PWCmerge_i + \beta_4 Controls_i + \varepsilon_i \quad (3)$$

where LAF was the log audit fee and PWpre was set equal to 1 if the observation was prior to the merger and the auditor at that time was Price Waterhouse. PostPWC was set equal to 1 for a post-merger observation. PWCmerge was set equal to 1 if the observation was after the merger and the original auditor was Price Waterhouse. β_1 captured any premium that Price Waterhouse earned prior to the merger, β_2 the post-merger premium paid by continuing Coopers and Lybrand clients and β_3 any incremental post-merger premium of Price Waterhouse clients.

11. The controls used included some additional variables to those used by Oxera and LSE Enterprise to control for complexity (domestic and foreign subsidiaries ratios) and risk (eg return on investment). Company data was collected by a Standard and Poor's database and audit data was collated from a number of sources including Datastream International and Thomson Analytics Worldscope. Subsidiary data was collected from the International Stock Exchange Yearbook and published annual reports.

12. The study found the effects of mergers on fees to be mixed; fees tended to increase after mergers in 1989/90 but on average fell after the Coopers–Lybrand merger in

1997. The merger between Deloitte and Andersen in 2002 did not appear to materially affect audit fees at the time of the study. The overall conclusion was that companies were likely to pay higher fees if their auditor merged with a larger counter-part. The paper also found significant fee discounting in the 1980s but this was not sustained in the following decade.

Ding and Jia (2012)

13. Ding and Jia (2012) assessed the impact of the PwC & L merger and looked at audit quality as well as fees. The following model was estimated to investigate the change in audit fees before and after the merger for both Big N and non-Big-N auditors:

$$Logfee_{it} = \lambda_{0t} + \lambda_1 after_{it} + \lambda_i control_{it} + \varepsilon_{it} \qquad (4)$$

14. The control variables included: assets (to control for size); ratio of debt to total assets (leverage); total current assets divided by total current liabilities (current ratio); quick assets divided by total current liabilities (risk); and net income divided by total assets (performance). The time dummy 'after' takes a value of one in the post-merger period.

15. Data was collected from COMPUSTAT Global for publicly listed firms in the UK during the period 1995 and 2001 (except for the event year 1998).

16. The results showed a statistically significant increase in audit fees for Big N clients in the post-merger period, although the authors found no significant difference between the audit fees charged by non-Big-N auditors in pre-merger and post-merger periods. The study also concluded that Big N audit quality (measured by earnings quality) improved in the post-merger period compared with non-Big-N auditors.

Simunic (1980)

17. In order to test the competitiveness of the US audit industry, the paper distinguished between price and quantity differences in the audit[40] and proposed that an auditor's cost function comprised both direct production costs and expected future losses that might arise as a result of the audit (eg litigation costs). Because these were not observable, the author used client attributes. The paper estimated the following equation:

$$\frac{FEE}{ASSETS} = b_0 + b_1 SUBS + b_2 DIVERS + b_3 FORGN + b_4 RECV + b_5 INV + b_6 PROFIT + b_7 LOSS + b_8 SUBJ + b_9 TIME + b_{10} AUDITOR + \hat{\mu} \quad (5)$$

18. The following were control variables for differences in loss exposure: 'SUBS' were the number of consolidated subsidiaries; 'DIVERS' was the number of two-digit SIC industries in which the company operated (less one); 'FORGN' was foreign assets divided by total assets; 'RECV' was accounts, loans and notes receivable divided by total assets; 'INV' was inventories divided by total assets. The following were control variables for differences in the assessed loss-sharing ratio: 'PROFITS' was net income divided by total assets; 'LOSS' was a dummy variable to indicate a company loss in the previous three years; 'SUBJ' was a dummy to indicate a qualified audit opinion. 'TIME' was the number of years the company had used the auditor and controlled for differences in auditor production functions. Lastly, 'AUDITOR' was a dummy to indicate whether the auditor was a Big 8 firm.

19. The paper was not able to reject the hypothesis that price competition prevailed in the market for audits of public companies, suggesting that observed differences in Big 8 concentration across the market was irrelevant.

[40] 'Quantity' refers to the quantity of resources utilized during the audit.

Ireland and Lennox (2002)

20. The studies reviewed thus far used single-equation models for their analysis. Some studies have used a simultaneous equation or two-stage approach to control for potential endogeneity. Ireland and Lennox (2002) noted that a number of earlier studies sought to test the existence of a 'Big N' premium with equations like the following:

$$AF_i = \beta_{0t} + \beta_1 X_i + \beta_2 Z_i + \beta_3 AUD_{i+}\mu_i \qquad (6)$$

where AF was the audit fee. X were client characteristics, Z were auditor characteristics other than size and AUD was a dummy to indicate whether the auditor was one of the Big N. However, the estimate of β_3 was likely to be biased because clients chose whether to appoint a large or Mid Tier firm (ie the auditor was not exogenous). In order to control for this, the authors employed a two-step Heckman procedure by estimating a probit auditor selection model and then using the results to control for the selection bias on audit fees.

21. The study included the following variables in both the auditor selection and audit fee models: assets; turnover; number of business areas in which the company operated (defined by the number of industries); number of domestic subsidiaries; number of overseas subsidiaries; gearing; a loss dummy; and a dummy if the company's year-end was during the busy period (between 1 December and 31 March). The following variables were included in the auditor selection models only: number of non-executive directors divided by the number of directors;[41] dummy to indicate whether the influential director was affiliated with a large audit firm; and dummy to indicate whether the influential director was affiliated with a small audit firm. A dummy to indicate whether the audit office was located in London was included in the audit fee model but not the auditor appointment model.

[41] Non-executive directors were hypothesized to have stronger preferences for high-quality firms, which the authors equated with larger firms. Also it was suggested that companies with a high demand for monitoring may have had greater incentives to appoint non-executive directors and hire large audit firms.

22. The data was taken from the annual reports of 1,543 companies registered with a UK stock exchange that had year-ends between 1 March 1997 and 28 February 1998. The PWC Corporate Register was used to identify company auditors, audit office locations, company directors and corporate affiliations with audit firms. The study concluded that the premium earned by large audit firms was significant and more than twice as large when selectivity bias was taken into account.

23. A similar methodological approach was followed by Chaney et al (2004) with regard to audit pricing for private firms, but in this case the study found no evidence of a Big 5 premium when self-selection bias was controlled for.

Some comments

24. PwC referred us to a critique of the Oxera study which it prepared in 2006. PwC said that Oxera and other studies had used FAME data which was said to contain a number of data inaccuracies (see Appendix 6). In addition, PWC said that the Oxera study would suffer from endogeneity and omitted variable bias. In particular, in the Oxera model the audit firm's market share was used as an explanatory variable for audit fee, but these might be jointly determined. PwC said that the failure to control for the risk and complexity of an audit could result in biased estimates if the variables were correlated with the size of the auditor and market concentration.

HHI calculations

The tables below give the annual HHI for FTSE 350, FTSE 100, FTSE 250 and private companies. We calculated the index for all companies within the index designations, all companies excluding banking, insurance and financial services and all companies by sector. The index was calculated using audit firm shares of audit fees.

TABLE 1 **Annual HHI (derived from shares of audit fees) within index designation**

Index designation	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*
FTSE 350	2,939	2,954	3,000	2,872	2,872	3,079	2,917	2,910	2,909	2,859
FTSE 100	3,270	3,114	3,121	3,034	2,944	3,347	3,102	3,091	3,046	3,024
FTSE 250	2,340	2,568	2,735	2,525	2,734	2,579	2,565	2,638	2,729	2,566
Private	2,469	2,699	2,892	2,647	2,571	2,783	2,609	2,583	3,287	2,470

Source: CC.

TABLE 2 **Annual HHI (derived from shares of audit fees) within index designation (excluding banking, insurance & financial services)**

Index designation	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*
FTSE 350	2,866	3,057	3,274	3,090	3,034	3,044	3,062	3,033	3,065	2,973
FTSE 100	3,384	3,316	3,547	3,381	3,179	3,402	3,413	3,351	3,317	3,241
FTSE 250	2,291	2,638	2,810	2,601	2,845	2,590	2,593	2,704	2,856	2,718
Private	2,258	2,787	2,983	2,512	2,457	2,831	2,680	2,645	3,610	2,741

Source: CC.

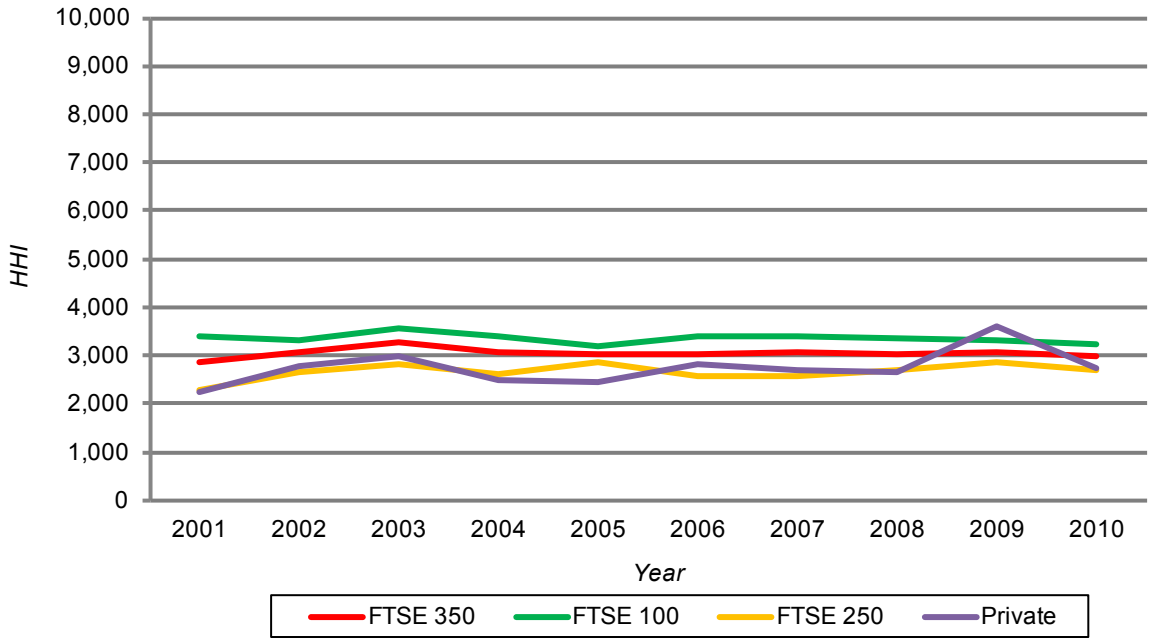
TABLE 3 **Annual HHI (derived from shares of audit fees) within index designation by sector**

Sector, index designation	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*
Basic materials										
FTSE 350	4,433	4,766	5,094	5,046	4,885	5,078	4,106	3,501	3,720	3,944
FTSE 100	5,159	5,034	5,550	5,268	5,236	5,170	10,000	10,000	10,000	10,000
FTSE 250	4,733	5,803	8,668	8,728	8,000	7,994	5,192	4,387	5,181	5,099
Private	4,762	3,465	3,445	2,702	5,582	3,529	5,249	4,761	4,851	4,723
Banks										
FTSE 350	3,895	3,679	3,833	3,748	3,839	4,150	3,873	3,447	3,496	3,715
FTSE 100	3,901	3,669	3,814	3,710	3,807	4,150	3,867	3,455	3,496	3,715
FTSE 250	10,000	10,000	10,000	10,000	10,000		10,000	5,296		
Private					10,000	10,000	10,000	10,000	7,025	6,568
Consumer goods										
FTSE 350	5,132	5,008	4,599	4,847	4,965	5,472	5,029	5,579	5,193	6,302
FTSE 100	5,783	5,470	4,897	4,961	5,120	5,666	4,984	5,561	5,377	6,630
FTSE 250	2,885	3,523	3,129	4,456	4,404	4,414	5,642	5,781	4,528	4,251
Private	3,666	3,451	2,927	3,109	2,441	2,185	2,097	2,188	2,271	2,315
Consumer services										
FTSE 350	2,471	2,829	3,259	3,214	3,139	3,202	3,444	3,403	3,499	3,313
FTSE 100	2,833	3,396	3,671	3,940	3,531	3,759	4,026	4,265	4,131	3,839
FTSE 250	2,784	2,649	3,305	2,797	2,796	2,764	2,689	2,621	2,760	2,761
Private	2,336	3,395	3,123	2,873	3,105	3,366	3,607	3,477	3,572	3,742
Healthcare										
FTSE 350	4,981	4,974	4,376	3,844	3,901	3,794	3,773	3,662	3,895	3,954
FTSE 100	4,878	4,979	4,308	3,624	3,965	3,807	3,824	3,839	4,161	4,177
FTSE 250	6,333	4,958	5,434	10,000	3,510	3,860	3,720	5,615	5,017	5,039
Private	4,473	4,621	3,808	9,027	8,004	10,000	5,433	4,050	8,534	4,515
Industrials										
FTSE 350	2,632	2,687	2,833	2,567	3,051	2,963	3,230	3,280	3,146	3,360
FTSE 100	4,521	2,769	3,042	2,891	3,942	4,024	5,093	4,769	4,587	4,527
FTSE 250	2,062	2,672	2,849	2,595	3,056	3,254	3,200	3,311	3,154	3,072
Private	1,696	1,714	2,517	2,679	2,093	4,069	3,018	2,895	4,345	4,178
Insurance										
FTSE 350	3,691	3,219	3,395	3,332	3,751	3,348	3,986	3,247	3,262	3,500
FTSE 100	3,664	3,390	3,681	3,847	3,833	3,403	4,245	3,439	3,454	3,433
FTSE 250	5,016	3,050	3,256	2,786	3,794	3,784	3,975	3,763	5,800	5,488
Private	7,654	7,716	4,587	8,371	7,873	3,919	3,729	3,769	3,706	7,758
Mining										
FTSE 350	3,665	3,559	2,905	2,825	3,023	2,657	2,690	2,706	2,563	2,495
FTSE 100	3,687	3,592	2,882	2,767	2,998	2,666	2,766	2,849	2,616	2,528
FTSE 250	5,131	5,320	5,064	5,529	5,017	10,000	4,266	5,818	6,827	5,053
Private			10,000	10,000	10,000	10,000				
Oil & gas										
FTSE 350	4,427	4,923	4,566	4,529	4,508	4,602	4,490	4,490	4,610	4,634
FTSE 100	4,926	5,352	5,094	5,075	5,115	5,001	4,930	4,699	4,772	4,784
FTSE 250	5,339	3,383	4,287	4,504	3,388	3,192	2,802	3,154	4,111	3,860
Private	7,383	5,233	3,302	9,097	7,358	7,024	4,653	4,602	6,459	4,404
Financial services										
FTSE 350	3,100	2,931	2,954	2,972	3,111	3,905	3,151	3,194	2,879	3,082
FTSE 100	4,028	4,618	4,619	4,684	4,604	6,823	5,870	5,699	4,894	4,499
FTSE 250	3,084	2,722	2,688	2,929	3,013	2,932	2,763	2,751	2,825	2,885
Private	3,554	3,693	3,932	4,536	3,340	4,081	4,139	4,571	4,480	6,547
Real estate										
FTSE 350	4,499	4,150	4,245	5,501	5,191	4,760	3,872	2,681	3,188	2,887
FTSE 100			10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
FTSE 250	4,499	4,150	7,319	7,367	3,649	3,366	5,405	3,408	3,177	2,913
Private	5,051	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	5,202
Technology										
FTSE 350	3,221	4,690	4,868	3,935	3,453	3,754	3,595	4,170	3,402	3,345
FTSE 100	6,122	8,851	10,000	10,000	10,000	10,000	10,000	4,403	4,146	3,716
FTSE 250	4,985	3,699	5,091	4,130	3,501	3,717	3,483	5,140	4,066	3,462
Private	6,320	6,756	2,575	3,468	2,982	3,064	2,957	2,638	2,742	2,926
Telecommunications										
FTSE 350	3,491	3,566	4,011	3,485	3,811	3,735	3,765	3,691	4,085	3,771
FTSE 100	3,882	3,673	4,287	3,670	3,850	5,016	3,693	3,596	4,061	5,010
FTSE 250	4,581	10,000	6,139	7,260	5,000	3,976	7,390	5,326	10,000	4,748
Private	5,789	6,049	6,024	9,782	10,000	10,000	8,844	10,000	10,000	
Utilities										
FTSE 350	6,698	7,711	7,053	6,670	5,932	4,382	5,667	5,579	5,789	5,607
FTSE 100	6,862	9,032	8,592	8,766	5,470	4,285	5,888	5,631	6,011	5,833
FTSE 250	6,538	3,395	3,537	3,672	8,302	7,112	3,660	5,612	3,657	3,668
Private		10,000	10,000	10,000	10,000	10,000	10,000	5,396	4,644	4,743

Source: CC.

FIGURE 1

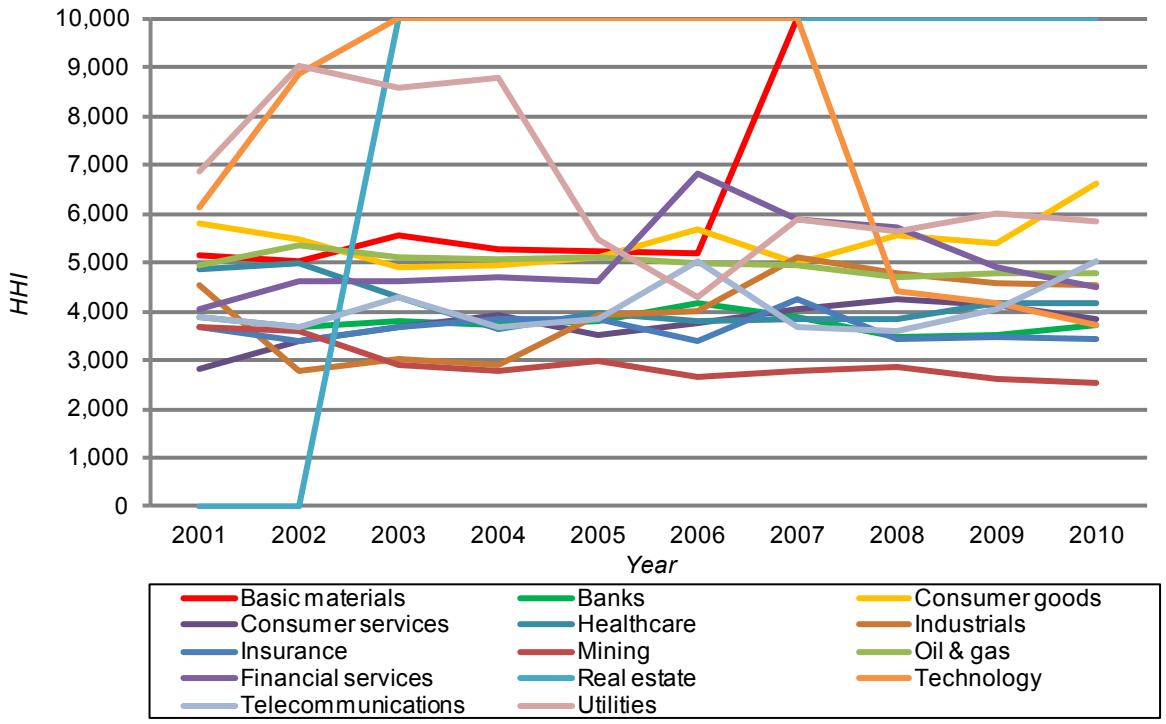
Annual HHI figures by index designation (excluding banking, insurance and financial services companies)



Source: CC.

FIGURE 2

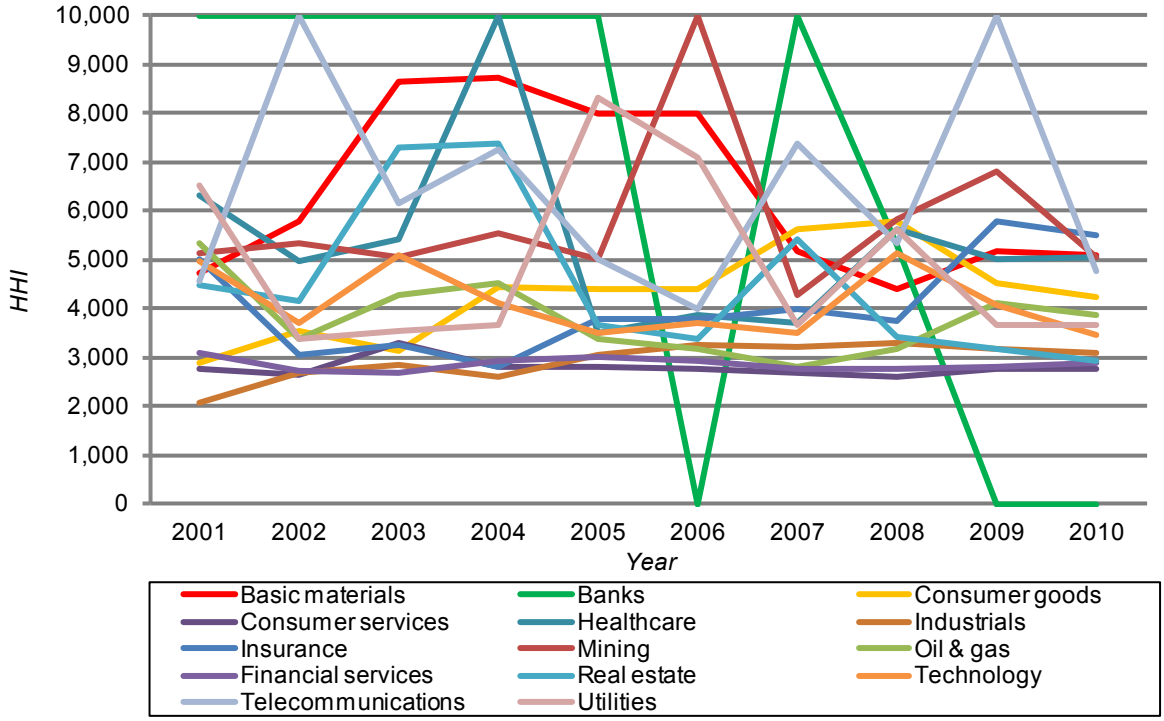
Annual HHI figures by sector for FTSE 100 companies



Source: CC

FIGURE 3

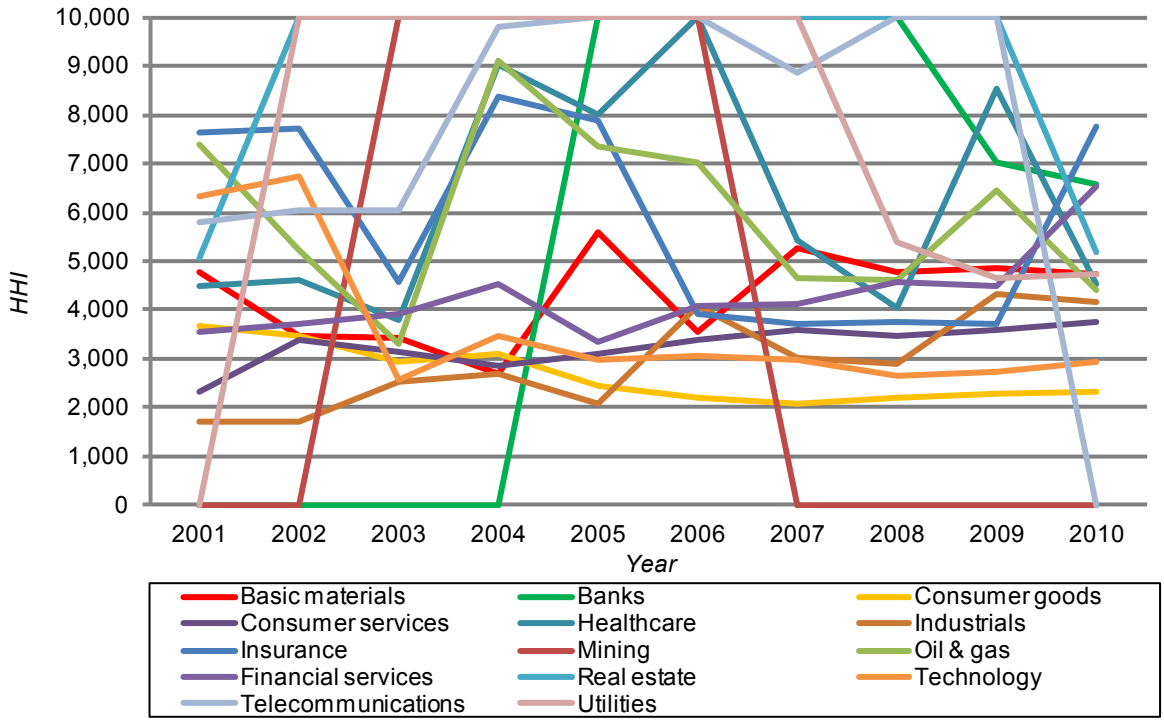
Annual HHI figures by sector for FTSE 250 companies



Source: CC.

FIGURE 4

Annual HHI figures by sector for private companies



Source: CC.

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Profitability

Contents

Page

Introduction

1. In this appendix we set out:

   (a) the firms' approaches to assessing profitability of their statutory audit work (in paragraphs 4 to 13);

   (b) the issues associated with assessing profitability in this market (in paragraphs 14 to 76);

(c) our review of the following measures of profitability (in paragraphs 77 to 165):

(i) ROCE;

(ii) ROS-based measures;

(iii) profits per partner; and

(iv) Assurance versus other business units; and

(d) engagement level profitability (in paragraphs 166 to 184).

2. We presented our initial analysis in three working papers: two on firm-level profitability[1] and one on audit engagement-level profitability.[2] This appendix draws together our provisional analysis of both firm-level and audit engagement-level profitability and takes into account firms' submissions on our profitability working papers.

3. We present a discussion of each topic in this appendix and our provisional conclusions are set out in the provisional findings, paragraphs 7.63 to 7.90.

The firms' approaches to assessing profitability of their statutory audit work

4. As noted in our guidelines,[3] we consider that the manner in which firms assess profitability for the purpose of monitoring and reporting their own performance may inform our view as to what is an appropriate measure for the industry in question.[4]

5. Ideally we wished to find a measure of the profitability of FTSE 350 audit work taking into account all relevant costs and an appropriate capital base. In assessing the viability of doing this, it was important to consider how the firms were organized.

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[1] www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/profitability_part_one.pdf and www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/profitability_part_two.pdf.

[2] www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/engagement_level_profitability.pdf.

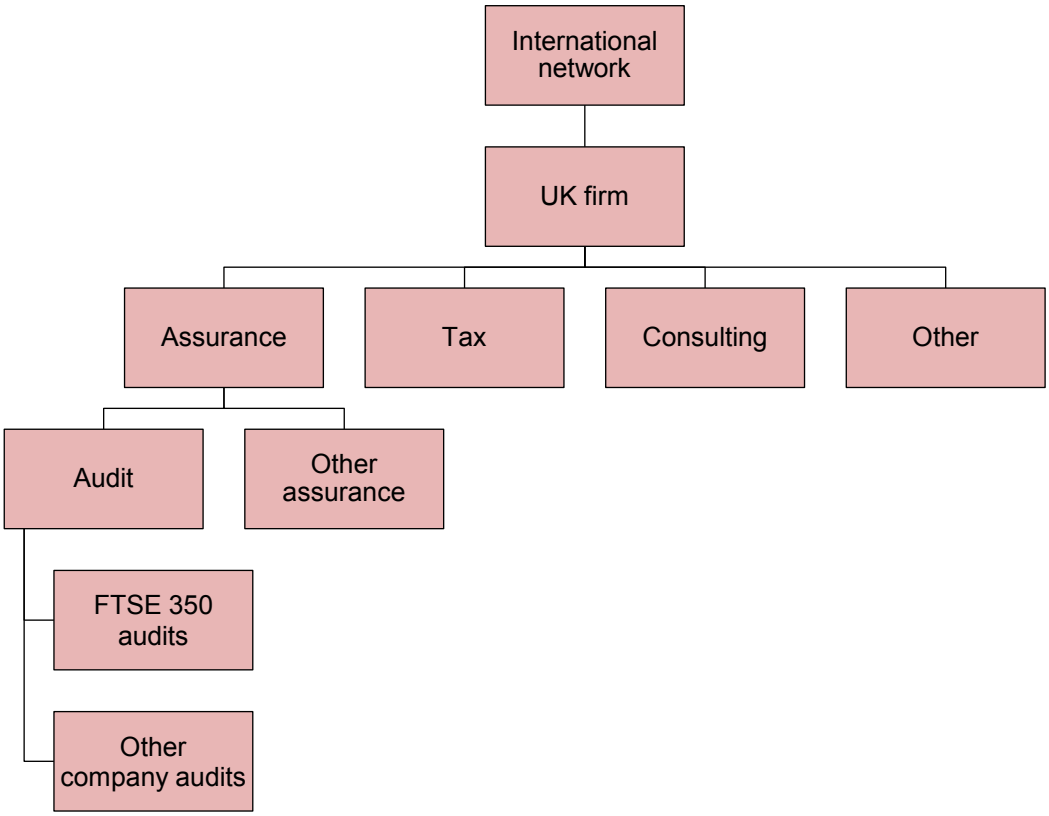
[3] Guidelines for market investigations consultation document, June 2012.

[4] Guidelines for market investigations consultation document, June 2012, Annex A, paragraph 8.

6. Figure 1 shows how the profits of FTSE 350 audit work fits within the organizational structure of the firms.

FIGURE 1

Example of FTSE 350 audit's position in firm's corporate structure



Source: CC.
Note: There will be subdivisions below the non-assurance service lines but these have not been shown in this diagram. The relationship between the international network and the UK firm will vary by firm.

7. The UK firms were each part of an international network, and they reported profitability at a UK firm level on the basis of profit per partner.[5] The UK firms'[6,7] management accounts were then generally split into service line accounts (or in some cases[8] were split by office location). The service line profitability was generally assessed on the basis of direct margin or, in some cases, margin after allocation of costs incurred

[5] Ernst & Young LLP operated as part of two sub-areas of its network's EMEIA structure (the sub-areas being UK&I (UK and Republic of Ireland) and FSO (Financial Services Office)). Ernst & Young (EY), as part of its internal reporting, did not report profitability at the UK level, but did prepare statutory accounts for Ernst & Young LLP which stated total profit and the number of members of the LLP.
[6] By firms, we are referring here to: BDO, Deloitte, EY, GT, KPMG and PwC.
[7] Deloitte's management accounts include UK crown dependencies, the Swiss member firm and two joint ventures in the Middle East and CIS respectively.
[8] For example, GT and BDO.

at a firm level (facilities, practice protection insurance, IT, marketing etc). The firms all reported an Assurance/Audit business unit/service line that encompassed their statutory audit work and several other services, not all of which were similar to statutory audit work (we use the term Assurance to refer to this business unit/service line unless commenting on a specific firm that uses the term Audit). The components of the Assurance business unit/service line differed between the firms.

8. The largest six firms produce 'transparency reports' which were required, among other things, to report financial information relating to a firm's statutory audit work.[9] However, reporting profitability for statutory audit and directly-related services falls under a voluntary code and not all firms produced this (see paragraph 17).

9. We asked the firms how they measured the profitability of engagements, to assist us in understanding whether assessing the profitability of either audit as a whole or FTSE 350 audits (as a subset) was possible. A key measure of engagement level profitability used by the firms was revenue recovery rate (RRR). This compared actual fees charged with 'scale-rate' (or 'charge-out') revenue. The scale-rate revenue was calculated by taking the scale rate for each grade of staff and multiplying it by the expected or actual number of hours booked by that grade. Because of the method of setting scale rates, RRR did not directly take into account actual costs per hour.[10]

10. Scale rates effectively cover direct staff costs with an allocation of overheads and an additional element of profit for partners.[11] Whilst scale rates were not a direct representation of costs, firms were able to reflect changes in the underlying cost base in

[9] These reports are required by all firms auditing PIE clients.
[10] The firms use a number of terms to describe a theoretical target revenue per hour for each grade. This appendix uses the term scale rate regardless of the firm's own descriptor.
[11] The actual scale rate chosen for each grade of staff will be subject to other considerations and will not necessarily include a specific mark-up or margin on top of direct staff costs and any apportioned overheads.

the scale rate. Review of RRR then allowed firms to monitor changes in their underlying profitability and firms were able to reflect changes in costs and hence scale rates in target revenues and/or fee discussions.

11. PwC also used a client profitability metric (CPy) that applied standard cost rates to hours worked by staff and partners to give an indication of the underlying average cost of delivery. The CPy margin compares the average cost of delivery to the revenue generated, rather than a scale rate, which is a theoretical target level of revenue to be earned per hour.[12]

12. It appeared that no firm calculated a profit per engagement that closely reflected actual costs. This was consistent across both Mid Tier and Big 4 firms and it was not isolated to FTSE 350 company audits which was the focus of our inquiry. From our discussions with firms, we understood this to be because *(a)* it would be very difficult to attribute the exact cost of the individuals working on an engagement (the bulk of the costs) and *(b)* inevitably there would need to be an allocation of costs to the engagements (both staff costs when not working on engagements[13] and non-staff costs). RRR is similar to contribution-based approaches in that it avoids the need for detailed cost allocation. The focus for management in using RRR is in comparing relative performance of engagements (between one another and over time) rather than indicating absolute levels of profitability of engagements.

13. The firms' measures of RRR were not comparable with one another, due to the differences in firms' scale rates.[14] Looking at trends in RRR helps firms manage their businesses but cannot be used to assess the absolute level of profitability in this

[12] PwC said that its 'Client Profitability' metric was not suitable for year-on-year comparison due to annual changes in the methodology used for its calculation.
[13] To calculate a measure of profitability for individual engagements, which when considered in aggregate would reconcile to the firm's accounting profit, would require periodic assessments of utilization rates, and thus different 'scale rates' over the course of the year would need to be calculated.
[14] Scale rates will differ both because of differing underlying cost bases but also because a scale rate will include an amount of headroom which relates to potential profit.

industry. We therefore consider other metrics instead (although we return to assessing relative within firm profitability in our assessment of engagement-level profits in paragraphs 166 to 184 below).

Issues in assessing profitability of the FTSE 350 audit market

14. In this section, we considered whether we could obtain appropriate data from the firms' management accounts to assess the profitability of the FTSE 350 audit market (and/or the audit market). There are a number of issues to consider in assessing profitability in this market, including:

(a) cost allocation (including staff time not spent on engagements);

(b) partner remuneration;

(c) capital base; and

(d) the appropriate benchmark cost of capital.

Cost allocation

15. As shown in Figure 1, FTSE 350 audit engagements together with other audit engagements (including those of private and smaller listed companies) make up the firms' Audit businesses. Generally Audit sits as a service within a wider Assurance business unit (although some firms call this business unit 'Audit', it comprises more than statutory audit).[15] In turn, the Assurance business unit forms only one part of the accounting firms' overall professional service offering and the accounting firms themselves are part of international networks of firms. As accounting firms are multi-disciplinary, there are many shared and common costs. Some of the costs are incurred directly by the audit engagements and Assurance divisions, such as staff, travel, recruitment, software, stationery, entertainment, some marketing costs and

[15] PwC said that although revenue and costs of audit and audit-related services were primarily recorded within the Assurance line of service, it was important to appreciate that this did not reflect how audit and audit-related services were delivered to clients. Audit services were provided using multi-disciplinary professionals from across all lines of services, with the exact composition of the team varying depending on the needs of each client. (PwC response to CC 'Profitability' 1&2 working papers, paragraph A3.)

some professional fees. Other costs are incurred at a firm level allocated across the firms to divisions, including Assurance. Typically these include international network costs, firm-wide marketing and branding, some recruitment costs, facilities, insurance, IT costs, property etc.

Assurance

16. The Assurance business unit sits as a separate division within firms. As discussed above, the business unit will incur direct costs as well as receiving an allocation of firm overheads.

17. The largest six firms produce 'transparency reports', which are required to report financial information relating to a firm's statutory audit work.[16] A voluntary code issued by the Consultative Committee of Accountancy Bodies applicable for reporting periods from April 2009 included guidance on reporting on the profitability of the firm's audit practice. Obtaining reasonably robust cost allocations for 'Audit' practices as a whole was therefore possible for some firms, but not all firms provide this analysis and not to the same level of detail.[17]

18. For the purpose of our investigation, PwC undertook an analysis of its audit business. It considered a range of fully-allocated cost (FAC) bases using two main drivers of costs. Its preferred approach (its FAC central estimate) gave an average audit profit margin—before any adjustments for partner salary or return on invested capital—of 19 per cent in FY07 to FY11. This compared with a five-year average of 18 per cent based on its transparency report.[18] PwC considered its transparency report approach to be reasonable for the purpose for which it was produced, but said that in the context of this investigation it wanted to perform the most accurate possible calculation.

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[16] These reports are required by all firms auditing PIE clients.
[17] For example, EY does not include any cost or profit information in the financial information included in its transparency report.
[18] PwC Observations on the assessment of audit profitability, 7 August 2012, paragraph 4.3.

It said that its FAC approach therefore used a more detailed analysis resulting in a smaller proportion of costs being allocated to Audit in later years than under the transparency report approach and so resulting in a small difference between the five-year average margins. PwC said that in 2011 there was a difference of six percentage points between its net audit margin of [✂] per cent and its net assurance margin of [✂] per cent (margins calculated on the basis of the transparency report).[19]

19. Deloitte said that its average audit net margin across the period FY06 to FY11 was [✂] per cent. This compared to the Audit service line average net margin of [✂] per cent.[20] It said that the Audit service line margin was a product of the comparatively lower margins from statutory audit activities and comparatively higher margins from advisory activities undertaken by the Audit service line (such as risk and regulation advisory services).

FTSE 350 engagements

20. Within the Assurance divisions, firms provide audit services to FTSE 350 businesses and other listed and private companies; they also undertake assurance (non-statutory audit) work for clients. As discussed above (see paragraphs 9 to 13), firms assess engagement profitability on the basis of RRR. For the Big 4 firms, FTSE 350 audit fees represented on average 19 per cent of Assurance revenues over the period 2007 to 2011.[21]

21. The direct cost data that we had on an engagement basis reflects average staff costs flexed only by the number of hours and not by skill mix within grade (ie for a manager's time on an engagement, the average cost of a manager multiplied by the

[19] Both FAC and transparency report margins are calculated on the basis of gross revenue and are before partner salary costs.
[20] Deloitte calculated net margin on an allocated cost basis (using either revenue or headcount as the allocation driver depending upon the cost). This margin is pre-partner costs and is on the basis of net revenue.
[21] CC analysis based on FTSE 350 audit fee information provided by the firms and Assurance revenues from the firms' management accounts. (For KPMG information available was for 2008 to 2011 only.)

number of hours worked is used). However, PwC's audit profitability analysis (see ROS measures section in paragraphs 92 to 99 below) calculated staff costs by individual and therefore did differentiate within grade.

22. If attempting to allocate costs from Assurance to a subset of audit engagements (eg FTSE 350 audits), we would need to consider whether using the average staff cost was appropriate for these engagements. In addition, the staff cost allocated to service lines (ie Assurance) includes the full cost of employing a member of staff and not just the cost of utilization on engagements. If allocating costs to a subset of engagements as some form of stand-alone business unit, we would need to consider carefully how to capture the full cost of employing staff.

Views of firms

23. Oxera, acting on behalf of GT and BDO, said it understood that cost allocation could be an issue when carrying out this type of analysis. However, where the objective was to compare the relative profitability within a firm (say between audit and non-audit services, or FTSE 350 audit and other audit), then standardization of cost allocation between firms was not necessary.[22] We note this point and have considered within-firm profitability in our analysis of engagement level profitability in paragraphs 166 to 184 below.

24. KPMG said that it did not believe it was feasible to construct a robust model of the economic profitability of its FTSE 350 audit services because this would require an allocation of the costs of the Audit function to individual audit engagements, an exercise that in its view could not be done in a robust or meaningful way.[23] KPMG said that its analysis of engagement profitability indicated that the margins for its FTSE

[22] Oxera response to 'Profitability' 1&2 working paper, paragraph 3.2.
[23] KPMG response to 'Profitability' 1&2 working papers, paragraph 2.1.5.

350 audit clients were broadly similar to those of its other audit clients and so it was reasonable to use an analysis of the Audit function as a whole as an indicator of the profitability of audit work for FTSE 350 clients.[24]

CC discussion

25. As set out above, costs are allocated from the firms to their Assurance service lines. Our review showed that up to around 30 per cent of costs incurred by the Assurance service line may be allocated rather than direct costs. To assess statutory audit or engagement-level profitability, a further allocation of costs from the Assurance businesses to those engagements needs to be made. (In some cases for the purposes of this investigation firms have done this for their Audit businesses.) Given the multiple layers of cost allocation required to analyse FTSE 350 audits as a subdivision of accounting firms (and the hypothetical nature of the exercise), we consider the accuracy of any such analysis to be questionable. As noted above, for the Big 4 firms, FTSE 350 audit fees represented on average only 19 per cent of Assurance revenues over the period 2007 to 2011.[25] We therefore provisionally conclude that obtaining profitability measures for FTSE 350 audits as a subset of the firms' Assurance businesses was unlikely to be a robust analysis (in the context of assessing economic profits).

26. However, we consider that allocating revenues and costs to the firms' Assurance businesses was possible. To a large extent, this cost allocation to the Assurance business was undertaken by the firms in their management accounts (albeit some firms still had a residual unallocated overhead that is considered only at the firm level). In assessing Assurance returns, we would need to be aware that Audit margins may differ from those for Assurance as a whole. As discussed in paragraph

[24] KPMG response to 'Profitability' 1&2 working papers, paragraph 1.3.
[25] CC analysis based on FTSE 350 audit fee information provided in the OBI (MFQ) and Assurance revenues from the firms' management accounts. (For KPMG information available was for 2008 to 2011 only.)

7, firms' Assurance divisions comprise more than just statutory audit services. Deloitte and PwC have presented data to suggest that statutory audit services may be lower margin than Assurance as a whole ([✂] percentage points and six percentage points respectively).[26] We note that assessing Audit as a subset of Assurance would be difficult for all firms as they do not all provide cost and profit information in their transparency reports. We considered prescribing a cost-allocation methodology and asking firms to use this to calculate margin data on statutory audit as a subset of their Assurance divisions. However, given the other issues associated with assessing economic profits (set out below), we decided that this would not be worthwhile as we were unlikely to be able to rely on the overall result.

Partner remuneration

27. Because partners supply labour as an employee would, as well as being an owner of the firm, the partner's remuneration compensates the individual for their:

    (a) contribution to engagements, marketing and other non-engagement activities (eg in some cases firm management) based on role and performance (ie they receive a salary-related element); and

    (b) capital investment in the firm (ie they receive a return on their investment).

28. Some firms include a nominal partner charge in their management accounts when assessing business unit profitability, but many do not.[27] Some firms nominally split partners' total remuneration into base, performance and capital return elements (or equivalent) but stress that this is not an accurate allocation.

29. We agree that there is a need to assess an appropriate 'salary' element from partners' total remuneration, as submitted by PwC, Deloitte and Oxera.

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[26] Although we note that PwC's data is for one year only.
[27] KPMG, EY, GT and BDO (BDO in 2007 and 2008 only).

30. In the following paragraphs, we set out some possible benchmarks that could be used as proxy for partner salaries, we consider PwC's submission on the appropriate benchmark partner salaries and discuss the implications of this exercise for average partner salary.

31. We considered a range of benchmarks could be used for this purpose. These included:

(a) a mark-up on average director salary costs (including employers' costs) for each firm based on the difference in charge-out rates for partners and directors—this gave a range for partner salary in 2011 of £[✂] to £[✂];[28]

(b) the salary costs of a non-equity partner (eg Deloitte £[✂] in 2011);

(c) the partner charge[29] used by different firms:

(i) GT used £[✂] in its management accounts;

(ii) KPMG used £[✂] in its 2011 management accounts; and

(iii) PwC used £[✂] in its internal CPy measure;[30] and

(d) industry benchmarks such as the average salary for FTSE 250 FDs or similar (in 2010 the median total remuneration for FTSE 250 FDs £489,000)[31]—although it is not clear that all partners have comparable responsibility to a FTSE 250 FD.

PwC partner salary benchmarking

32. PwC submitted that using the £[✂] figure in its CPy measure or the salaries of directors with audit signing power was likely to understate the true 'partner salary' cost as it did not reflect *(a)* the full opportunity cost of partner labour (as CPy estimate was only intended to facilitate comparisons across the business and so was a notional base pay only) and *(b)* the distribution of partner seniority required to deliver

[28] 2011 mark-up on director salary costs: [✂].
[29] The notional salary that firms include in their management accounts to represent the cost of a partner's labour.
[30] CPy is the measure PwC uses to assess engagement level profitability including partner time.
[31] FTSE Financial Director salary survey 2010.

audit services. A single CPy measure did not reflect the significant differences in the relative labour costs of partners at different partner role levels.[32]

33. For the purposes of our investigation, PwC undertook a job evaluation assessment. This involved matching each of its four partner 'bands' to comparably 'sized' roles within the finance functions of UK companies. It assessed 'size' based on six metrics: knowledge; specialist skills; people skills; customer service/external impact; decision-making; and creative thinking.[33]

34. PwC partners were allocated to 15 responsibility levels across four levels of partner. PwC benchmarked a partner from each role level; however, for Level 1 (the highest partner role level) it evaluated two partners at different ends of the scale because of its wide span.[34]

35. Table 1 sets out the nature of the market comparator roles that PwC considered in its benchmarking assessment, and the proportion of its partners that it assessed under each category. The 'Monks' points score refers to the points allocated to each level of partner based on the six factors considered (the maximum score is 110).[35]

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[32] PwC Observations on the assessment of audit profitability, 7 August 2012, paragraph 3.4.
[33] PwC Observations on the assessment of audit profitability, 7 August 2012, Table 6.
[34] PwC Observations on the assessment of audit profitability, 7 August 2012, paragraph A5.9.
[35] PwC Observations on the assessment of audit profitability, 7 August 2012, Table 7.

TABLE 1 **PwC Audit partner peer groups by role level**

Partner role	Monks points	Pay levels	Proportion of partners	Market comparisons	Sample size (of market comparators)
Role 4	80	4.2 to 4.1	✂	Listed and private companies • Heads of Internal Audit, revenues £1.25-5bn • Financial Controllers , revenues £1.25-5bn • Divisional Financial Directors, revenues < £500m, >25% UK source	67
Role 3	83	3.3 to 3.1		• Heads of Internal Audit, revenues £5-20bn • Financial Controllers, revenues £5-20bn • UK focussed Divisional Financial Directors, revenues £500m - £2bn , >25% UK source	51
Role 2	88	2.5 to 2.1	✂	• Finance Director jobs in listed companies in the FTSE small-cap index and private companies with revenues of less than £1,000 million	150
Role 1	95	1.5	✂	• Group Finance Director jobs in listed companies in the FTSE 250, but with less than 25% of annual revenue from outside the UK	68
	104	1.1		• Group Finance Directors jobs in listed companies with market capitalisation of between £1,000 million and £3,000 million	73

Source: PwC analysis.

36. PwC benchmarked the total reward received in the market for the roles it considered comparable to its partner roles (this included salary, actual bonus paid, expected value of long-term incentives and employer pension contributions). The results are set out in Table 2.[36]

TABLE 2 **External benchmarks for the 'partner salary' component of remuneration by PwC partner role**

	Partner salary, £'000					
	Role 4	*Role 3*	*Role 2*	*Role 1.5*	*Role 1.4*	*Role 1.1*
Lower quartile	152	204	365	509	745	781
Median	**214**	**314**	**487**	**762**	**876**	**1,002**
Upper quartile	317	619	619	1,052	1,095	1,308

Source: PwC.

[36] PwC Observations on the assessment of audit profitability, 7 August 2012, paragraph A5.12.

37. PwC said that a further sense check on the benchmarking results was the fact that there was comparability of the lower quartile Role 4 partner salary with its Core Assurance director salaries. The average Core Assurance director salary at PwC was £[✂] in FY11. It said that this showed a continuum in average salaries from director to most junior partner.[37]

38. PwC's expectation was that:

> the firms which compete closely with us would have broadly equivalent levels of 'partner salary', while smaller firms which are generally only competitive with us in relation to the audits of far smaller companies would employ partners with lower 'partner salaries', as the majority of their audit partners would be ranked at the lower partner role levels, or as directors, if they worked in the large firms.[38]

KPMG

39. KPMG in its ROCE analysis (see paragraph 82 below) used a partner charge of £[✂] [a sum slightly lower than the working assumption of £473,000 based on the PwC benchmarking data] based on a 100 per cent mark-up on top KPMG audit director salaries. KPMG said that there was no significant differential between the remuneration of senior directors and junior partners and that this provided further support for its view that partner remuneration reflected only limited amounts for return on investment and that a large proportion of partner reward should be treated as employment cost. It said that the general view of KPMG UK's partners was that the vast majority of, if not all, partner reward was effectively pay and benefits (ie a reward for their personal services) rather than a return on a financial investment.[39]

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[37] PwC Observations on the assessment of audit profitability, 7 August 2012, paragraph A5.15.
[38] PwC Observations on the assessment of audit profitability, 7 August 2012, paragraph 3.7.
[39] KPMG response to 'Profitability' 1&2 working papers, paragraphs 3.2.7–3.2.10.

40. KPMG said that FDs tended to have similar backgrounds and qualifications to audit partners, often with similar career experience. FDs acted as senior finance professionals and were closely involved in the running of large business units, as were KPMG's audit partners. In addition, there were examples of KPMG UK's audit partners leaving KPMG UK to join FTSE 350 companies (indeed, even FTSE 100 companies) as FDs. KPMG considered that most FTSE 350 FDs earned more, often considerably more, than KPMG UK's audit partners, and that this supported its view that its base case assumptions on partner employment costs were relatively conservative.[40]

Oxera

41. Oxera said that, given the large range in salaries put forward by PwC and the sensitivity to this value for at least some return metrics, it would seem appropriate for the CC to conduct its own research to establish robustly the appropriate equivalent salary for partners carrying out FTSE 350 audits. It said that as both BDO and GT had indicated that, with their current skill mix, they were capable of auditing most FTSE 350 companies, and that there were significant parts of the audit market outside the FTSE 350 that required similar levels of skill, the implication (see paragraph 43 below) that FTSE 350 audit partners would overall command average salaries of at least £473,000, compared with the Mid Tier average of £264,000, did not, at first sight, look realistic.[41] Oxera said that Mid Tier firms provided audit services almost entirely outside the reference market and therefore in the market covered by 80 per cent of the Big 4 firms' audit output. It said that there was no clear justification for the difference in notional salaries.

[40] KPMG response to 'Profitability' 1&2 working papers, paragraphs 3.2.11–3.2.12.
[41] Oxera response to 'Profitability' 1&2 working papers, paragraph 3.3.

CC discussion

42. If we were to accept the benchmark salaries in Table 2 and the likely proportion of partners in each category, the average PwC partner salary suggested by the PwC information was £[✂] (as calculated in Table 3). We consider it a reasonable assumption that the other Big 4 firms would have similar average partner salary costs.

TABLE 3 **Average PwC audit 'partner salary'**

Partner level	*Median [✂] £'000 (A)*	*Proportion of partners % (B)*	*Contribution to average salary £'000 (A*B)*
4	214	[✂]	[✂]
3	314	[✂]	[✂]
2	487	[✂]	[✂]
1	876	[✂]	[✂]
Average partner salary (£'000)			[✂]

Source: CC analysis.

Note: Median salary does not include National Insurance contributions.

43. If as a working assumption we were to assume that on average the Big 4 firms' partner responsibilities fell evenly across the four categories, then the average partner salary at these firms implied by the PwC data would be £473,000. If we were to assume that most of the larger Mid Tier firms' partner responsibilities fell evenly in categories 3 and 4, then the average partner salary at these firms implied by the PwC data would be £264,000.

44. We noted that the mean scale rate difference between a PwC partner and director in 2011 was [✂] per cent.[42] However, the difference in average 'salary' (ie excluding partner return on investment) was [✂] per cent.[43] PwC said that the reasons for the low scale rates (in comparison with 'salary') for partners relative to directors were:

(a) Partners had primary responsibility in the important tasks of generating work for the firm and acting as leaders of the business. The value of partners to the firm,

[42] [✂]
[43] [✂]

and hence the reward they received, was strongly linked to their roles in these areas which distinguished them from other employees. It would be problematic to explain to clients that they should pay higher fees for using partners based on higher rewards associated with these activities and skills of partners, as they would not be directly applied in the hours charged to a particular client engagement.

(b) Partners had an important role in leading, overseeing and quality controlling PwC's client work. Scale rates at the level set for partners ensured that clients were not hostile to partner involvement and facilitated PwC ensuring—through adequate partner involvement—the very highest quality of its work for its clients. Similarly, due to these relatively low rates, PwC's staff (who were in part assessed on the economic performance of assignments they worked on) were not disincentivized from seeking partner input.[44]

45. The range of possible partner salary values we have considered for a Big 4 firm varies from around £[✂]. We note that the salary of a lead partner for a FTSE 350 audit is likely to be considerably higher than for an average partner.

46. We note Oxera's view that the proposed salary for Mid Tier partners (in our working paper[45]) did not look realistic—see paragraph 41. However, we make the following points:

(a) Oxera appears to have misinterpreted the use of the £473,000, saying that it represents salary of FTSE 350 audit partners, when in fact it represents average partner salary at a Big 4 firm.

(b) The £263,000 figure used in the working paper as a working assumption of average partner salary at BDO/GT firms reflected the average of the lower two

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[44] PwC response to 'Profitability' 1&2 working papers, Annex 1: A2.
[45] www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/profitability_part_one.pdf.

partner salary bands at PwC. This reflected PwC's view of benchmarked salary of partners generally not undertaking FTSE 350 audit (as is the case for the majority of BDO/GT partners).

(c) Whilst Oxera consider 80 per cent of the Big 4 firms audit practice to be outside of the reference market and thereby comparable to GT/BDO's audit practice we do not agree that such a simplistic comparison can be made. We note for example that:

(i) the Big 4 firms have significantly more international revenue from overseas clients than BDO or GT;

(ii) BDO has significantly more audit clients than PwC yet significantly lower revenues suggesting that the client base is very different (at least in terms of size); and

(iii) that BDO/GT have limited presence in the FTSE audit market as a whole and not just the reference market

(d) Given the approach we take, the assumed average partner salary for either Mid Tier firms or Big 4 firms is not determinative; and

(e) We do not consider that a bare comparison of average partner salary provides information as to the level of economic profit in the reference market.

47. We have not sought to undertake or commission our own assessment of comparator salaries for either Big 4 partners or Mid Tier partners as this is a complex task, and the merits of which would in our view be limited. Given the level of uncertainty surrounding other aspects of a calculation of economic profits, we considered that commissioning or undertaking our own assessment of partner salary would not, by itself, allow us to perform a reliable assessment of profitability.

Capital base

48. Our understanding is that partners are required to invest in firms when they join and are sometimes required to make subsequent investments as they progress to a different tier of the partnership or if the firms require additional capital from all partners. This investment is returned when the partners retire from or leave the partnership, and in some firms without interest.[46] The contributions of new partners in some firms are based on the allocation of a number of units of equity dependent on role.[47] The contribution per unit of equity may be revised periodically to reflect the working capital and investment needs of the firm and is not adjusted to reflect a calculated market value of the equity.

49. The assets in a professional services firm's balance sheet include tangible assets (eg property, plant, equipment; working capital) and intangible assets that are recognizable under accounting standards such as goodwill and software licences. The costs incurred by the firms relating to brand development, human capital, reputation and some intellectual property are not allowed to be recognized as assets on the balance sheet. However, the firms derive value from these and such non-recognized intangibles are likely to have significant value for a professional services firm.

50. In addition, the capital base from which the firms' Assurance businesses operate is common to each firm as a whole (ie is shared with other service lines).

Oxera submission on behalf of BDO and GT

51. Oxera proposed an approach which effectively built an asset base by considering costs incurred in creating the firms' intangible capital as being capital in nature, even if they were not recognized as such in accounting terms. Use of such an approach

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[46] [✂]
[47] [✂]

takes costs that might be considered to be incurred in creating intangible assets, allocates them a useful economic life (UEL) and converts them into a capital asset.

52. A similar approach was used by Oxera in Ofcom's market investigation in the pay-TV market. In that case, subscriber acquisition costs were readily identifiable and were used to value the subscriber base (an intangible asset) at replacement cost.

53. In response to our working paper, Oxera said that in the past the CC had taken a relatively strict approach: if a cost could not be identified then it would not be included as an intangible and the asset base was measured without it. It said that it inferred from the working paper that the CC was taking a different approach here as the CC was saying that if the cost could not be identified, then measuring the asset base was too difficult and so the CC was not intending to rely on profitability analysis at all. Oxera considered that the burden of proof was on those being investigated and that they should show what costs should be included in the intangible asset base and why.[48]

PwC

54. PwC said that compared with the businesses involved in pay-TV and SME banking, professional services firms were far more reliant on intellectual property and other intangible assets as a relative proportion of their asset base to provide their services. It said that this presented substantial challenges in applying the CC's previous methodology including: agreeing a consistent definition of intangible assets across the audit firms; deciding on how to measure the 'replacement cost' of such assets; and determining the 'asset life' of various types of intangible assets, some of which might have relatively long asset lives that were difficult to determine (in particular,

[48] Oxera response to 'Profitability' 1&2 working papers, paragraph 3.4.

intellectual property, which would be unlike, for example, IT systems for SME banking).[49]

55. It considered particular challenges to include:[50]

(a) Identifying specific costs associated with intangible assets and intellectual property: given that developing intellectual property and other intangible assets was such an integral part of a professional services firm's business, identifying the associated specific costs (eg developing methodologies, producing thought leadership, developing relationships, marketing by client services staff and partners etc) within the firm's financial information would be a considerable undertaking. PwC's systems for recording hours were primarily designed to keep track of billable client work, rather than to distinguish in detail between time spent on different aspects of our non-billable work. It said that this was unlike, for example, the development of IT systems in SME banking, which was likely to have identifiable associated costs.

(b) Distinguishing between costs which were necessarily incurred in running the business, and those which were additional: because professional services firms depended to such a high degree on their expertise and reputation for their operations, trying to distinguish consistently and reliably across a number of firms those intangible asset costs which were additional to those necessarily incurred at the time in running the business would be a significant (and perhaps fruitless) endeavour.

(c) Recognizing that intangible assets and intellectual property were developed in the normal course of business: such assets and property were frequently essential to the delivery of future client services. For example, it was usual for professional services firms to be asked when bidding for work to present their past

[49] PwC Observations on the assessment of audit profitability, 7 August 2012, paragraph 2.12.
[50] PwC Observations on the assessment of audit profitability, 7 August 2012, paragraph 2.13.

client work credentials and demonstrate a history of delivering similar work successfully. Such credentials and experience (which formed part of reputation) were products of previous assignments undertaken in the normal course of business for which the professional services firm was paid, but were demonstrably of interest and value to future clients, and were therefore an asset of the business.[51]

KPMG

56. KPMG estimated its Audit function's average annual capitalized intangible expenditure at £[✂] million, with intangible asset lives of three to five years.[52] This was based on direct costs and staff and partner time spent on marketing and business development, recruitment, training and [✂].[53]

Deloitte

57. Deloitte said that we were correct to conclude that it was not possible to calculate an economically meaningful measure of the capital base of firms in the reference market. However, this did not mean that no evidence was available to the CC upon which to reach a conclusion on profitability in this market. It said that there was persuasive evidence on the profitability of the reference market which the CC should take into account, including RRRs and gross margins for FTSE 350 audit versus non-FTSE 350 audit and other non-audit service.[54] (We consider these metrics in the section on engagement level profitability in paragraphs 166 to 184 below.)

CC discussion

58. We recognize that in industries with a relatively low level of tangible assets, such as service and knowledge-based industries, the book value of capital employed may

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[51] PwC Observations on the assessment of audit profitability, paragraphs 2.12 & 2.13.
[52] KPMG response to 'Profitability' 1&2 working papers, paragraphs 1.17 & 3.3.4.
[53] KPMG response to 'Profitability' 1&2 working papers, paragraphs 3.3.1 & 3.3.2 & Appendix 1.
[54] Deloitte response to 'Profitability' 1&2 working papers, sections 3 & 4.

bear little relationship to the economic value because of the presence of significant intangibles. We therefore may consider making adjustments to accounting data to reflect certain intangible assets. In previous inquiries, we have considered the inclusion of certain intangibles where the following criteria are met:[55]

(a) it must comprise a cost that has been incurred primarily to obtain earnings in the future;

(b) this cost must be additional to costs necessarily incurred at the time in running the business; and

(c) it must be identifiable as creating such an asset separate from any arising from the general running of the business.

59. In the case of accounting firms, much of the asset base is intangible in the form of clients, reputation, brand and human and intellectual capital (staff and partner experience and skills, and internally developed methodologies and know-how). In other inquiries, we have been able to identify specific costs incurred in addition to running costs that create an asset (see paragraph 58). In this case, such an approach would be complicated as there seems to be no obvious way to identify the appropriate costs.

60. We considered in particular whether we might identify a subset of costs that related to client acquisition and which might therefore qualify to be recognized as creating an intangible asset under the criteria set out above.

61. If these costs could be identified, we would then look to convert these into an appropriate asset base by making assumptions about the UEL, for example using average client life in the case of client acquisition costs. We reviewed the firms' management accounts to assess whether we would be able to make assumptions about the nature

[55] Guidelines for market investigations consultation document, June 2012, Annex A, paragraph 13.

of the operating costs to identify where these might be considered to represent client acquisition costs or intellectual capital development. The degree of detail provided varied but in all cases was insufficient to be able to conclude as to the specific nature of the cost incurred and in particular whether it related to the ongoing running of the business or could be regarded as additional expenditure to create an asset. In addition, we recognized that many of the costs incurred in client acquisition and intellectual capital development would be staff and partner time and that this, in itself, would be difficult to allocate between the above categories in the absence of any established business methodology for doing so.

62. We also considered that it would be conceptually difficult to isolate Assurance or audit-specific intangibles given the integrated nature of the firms and because many operating costs were allocated to the Assurance division from the firm's central overheads.

63. We considered Oxera's argument that because the costs of developing intangible assets were not separately identifiable, they did not fit the CC's recognition criteria. However, we considered that conceptually there was a real prospect of intangible assets, in particular in the form of customer acquisition costs and intellectual capital, having a separately identifiable value. We thought that it would be very difficult to measure these costs reliably and to estimate corresponding asset lives reliably.

64. We note that KPMG has attempted to identify and measure the staff and partner time costs related to activities generating intangible asset value (see paragraph 56). We did not attempt to verify these calculations, but they serve to illustrate that, depending on the assumptions made, the figures could be very high. Whilst we questioned KPMG's assumption that all staff and partner time coded to marketing and business development could be characterized as generating intangible assets, we could not

see a reliable method of distinguishing the relevant proportion. This provides an example of one of the areas of debate that would surround any assessment of intangible assets in the audit market.

65. Given the conceptual and practical difficulties involved, we considered that we would not be able to assess the intangible asset base reliably. Because the intangible asset base is likely to have substantial value, and be long-lived, in contrast to the relatively small tangible asset base, this leaves us in a position of being unable to measure the appropriate capital employed reliably.

Appropriate benchmarks

66. To say whether a firm's return is high or low, it must be compared with the appropriate cost of capital. Normally, the cost of capital for a business is assessed using the capital asset pricing model (CAPM). However, the key assumption of the CAPM of efficient capital markets with fully diversified investors is violated in this case because the partners are the investors and are unlikely to hold fully diversified portfolios and thus are exposed to firm-specific risks and illiquidity risk. The implication of this is that the returns from the audit market will need to be significantly higher to compensate for the additional risk, but there is no established theoretical framework by which to quantify how much higher. Oxera (2007) considered this issue and estimated that required returns for audit firms could be approximately ten percentage points higher than those of a diversified benchmark.[56]

67. PwC proposed a measure of its cost of equity of 10.7 per cent based on the CAPM framework—see Table 4.[57] To estimate beta, it looked at companies (in the UK, North America and 'developed European' markets) with an industrial classification

[56] Oxera (2007), page iv.
[57] PwC Observations on the assessment of audit profitability, 7 August 2012, Table 12.

that included accounting, auditing and taxation services or comparable consulting services (management consulting services, agriculture and economic consulting services). From this list it excluded any where the company description included defence, engineering or real estate sectors.[58]

TABLE 4 **PwC's estimate of its cost of equity—key components**

	FY07	*FY08*	*FY09*	*FY10*	*FY11*	*5-year average*
Risk-free rate (%)	4.5	4.7	4.5	4.1	3.9	4.4
Equity beta	1.0	0.9	0.8	0.8	0.7	0.8
EMRP (%)	4.5	4.5	4.5	5.0	5.0	4.7
Post-tax cost of equity (%)	8.8	8.6	7.9	8.0	8.4	8.3
Average UK corporation tax rate (%)	30.0	29.5	28.0	28.0	27.5	28.6
Pre-tax cost of equity(%)	11.5	11.1	10.1	10.3	10.7	10.7

Source: PwC.

68. In response to our Profitability 1 and 2 working papers,[59] PwC said that compared with shareholders of public companies, partners (as business owners) faced relatively high risk, as they were less well diversified in their investments, and both the salary and return on capital elements of their remuneration were at risk.[60] In addition, it said that Audit was not significantly less systematically risky than indicated by an equity beta of 0.8, which was already below the average of 1.0. It was true that there was a fixed annual *quantity* of statutory audit services demanded by companies within the reference market. However, there were a number of reasons that caused the *prices* of audit services to respond strongly to systematic risk factors. These reasons included:

(a) During economic downturns, buyers of audit services faced strong downward pressure on their budgets. These pressures impacted directly on the willingness to pay for any discretionary part of audit and audit-related services.

[58] PwC Observations on the assessment of audit profitability, 7 August 2012, paragraph 7.17.
[59] www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/profitability_part_one.pdf and www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/profitability_part_two.pdf.
[60] PwC response to 'Profitability' 1&2 working papers, paragraph 6.

(b) PwC was committed to delivering audits of only the highest quality. Regulation was also designed to ensure the quality of audits. This meant that when faced with downward fee pressure from clients, PwC had limited scope in the short term to adjust the resources committed to a particular audit engagement. Falling fees thus translated not only to falling total revenue, but also falling revenue per hour of client-facing staff time and, resultantly, falling profitability.

(c) The nature of PwC's relationship with a client it audited was typically structured on a much longer-term basis than that for a typical non-audit client. Non-audit engagements were more ad hoc and were often one-off in nature. Because of the longer-term audit relationship, companies were able to place proportionately more pressure on audit fees than would be possible in a non-audit engagement. PwC was more likely to decline a non-audit engagement where its client placed significant downward pressure on fees than was the case for an equivalent audit engagement. This was because it was not possible to decline to perform an audit during a recession when fee rates were under pressure, and then simply re-engage when the fee rates recovered.[61]

69. Deloitte also highlighted the difficulty of establishing the appropriate WACC in relation to a business such as Deloitte which had no traded equity from which to obtain a beta value, and also that the CAPM captured only systematic risks and not the specific risks that characterized partners' investment in large audit firms.[62]

70. Oxera questioned the validity of the equity beta proposed by PwC and suggested that a figure of 0.5 might be more appropriate—see paragraph 91*(c)*.

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[61] PwC response to 'Profitability' 1&2 working papers, A10.
[62] Summary of Deloitte's response to the Competition Commission's marketing and financial questionnaire—paragraph 7.7(c).

71. KPMG considered a WACC estimate of 17.5 per cent (its central estimate) and 12.2 per cent (its low estimate).[63] This included an uplift for unsystematic and liquidity risk exposure (2.2 per cent low case and 4.9 per cent central case). It used an ungeared equity beta (asset beta) of 0.61 (low case) and 0.62 (central case).

72. KPMG said that audit was a mandatory requirement for all listed firms, with numerous academic studies showing that fees were a function of auditee size and complexity. It considered there to be some cyclicality in the market for audit fees implied by this relationship between size and fee, and auditees would try and exert downward pressure on such fees which would be accentuated in bad times. KPMG said that this fundamental requirement to purchase audit services invited an obvious comparison with utility service providers. However, some utilities (water companies) faced no real competition within their distribution areas, whereas audit firms faced a competitive environment. KPMG said that the analogy, therefore, might be more with telecommunications companies or energy companies than water utilities.

73. We note the firms' comments made in relation to the risk of their Audit practice compared with their other lines of service in paragraphs 154 to 161 below.

CC discussion

74. We have not formed a view on the appropriate cost of capital. PwC's general approach did not appear unreasonable; its parameters for the risk-free rate and the ERP appeared to be within a reasonable range. However, if the cost of equity became a key component of our analysis, then we said that we would need to consider more carefully in due course what an appropriate equity beta estimate would be. We note that PwC's estimate of 0.8 is considerably higher than the values proposed by KPMG and Oxera. In particular, we consider that audit is a relatively

[63] KPMG response to Profitability 1&2 WP, paragraph 1.15.

non-cyclical business and therefore that it is likely to have low systematic risk in comparison with other activities undertaken by professional services firms and consultancies. In relation to PwC's argument that audit fees could come under pressure in certain circumstances, whilst we agreed that audit revenues might not be completely immune to economic conditions, we thought that the compulsory nature of the statutory audit meant that it was largely insulated from market risk. As a result, we consider that KPMG's comparison of audit firm betas to utility companies, particularly those exposed to competition, has merit.

75. We consider there to be some merit in the Oxera 2007 view that there should be an uplift in the cost of capital assessment to take account of the fact that investors in audit firms are not diversified. KPMG proposed liquidity and specific (unsystematic) risk uplifts in its assessment of the cost of capital. We considered that this uplift was potentially difficult to quantify accurately as there was no established framework for assessing the required rate of return for a non-diversified investor.

76. We have not estimated the cost of capital for the statutory audit business as we considered that, in conjunction with the other areas of uncertainty (namely the problems of cost allocation, measurement of capital employed and partner salaries), we would be unlikely to be able to conduct a reliable assessment of audit firm profitability. However, we do consider the systematic risk of the statutory audit business to be relatively low in comparison with other service lines, because companies are compelled to purchase statutory audit and revenues are therefore insulated to a large degree from the effects of an economic downturn.

Review of measures of profitability

ROCE

77. ROCE is a standard measure of profitability that compares profits with the investment in the company and that can be compared with the company's WACC.

78. In this investigation, calculating the return of the audit firms requires assumptions to be made about cost allocation and partner salaries (as discussed above). Additionally we need to obtain an appropriate value for capital employed.[64]

Parties' views on ROCE

79. PwC stressed the sensitivity of any ROCE calculation to *(a)* changes in estimated profit, and *(b)* the range in the value of the intangible assets. It provided the example shown in Table 5.

TABLE 5 **PwC's example of the effect of changes in profit and asset base assumptions**

	Effect of change in profit based on tangible assets only		*Effect of change in profit where full possible value of intangibles are included*	
Profit	5	1	5	1
Tangible assets	10	10	10	10
Intangible assets	0	0	20	20
ROCE (%)	50	10	17	3

Source: PwC.

80. Deloitte said that whilst the CC had previously considered circumstances in which items such as brand or intellectual capital might constitute intangible assets, these circumstances were difficult to apply, as brand and intellectual capital were intrinsic to the service offering of Deloitte and also were part of the off-balance-sheet capital

[64] Guidelines for market investigations consultation document, June 2012, Annex A, paragraph 11.

that it had built up over time. It considered that a ROS-based analysis might be more appropriate.[65]

81. Oxera considered that ROCE could be used as an indicator of profitability and proposed a method of building an asset base to reflect intangibles (see paragraph 51). Oxera hypothesized that the asset base that would result in an IRR in line with the cost of capital would be comparatively large.[66]

82. KPMG presented its own ROCE analysis both for KPMG UK and KMPG Audit UK. It calculated average ROCE for KPMG's Audit function across the period 2007 to 2011 of 12.7 per cent: it compared this to a central WACC estimate of 17.5 per cent and a low case of 12.2 per cent.[67] The key assumptions in this calculation were:

(a) average annual audit partner salary of £[✂] based on a 100 per cent mark-up on top KPMG audit director salaries;

(b) average annual capitalized intangible expenditure of £[✂] million, with intangible asset lives of three to five years, based on direct costs and staff and partner time spent on marketing and business development, recruitment, training and [✂]; and

(c) an allocation of, on average, 34 per cent of common costs to the Audit function based mainly on headcount (KPMG said that using revenues or direct costs as a driver would not generate a materially different ROCE estimate).[68]

83. KPMG said that there was a constant risk of a low-probability, high-impact event adversely affecting the performance of the Audit function in the future. This was reflected in the practice protection insurance premium which the firm paid annually, that had a strong weighting towards audit (ie audit drove the large majority of these

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[65] Summary of Deloitte's response to the Competition Commission's marketing and financial questionnaire—paragraph 7.8.
[66] Oxera ideas on profitability assessment presentation 29 May 2012, slide 13.
[67] KPMG response to 'Profitability' 1&2 working papers, paragraph 1.15.
[68] KPMG response to 'Profitability' 1&2 working papers, paragraph 1.18.

costs). Low-probability, high-impact events were examples of specific risk and not systematic risk. Specific risk was excluded from a cost of capital calculation which assumed that investors could diversify away all unwanted specific risk. However, this was not possible for audit partners. Such events would manifest as major cash-flow shocks, and so KPMG said that care must be taken in extrapolating long-run profitability from profits in a relatively short period. It considered that the important implication was that the Audit function's profits were likely to be an overstated estimate of long-run sustainable profits to the extent that such events had not arisen in the period under review.[69]

84. KPMG said that whilst the inherent difficulties in such an analysis might preclude a wholly accurate calculation of ROCE, it was possible to use such an analysis to demonstrate that the economic profitability of KPMG UK's Audit function was consistent with a competitive market over a five-year period.[70]

85. KPMG said that it was difficult to value intangibles. However, in its model it found that the results on the ROCE were not particularly sensitive to the assumptions in relation to intangible assets. The assumptions on partner remuneration were, in KPMG's view, the most challenging aspect of a ROCE analysis in this market, and the results of the ROCE analysis were also more sensitive to assumptions about partner remuneration than the level of intangible assets capitalized.[71]

CC discussion—ROCE

86. We recognized the issues associated with cost allocation and partner salaries above. Taking into account the evidence from the parties, we considered that there was considerable uncertainty as to the appropriate cost allocation to the firms' Assurance

[69] KPMG response to 'Profitability' 1&2 working papers, paragraph 4.1.7.
[70] KPMG response to 'Profitability' 1&2working papers, paragraph 5.2.3.
[71] KPMG response to 'Profitability' 1&2 working papers, paragraphs 5.2.7–5.2.9.

businesses and/or Audit businesses as well as some uncertainty as to the appropriate average partner salary.

87. We considered that the assessment of an appropriate capital base was perhaps the most difficult issue in considering a ROCE-style analysis in this investigation (see paragraph 61 above) (although we note KPMG's view that it is the partner salary assumptions that were the most challenging in the ROCE assessment). We considered that we were unlikely to be able to assess the intangible asset base of the firms' Assurance businesses with a great degree of certainty. Obtaining consistent evidence across firms (in terms of having the same level of detailed cost information) is difficult, and our understanding was that the firm's reporting systems did not provide sufficient detail as to the nature of the costs to be able to identify intangible capital costs.

88. We considered that the scale of any sensitivity that would need to be applied to partner salary and capital base assumptions, as well as the range of potentially appropriate benchmark returns, meant that obtaining a definitive or even directionally indicative ROCE assessment was unlikely. We therefore did not undertake detailed assessments of the component parts of a ROCE calculation (ie capital base, cost allocation, partner salary and appropriate benchmarks).

ROS-based measures

89. Our guidelines state that in situations where capital employed cannot be reliably valued, the CC may consider alternative measures, such as the ROS or other

relevant financial ratios. For instance, comparisons with businesses operating in different but similar markets may on occasion be helpful.[72]

Views of the parties

Oxera

90. Oxera in its presentation to the CC said that whilst IRR/WACC approaches were subject to measurement problems, the framework was superior to alternatives, such as ROS, that ignored investment and risk. Oxera therefore considered that IRR/ WACC approaches should be given weight.[73]

91. In response to PwC's proposed 'economic profit margin' (see paragraph 92), Oxera said that the measurement issues that caused problems with other indicators (IRR, ROCE) and led PwC to reject these also applied to the 'economic profit margin'.[74] In particular, it said that:

(a) Profits inside the reference market could be excessive, whilst at the same time profits outside were normal or even negative. In such a case, PwC's result of a 1 per cent positive 'economic profit margin' in aggregate could be consistent with the existence of excess profits in the reference market.[75]

(b) PwC used partners' invested capital as the measure of capital for its approach; this was an erroneous estimate of the appropriate capital base as there was no attempt to account for intangibles (unless they were implicitly included in the partners' invested capital). This was the precise issue that led PwC to reject ROCE or IRR. Oxera said therefore if the CC did not estimate intangibles, it could rely no more on PwC's metric than it could on a ROCE or IRR calculation based only on a measure of partners' invested capital or tangibles assets.[76]

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[72] Guidelines for market investigations consultation document, June 2012, Annex A, paragraph 14.
[73] Oxera presentation to CC dated 29 May 2012, p11.
[74] Oxera comments on PwC document, 30 August 2012, paragraph 2.1.
[75] Oxera comments on PwC document, 30 August 2012, paragraph 2.4.
[76] Oxera comments on PwC document, 30 August 2012, paragraphs 2.8–2.10.

(c) PwC may have overestimated the equity beta and hence cost of equity applicable to audit. The cyclicality of demand for audit would be low as its purchase was a statutory requirement; however, PwC's estimate of equity beta was based on businesses that did not have this characteristic. PwC's economic profit margin might be underestimated as a result. Additionally, if PwC's own debt-to-equity ratio was used, then an equity beta of 0.5 rather than 0.9 would be obtained.[77]

(d) The economic profit margin was highly sensitive to errors in the labour cost adjustment, and much less sensitive to errors in the cost of capital or partners' invested capital. It was not possible to make any meaningful comment on the robustness or otherwise of the labour cost adjustment. However. it was apparent that any errors in the calculation had the potential to change the profitability result in a way that could change any conclusion on whether profits were excessive or not.[78]

(e) The methodology used by PwC included employer national insurance when calculating the notional cost of partners. As national insurance contributions were not paid in relation to partners, this could be seen to inflate the labour cost in-appropriately and by a material amount. Whether a national insurance adjustment was appropriate depended on what was assumed about the ownership structure in the hypothetical scenario where partners were salaried and the ownership structure of competing firms.[79]

PwC

92. PwC considered a variant of ROS (which it termed the 'economic profit margin') to be its preferred measure. In assessing the 'economic profit' of its business, PwC adjusted its audit business returns (revenue less attributable costs—staff, direct and indirect costs) for: assumed partner salary (as discussed in paragraph 33); it made

[77] Oxera comments on PwC document, 30 August 2012, paragraphs 2.11–2.13.
[78] Oxera comments on PwC document, 30 August 2012, paragraphs 2.14–2.18.
[79] Oxera comments on PwC document, 30 August 2012, paragraph 2.19.

an 'ACA adjustment' to reflect the costs incurred in training staff who gained the ACA qualification and then moved to non-audit parts of PwC (ie it assumed that those parts of the business would otherwise have to pay to train ACA qualified staff); and it calculated a return on partners' invested capital.[80] It calculated the 'economic profit margin' by taking its measure of economic profit and dividing by revenue.

93. PwC considered that its economic profit margin measure had significant advantages over both return on capital-based measures and benchmarking profit per partner to other partnerships. In particular, it said that:[81]

(a) Margins analysis reduced the need to focus on accurately estimating the value of intangible assets, although the results needed to be interpreted in the context that if such assets did exist they had not been taken into account.

(b) Margins analysis used revenue as its denominator, which provided more stable results and was less sensitive than both ROCE and truncated IRR analysis to:

(i) a missing valuation for intangible assets; and

(ii) the precise level of audit profit.

(c) A key issue in competition analysis was whether the level of profitability was sufficiently large to be indicative of a competition problem. Positive economic profits would frequently be observed in a competitive industry and could be compatible with effective competition or result from measurement error. For a business such as an audit firm, where the amount of tangible capital was small but the size of the business (measured by sales) was large, whether the level of profitability was sufficiently large to be indicative of a competition problem could not be judged by the yardstick of return on tangible capital. Margins analysis gave a far more reliable indication of the materiality of any identified positive economic profit.

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[80] PwC Observations on the assessment of audit profitability, 7 August 2012, paragraph 2.21.
[81] PwC Observations on the assessment of audit profitability, 7 August 2012, paragraph 2.22.

(d) Compared with profit per partner analysis, margins analysis was not as reliant on benchmarking audit profits against those for other businesses that may or may not operate in sectors that were both comparable and could be regarded as effectively competitive. In applying its economic profit margin methodology to its own audit services, PwC said that it had also been able to factor in a calculation of notional 'partner salary'—one of the main concerns with profit per partner analysis based simply on publicly available data (eg from transparency reports).

94. PwC said that using partners' invested capital as a proxy for tangible assets implicitly assumed that most of the firm's balance sheet operating tangible assets were funded by the capital that partners had invested (PwC had almost no borrowings). PwC used a proportion of reserves (ie retained earnings) to fund tangible assets and working capital, which it said should also be considered part of the firm's asset base. However, to prevent any concerns that there might be a degree of circularity in attempting to estimate the reasonableness of profits based on a return on retained profits, PwC did not include this element of reserves in its calculations. It said that its measure should therefore be regarded as understating total tangible capital employed. Average partners' invested capital for audit services was estimated by multiplying average invested capital per partner by PwC's calculated number of audit partner FTEs. PwC Audit's cost of equity was calculated based on the CAPM (as set out in paragraph 67).[82]

95. PwC presented its results as shown in Table 6.[83]

[82] PwC Observations on the assessment of audit profitability, 7 August 2012, paragraphs A7.3–7.7.
[83] PwC Observations on the assessment of audit profitability, 31 July 2012, Table 1.

TABLE 6 **Summary financials for PwC Audit business, FY07 to FY11**

	PwC Audit (£m)					
	FY07	FY08	FY09	FY10	FY11	5 year Av.
Total Revenue	588.0	576.4	558.0	547.5	546.6	563.3
Cost of sales disbursements	✂	✂	✂	✂	✂	✂
Net revenue	✂	✂	✂	✂	✂	✂
Client Service Staff (CSS) costs	✂	✂	✂	✂	✂	✂
Gross profit	✂	✂	✂	✂	✂	✂
Gross profit margin	✂	✂	✂	✂	✂	✂
Direct costs[35]	✂	✂	✂	✂	✂	✂
Direct profit	✂	✂	✂	✂	✂	✂
Direct margin	✂	✂	✂	✂	✂	✂
Indirect costs	✂	✂	✂	✂	✂	✂
Unadjusted profit	✂	✂	✂	✂	✂	✂
Unadjusted profit margin	*19%*	*18%*	*20%*	*22%*	*19%*	*19%*
ACA adjustment	✂	✂	✂	✂	✂	✂
"Partner salary"	✂	✂	✂	✂	✂	✂
Return on partners' invested capital	✂	✂	✂	✂	✂	✂
Economic profit	✂	✂	✂	✂	✂	✂
Economic profit margin	*4%*	*(1%)*	*0%*	*1%*	*(1%)*	*1%*

Source: PwC data and analysis.

96. PwC said that having allocated costs on an FAC basis, and deducted estimates of partner labour and capital costs, in theory the observed economic profit margin might be expected to be close to 0 per cent in a competitive market. This was because in a hypothetical perfectly competitive industry in long-run equilibrium, a company would not make any profits in excess of what it needed to pay for its labour, capital and other factors of production.[84]

97. It considered that in practice, economic profit margins in a competitive market were likely to differ from 0 per cent for a number of reasons. These reasons included:

(a) a return on intangible assets that had not been quantified;

[84] PwC Observations on the assessment of audit profitability, 7 August 2012, paragraph 4.7.

(b) extra risks borne by partners in an audit firm that had not been reflected in the cost of equity estimate, eg because they were not as fully diversified investors as was assumed within the CAPM framework;

(c) the industry or individual business might not be exactly in long-run competitive equilibrium;

(d) differing requirements for each business area on how much they were expected to contribute to the firm's overall costs (PwC used FAC for its audit services); and

(e) some error in measuring audit profitability, given the need to use judgement (for example, in cost allocation).[85]

98. PwC concluded that a 1 per cent 'economic profit margin' for its audit services over the last five years strongly indicated that profits were not excessive given these factors. In principle, it would be instructive to benchmark this 1 per cent audit economic profit margin against similarly calculated margins for comparable companies in other effectively competitive industries. However, because it had not identified any appropriate comparators, it had not carried out such analysis.[86]

99. In response to our Profitability 1 and 2 working papers,[87] PwC said that it did not agree with our reservations with regard to a ROS analysis. In particular, it noted that:

(a) It considered its cost allocation to be extremely detailed and robust. There were a number of reasons beyond cost allocation that might cause differences in assurance net margins across the four largest firms. For example, there may be significant differences in (i) business models, (ii) commercial priorities and (iii) differences in the mix of businesses that fall within the firms' Assurance divisions.

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[85] PwC Observations on the assessment of audit profitability, 7 August 2012, paragraph 4.8.
[86] PwC Observations on the assessment of audit profitability, 7 August 2012, paragraph 4.9.
[87] www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/profitability_part_one.pdf and www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/profitability_part_two.pdf.

(b) Its partner salary benchmarking exercise was robust and endorsed by Dr Jonathan Trevor of the Cambridge Judge Business School.

(c) All measures of profitability were inherently sensitive to underlying assumptions but this had not prevented the CC from estimating—and concluding on—profitability in other investigations. PwC said that even when key assumptions were flexed using reasonable sensitivities, there was no evidence to suggest that PwC's Audit business generated excess profits.[88]

CC discussion—adjusted ROS

100. The method proposed by PwC requires a similar approach to assessing the distributable profits as for the ROCE analysis because cost allocation and partner salary are still key assumptions. The method requires the application of an appropriate WACC to an appropriate capital base. This therefore involves similar issues to those for a ROCE-based approach. The question is then whether the profit after a deduction of a return on tangible assets/invested capital would leave an adjusted ROS figure that could be assessed in a more meaningful way than a ROCE figure. The method proposed by PwC addresses the issue of investment made by the firms, by assuming that invested capital was a proxy for tangible assets.

101. The theory that taking into account an appropriate return on a meaningful asset base and adjusting profits accordingly would lead to an expectation of no additional profits is correct. Dividing any remaining return by sales to give a percentage metric is only helpful if there is a benchmark against which to compare it. We agree with PwC that finding a suitable benchmark is difficult. We considered similar calculations for law firms, although such an exercise would require an assumption about the appropriate salary for a law firm partner (we discuss the comparability of law and audit firms in paragraph 125). Without a benchmark, PwC's resulting figure of 1 per cent is difficult

[88] PwC response to 'Profitability' 1&2 working papers, section 5.

to interpret. The argument that the adjusted ROS is overstated as the capital invested does not reflect any element of retained profit has some merit, but it is difficult to assess the scale of any effect.

102. Review of PwC's methodology and the figures in Table 6 highlight the sensitivity of the analysis to the assumptions made as [✂].

103. We note, for example, that if the PwC benchmarked salaries were, say, 10 per cent overstated, the 'economic profit' across the period would be in the region of £[✂] million (rather than £[✂] million).

104. PwC's cost allocation to its Audit business may well be correct but we note that the difference in net margin for the Big 4 firms' Assurance net margins varies over the period 2007 to 2011 (see paragraph 143).[89] Whilst some of this difference in net margin (which is measured before partner salary costs) may be offset by differences in invested capital and hence the return on that capital to be deducted from the net margin, or because of differences in the number of partners (or differences in their salaries) between firms, an initial review suggested that this would not align the returns of the Big 4 firms (in particular, Deloitte maintains a higher margin than the other Big 4 firms). We would not expect the firms to have perfectly consistent returns; however, the scale of this difference calls into question the comparability of the cost allocation methods used by the firms. Whilst it may be that (as PwC suggested) this difference is caused by the inclusion of different services in Assurance, different business models or commercial priorities between firms, it was not clear that we would be able to obtain accurate financials for the firms' audit divisions (see paragraph 17).

[89] Net margins here are calculated on the basis of billable revenue, less the costs of employing staff in the service line, the direct costs of the service line and any allocation of central costs. Notional partner costs have not been deducted.

105. Given the difficulties in assessing an appropriate cost allocation (as discussed above), the difference in net margins (before partner salary costs) of the Big 4 firms, the variation in potential benchmark salaries for partners (see paragraph 45) and the sensitivity of any adjusted ROS to those assumptions, we do not think that an adjusted ROS can be accurately computed and assessed against a suitable benchmark. We also note the points made by Oxera with regard to the return to be applied to invested capital and the sensitivity of the economic profit margin to the assumptions made. There are a wide range of assumptions that could be used for such an assessment, so obtaining clear directionally indicative results on which we could benchmark and rely was unlikely.

Profits per partner

106. As noted in paragraph 4 above, in a market investigation the CC will often consider how the firms measure profitability. Much of the benchmarking between the audit firms is undertaken on the basis of 'profit per partner' (at a firm level). The 'profit' used in these calculations is the total remuneration of the partners (ie it includes both the salary and return on investment elements).

107. In the Market and Financial Questionnaire (MFQ), we asked parties to provide information on the total remuneration/profit per partner as set out in Table 7 below.[90,91,92]

[90] Whilst it is possible to identify remuneration for Responsible Individuals (who are authorized by their respective firms to sign audit reports) as 'audit partners', in practice non-audit partners (from both assurance and non-assurance service lines) will also contribute to engagements and 'audit' partners will similarly spend time on non-audit work. Different firms may have interpreted 'audit partner' in different ways. For example, PwC used Responsible Individuals to assess 'Audit partner' total remuneration.
[91] [✂]
[92] Non-audit partners may include any partners who form part of the senior management structure.

TABLE 7 **Total remuneration/profits per partner by firm (and for some by audit/non-audit)**

£'000

	2004	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*
Deloitte—audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Deloitte—non-audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY—partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG—audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG—non-audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC—audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC—non-audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO—audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO—non-audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT—audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT—non-audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: MFQ other business information responses.

Notes:
1. EY provided data only on partners as a whole.
2. Profit per partner has generally been calculated as total remuneration per partner.
3. N/A = not available.

108. Table 7 shows that the difference between the average audit and non-audit partner total remuneration/profits at Deloitte, PwC and BDO were not significantly different (ie less than £[✂]). But at Deloitte and PwC (the two largest firms by revenue), the total remuneration/profits per audit partner were on average higher than the total remuneration/profits per non-audit partner. At KPMG and GT, the total remuneration/profits per audit partner were £[✂] and £[✂] lower (on average over the period) than for their non-audit colleagues.[93]

109. PwC noted that the change in the relative levels of average audit and non-audit partner remuneration over the period reflected, among other factors, the relative growth in the different lines of service and changes in the partner seniority mix within the service lines.

110. The total remuneration/profits per partner at GT and BDO were generally less than half that of those at the Big 4 firms.

[93] This difference is in nominal terms. [✂]

111. Table 8 shows the total remuneration/profit per partner in real terms (2011 prices). [✂] and [✂] achieved real increases for both audit and non-audit partner remuneration of [✂] per cent a year over the period driven by increases between 2004 and 2006 or 2007.[94] EY's firm-wide performance was [✂]. GT's remuneration per partner showed a [✂].

TABLE 8 **Total remuneration/profits per partner by firm (and for some by audit/non-audit), real terms (2011 prices)**

								£'000	*%*
	2004	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*CAGR**
Deloitte—audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Deloitte—non-audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY—partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG—audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG—non-audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC—audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC—non-audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO—audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO—non-audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT—audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT—non-audit partner	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: MFQ other business information responses.

*Compound annual growth rate.
Notes:
1. EY provided data only on partners as a whole.
2. Figures adjusted using CPI All Items Annual Average for the calendar year of the reporting date.
3. N/A = not available.

Views of the parties

112. PwC said that profit per partner 'or more precisely total remuneration per partner' was used by PwC as a key financial performance metric for the overall firm (ie it was not specific to audit).[95]

113. PwC said that it considered the following as potential benchmarks: management consultancies; actuarial and benefits consultancies; engineering and other consultancies (tax, recruitment, pricing, security, project management etc); media firms; architect and design firms; property/chartered surveyors; and GPs, dentists and other

[94] CAGR presents an annualized growth figure for the period as a whole and as a result may mask long periods of stagnation or large increases followed by similar decreases.
[95] PwC: observations on the assessment of audit profitability, 7 August 2012, paragraph 2.4.

healthcare practices. However, it found it difficult to obtain reliable UK financial data on these potential benchmarks, mainly because: *(a)* some businesses were partnerships but did not have an LLP structure, so the company did not have to disclose the number of partners; and *(b)* partner remuneration was often not disclosed. The one exception to this was law firms, for which there appeared to be more publicly available profitability data.[96]

114. PwC considered top UK law firms to be sufficiently comparable to PwC (on a firm-wide rather than an audit basis) to provide a sense check of the profitability findings of its economic profit margins analysis. This was because they:

(a) were generally organized in partnerships;

(b) relied heavily on intellectual property, brand, reputation and other intangible assets in the provision of their services;

(c) served broadly the same UK client base as the large audit firms, and provided similarly high-value-added professional services;

(d) had a mix of client and project tenures; and

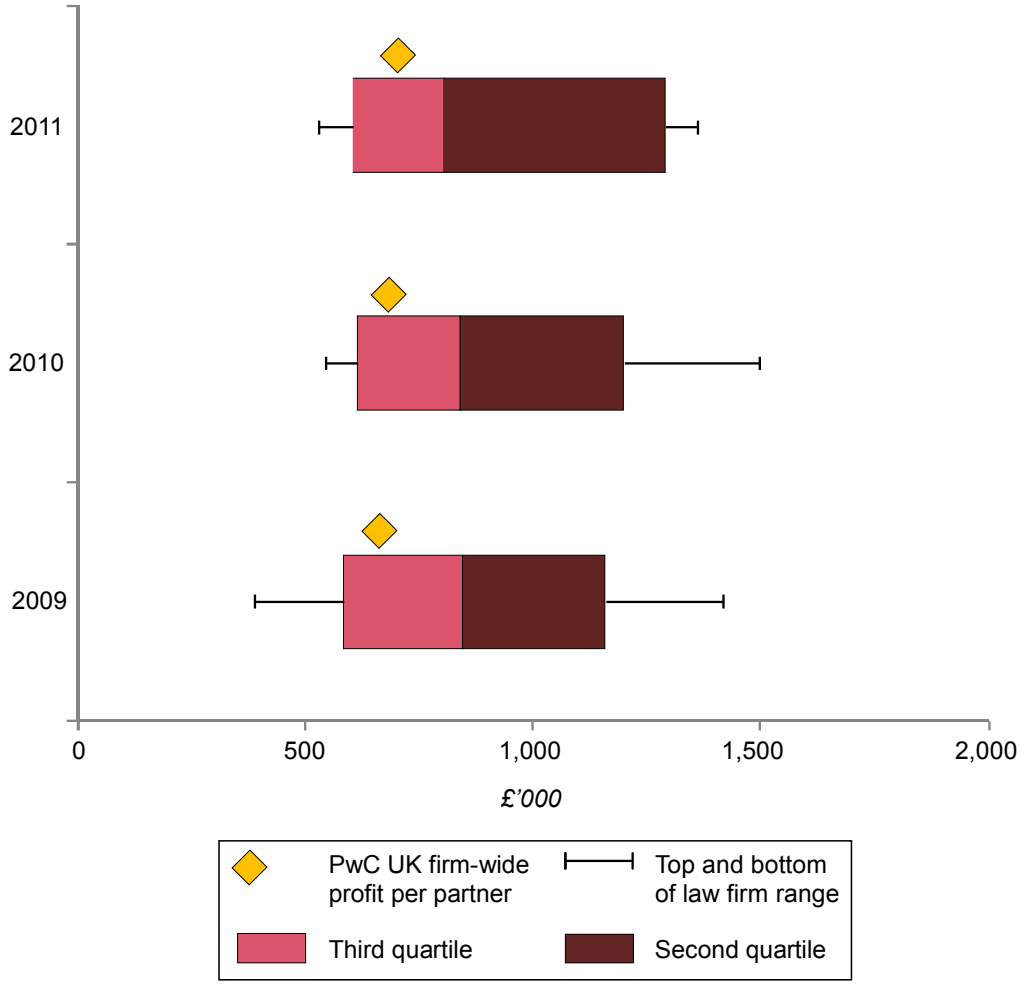
(e) operated in unconcentrated markets.[97]

115. PwC provided analysis of the profit per equity partner over the last three years for the top 10 UK law firms and PwC UK, as shown in Figure 2.[98]

[96] ibid, fn 16.
[97] ibid, paragraph A3.4.
[98] ibid, Figure 4.

FIGURE 2

Profit per equity partner—top 10 UK law firms and PwC UK, 2009 to 2011



Source: PwC Law Firms' Survey 2009–2011, PwC data and analysis.

116. PwC and Deloitte considered that their profit per partner ranked lower than Magic Circle law firms.[99] Deloitte provided analysis to suggest that on both a net margin and profit-per-partner basis the profits of the Silver Circle law firms were higher than those of Deloitte in 2006 to 2008 and were below those of Deloitte for 2009 to 2011.

117. Deloitte said that the profitability of its audit services was commensurate with that of other high-quality professional services firms such as law firms. It considered that the premium returns of its audit services relative to that of Mid Tier firms was

[99] ibid, paragraph 2.7.

commensurate with the premium that Magic Circle law firms were able to sustain over Silver Circle law firms.[100]

118. Deloitte said that:

> the substantial market and business risk of providing audit services are difficult to quantify but if successfully mitigated would result in correspondingly higher levels of profitability for those, generally larger, firms that are both willing and able to take on the higher risk associated with larger more complex clients.[101]

119. Deloitte said that given the similarities between legal and auditing firms in terms of the provision of professional services based on extensive training and methodologies to a similar client base, such comparisons were instructive and showed that competitively justified gaps in the quality of professional service providers would be reflected in premium returns for the highest-quality firms.[102]

120. Oxera said that its understanding was that there was little overlap in terms of customers between Magic and Silver circle law firms and other law firms outside the City of London. It said that in any benchmarking comparison, this apparent structural difference between the Magic and Silver circle law firms and the audit firms should be taken into account. As an example, it said that it would seem more appropriate to compare profit per partner on the basis of those audit partners supplying audit services to the FTSE 350, or even FTSE 100, with partners in Magic or Silver circle law firms, to reflect that, at the level of the firm, there were no equivalents in these law firms of audit services provided to small companies out of the Armagh office, for

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[100] ibid, paragraph 7.4.
[101] ibid, paragraph 7.4.
[102] Deloitte response to 'Profitability' 1&2 working papers, paragraph 4.10.

example. Oxera also considered that it was appropriate to take differences in the stability of demand conditions between legal and auditing firms into account.[103]

121. KPMG said that assumptions on partner employment costs were needed even when simple metrics such as engagement profitability/margins and profit per partner were considered. It said that using PPP, we (the CC) had found (in our Profitability 1 & 2 working papers) that total remuneration per partner of the partners at Mid Tier firms was 'generally less than half that of those at the Big 4 firms'. It said that this kind of measure was not appropriate when considering the level of economic profitability in the market. This was because partner employment costs were significant. KPMG would also expect partner employment costs to be higher in the largest four audit firms than in the Mid Tier firms, reflecting the market rate for the talent required to deal with the larger and more complex audit engagements of the largest four audit firms.[104]

122. KPMG said that PPP measures were affected by the number of partners in the firm in question. For PPP measures to be sensibly applied in inter-firm comparison, differences in the business models of each firm as well as its policy on appointing new partners would need to be taken into account.[105]

123. We notified firms that we were considering a return on invested capital measure (we envisaged this using the return element of partner remuneration and the average invested capital per partner)—although we recognized that this would not equal the economic capital base of the firm.

124. Firms highlighted that:

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[103] Oxera response to 'Profitability' 1&2 working papers, paragraph 3.6.
[104] KPMG response to 'Profitability' 1&2 working papers, paragraphs 5.2.11 & 5.3.1–5.3.4.
[105] KPMG response to 'Profitability' 1&2 working papers, paragraph 5.3.5.

(a) Invested capital was not an appropriate measure of the firms' capital base for an assessment of economic profitability either on a firm or a per partner basis.[106]

(b) Equity partners had an interest in the full market value of the firm, and this value was at risk.[107]

(c) Firms were mainly financed by reinvestment of earnings rather than these being distributed. Large amounts of funding for working capital and investment came not from capital subscriptions made by partners, but from funds otherwise payable to partners, such that at any point in time the total investment by the partner group significantly exceeded the formal capital which they injected.[108]

(d) There was also a significant amount of intangible assets not included on the balance sheet. The cash investment in these intangible assets was funded through both partner capital injection and internally-generated funds, with the latter being most significant.[109]

(e) Any return on invested capital calculation was highly sensitive to partner salary assumptions.[110]

(f) Partner remuneration was sensitive to the number of partners admitted and this number was entirely a decision for each firm having regard to its chosen business model, and there were differences in approach (eg use of salaried partners and directors).[111]

(g) Partners shared profits of the firm as a whole.[112]

CC discussion—profits per partner

125. We accepted PwC's submission that finding an appropriate benchmark for audit profits per partner was difficult. We considered that whilst data on law firms was more readily available than for other professional partnerships, legal and auditing returns

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[106] EY, GT, KPMG and PwC.
[107] Deloitte and PwC.
[108] KPMG and PwC.
[109] KPMG and PwC.
[110] BDO, Deloitte, EY and GT
[111] KPMG and PwC.
[112] Deloitte and PwC.

should not necessarily be equivalent. For example, the level of equity injected and the relative roles of partners in different professional service firms might differ and might indicate different levels of risk incurred. It was not clear to us that the volatility of earnings from audit and law businesses were comparable.

126. What was clear was the large difference between the profits per partner earned by the Big 4 firms compared with BDO and GT. However, we recognized KPMG's point that profit per partner reflects total remuneration and that it is not clear that the work undertaken by an average partner at BDO or GT is comparable to that of an average partner at a Big 4 firm. We broadly accept that a direct comparison of average remuneration between Big 4 and larger Mid Tier firms is not informative of itself as to the level of economic profits in the reference market. We do not consider the role and responsibilities of an average Big 4 and larger Mid Tier partner to be directly comparable (see paragraph 46 above), and note that PPP includes a share of firm-wide returns (we have not considered the comparability of the firm-wide activities of Big 4 and Mid Tier firms in detail).

127. We considered the data provided to us by PwC from which it benchmarked audit partner salaries (as discussed in paragraph 43). By deducting these notional 'salaries' from total partner remuneration, we are then left with a residual value which we understand to represent a return on capital. On this basis, returns on capital per partner for the Big 4 firms in 2011 were between £[✂] and £[✂] (excluding employers NI)[113] and for BDO/GT £[✂] and £[✂] respectively (excluding employers NI).[114]

[113] Calculated as the highest and lowest audit partner salaries in 2011 less £473,000 assumed average salary based on paragraph 43.
[114] Calculated as the highest and lowest audit partner salaries in 2011 less £264,000 assumed average salary based on paragraph 43.

128. Table 9 sets out (by firm) the average initial monetary investment made by a partner entering the partnership (including additional investment on entry to a higher tier of partnership) over recent years. The average initial monetary investment across the firms across the periods for which data was available was £[✂].[115]

TABLE 9 **Average audit partner initial monetary investment* over recent years**

£

	FY09	*FY10*	*FY11*	*Current*	*Average†*
Deloitte‡	N/A	N/A	N/A	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]
PwC§	[✂]	[✂]	[✂]	[✂]	[✂]
EY	N/A	[✂]	[✂]	[✂]	[✂]
BDO	N/A	[✂]	[✂]	[✂]	[✂]
GT	N/A	N/A	N/A	[✂]	[✂]

Source: Firms' response to partner capital questions.

*Including the additional monetary investment by a partner on entering a new level/tier of partnership and additional investments required from partners for financing business needs.
†Average across period data provided for.
‡Deloitte figure is for all partners across the firm in May 2011.
§PwC does not operate a 'statutory audit practice' and does not identify 'statutory audit partners'. The figures provided by PwC represent the average over recent years for PwC's Assurance Line of Service (which contains partners who are 'Responsible Individuals' for audit purposes).
Note: N/A = not available.

129. Comparing the average return on capital per partner shown in paragraph 127 with the average initial monetary investment of audit partners (calculated in accordance with paragraph 128 above) shows that in a given year, eg 2011,[116] audit partners in the Big 4 firms receive on average over [✂] per cent return on their initial monetary investment.[117] This demonstrates that on average audit partners in the Big 4 firms are receiving total remuneration in excess of their notional salary and what appears to be a relatively high return on the initial monetary investment that they have made in the firm.

130. We noted that the initial monetary investment figures in Table 9 did not reflect any partner capital in the form of retained earnings and considered whether the relatively high return on initial monetary investment could be indicative of high profitability. We

[115] [✂]
[116] 'Audit partners' are approximated by Assurance partners for PwC data as PwC does not operate a 'statutory audit practice'.
[117] For the avoidance of doubt, this figure does not represent ROCE.

note that the initial monetary investment in the firm does not appear to be linked to the value of the firm. We understand that partners are required to invest a notional amount in the firm on entry to the partnership (and are sometimes required to increase this capital investment during their tenure, for example as they are promoted to a more senior partnership level) and on exiting the partnership they receive their investment back with no capital appreciation (ie their investments are not adjusted to reflect changes in the value of the firm). Some firms told us that the amount required to be invested was based on the working capital requirements of the firm.

131. In view of the above, it appears to us that whilst partners receive remuneration based on firm-wide profits whilst they are in office, they do not purchase their share in the firm at market value and do not own a stake in the partnership which can be traded. This is very different from standard investment models where investments are made on the basis of comparing the cost of the investment with the expected returns.

Assurance versus other business units

132. Among the closest comparators for the Assurance businesses are the accounting firms' other service lines. We consider the relative profitability of each firm's service lines in detail in Annex 1.[118] This analysis has been undertaken such that we can make comparisons within firms but not directly across firms (or make comparisons between the margins of the Big 4 firms and those of GT and BDO).

133. In paragraph 7 above, we explained that the firms' Assurance businesses comprise different service offerings; however, the majority of Assurance business for all firms is audit and/or audit related.[119] As set out in paragraphs 18 and 19 above, we noted

[118] Deloitte's service line figures in this appendix include the results of its Swiss firm and its Middle East joint venture.
[119] We note that in 2011, for the Big 4 firms audit/audit-related fees represented between 65 and 91 per cent of the Big 4 firms' Assurance businesses. In 2011, EY had £444 million Assurance revenue, of which 70 per cent (£311 million) was statutory

that PwC and Deloitte had provided data to show that Audit margins were lower than Assurance margins as a whole at their firms. We did not consider these calculations in detail and noted that they relied to a large extent on assumptions about cost allocations. We did not review these cost allocations (see paragraphs 25 and 26 above regarding our views on cost allocation difficulties). In this section, we considered the margins of the firms' different service lines (we consider in more detail the margins of different types of work in our assessment of engagement profitability below). As audit/audit-related services comprise the majority of the Assurance businesses, we consider the Assurance margins to be broadly indicative of audit margins.

134. As explained in Annex 1, there are two ways of considering margins:

(a) gross margin—net revenues less direct costs; and

(b) net margin—net revenues less all costs attributable or apportioned to a service line.

We consider both measures to be of interest. In this analysis, both of these measures exclude any notion of partner salary costs and both are calculated on the basis of revenues net of disbursements (ie after client-related expenses were taken out of the revenue figure).

135. We also consider profit per partner by Assurance and non-Assurance in paragraphs 149 to 151. This has been calculated using the firms' management accounts data at a gross and net margin (pre-partner salary costs) level divided by the number of

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audit-related (EY transparency report 2011). In 2011, Deloitte had £372 million audit revenue from £570 million Assurance revenue (65 per cent). In 2011, KPMG had £431 million Audit revenue from £469 million Assurance revenue (91 per cent) (KPMG LLP UK Transparency Report 2011). In 2011, PwC's audit revenue represented £502 million of its £724 million Assurance revenue (69 per cent).

partners in each category (ie this is not comparable to the PPP measure considered above which reflected total remuneration per partner).[120]

Gross margins

136. In Table 10, we set out by firm the gross margins (before partner costs) of their Assurance and non-Assurance businesses.

TABLE 10 **Gross margin (before partner costs) by service line**

per cent

Firm	*2007*	*2008*	*2009*	*2010*	*2011*	*Average**
Assurance						
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Non-Assurance						
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

*Average calculated on an aggregate basis for the period 2007 to 2011.
Note: N/A = not available.

137. There was no overall trend in whether Assurance or non-Assurance as a whole generated higher gross margins. Comparison of the gross margins achieved by individual service lines demonstrated a significant level of variation between the gross margins achieved. Variation in gross margins between the best and worst performing service lines for each firm in a given year ranged from [✂] percentage points [✂] to [✂] percentage points [✂]—see Annex 1, Table 4.

138. With the exception of [✂], there were no service lines for any of the Big 4 firms that had shown improvement in 2011 relative to their first year's data point (2007 or

[120] We note that PwC undertook an internal reorganization in 2009 in which Transaction Services was moved from Assurance to Advisory: as such, the trends in Assurance and non-Assurance margins and profit per partner are not strictly comparable over the period.

2008). However, changes in the nature of service lines may mask individual services within the firms that showed improvements in profitability.

Assurance

139. The range of Assurance gross margins achieved by the Big 4 firms each year was between [✂] and [✂] percentage points and each firm's gross margin fluctuated within a range of [✂] percentage points across the period. [✂] gross margins increased (from [✂] to [✂] per cent) over the period. [✂][121] [✂] gross margin in 2011 was [✂] per cent.

Non-Assurance

140. Gross margins for non-Assurance work showed a general downward trend, for all firms, with the exception of [✂], whose margins had remained largely steady, and [✂], whose margins had generally increased. [✂]

141. [✂]

Net margins

142. Table 11 sets out the net margin for the firms over the period 2007 to 2011. It shows that the net margin for Assurance is the lowest margin service line for [✂] and that for the other firms Assurance is sometimes higher margin and sometimes lower margin than the other lines of service.[122]

[121] The number of partners [✂] over this period from [✂] to [✂] so the explanation is not likely to be a change in the gearing ratio.
[122] Where firms have not fully recharged central costs, the net margin has been calculated by the CC by allocating these costs on the basis of revenue of each service line.

TABLE 11 **Net margins (before partner costs) by firm by year and by service line**

per cent

	2007	*2008*	*2009*	*2010*	*2011*
Deloitte					
Assurance	[✂]	[✂]	[✂]	[✂]	[✂]
Consulting	[✂]	[✂]	[✂]	[✂]	[✂]
Corporate finance	[✂]	[✂]	[✂]	[✂]	[✂]
Tax	[✂]	[✂]	[✂]	[✂]	[✂]
EY					
Assurance	[✂]	[✂]	[✂]	[✂]	[✂]
Advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Business advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Risk advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Tax	[✂]	[✂]	[✂]	[✂]	[✂]
Transaction advisory	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG					
Assurance	[✂]	[✂]	[✂]	[✂]	[✂]
Advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Performance & technology	[✂]	[✂]	[✂]	[✂]	[✂]
Risk & compliance	[✂]	[✂]	[✂]	[✂]	[✂]
Tax	[✂]	[✂]	[✂]	[✂]	[✂]
Transactions & restructuring	[✂]	[✂]	[✂]	[✂]	[✂]
PwC					
Assurance	[✂]	[✂]	[✂]	[✂]	[✂]
Advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Tax	[✂]	[✂]	[✂]	[✂]	[✂]
BDO					
Assurance	[✂]	[✂]	[✂]	[✂]	[✂]
Tax	[✂]	[✂]	[✂]	[✂]	[✂]
Corporate finance	[✂]	[✂]	[✂]	[✂]	[✂]
Forensics	[✂]	[✂]	[✂]	[✂]	[✂]
Business restructuring	[✂]	[✂]	[✂]	[✂]	[✂]
Other	[✂]	[✂]	[✂]	[✂]	[✂]
GT					
Assurance	[✂]	[✂]	[✂]	[✂]	[✂]
Advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Corporate finance	[✂]	[✂]	[✂]	[✂]	[✂]
Forensics	[✂]	[✂]	[✂]	[✂]	[✂]
Outsourcing	[✂]	[✂]	[✂]	[✂]	[✂]
Restructuring & reorganization	[✂]	[✂]	[✂]	[✂]	[✂]
Tax and pensions	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Notes:
1. Unallocated overheads have been allocated across service lines on the basis of revenue.
2. N/A = not applicable.

Assurance

143. The net margins achieved by the Big 4 firms from their Assurance service lines vary to a greater extent than their respective gross margins, with the range between the highest and lowest net margins for each year varying by between [✂] and [✂] percentage points, compared with [✂] to [✂] percentage points for gross margins.

144. The net margin of [✂] remained within a band of two to four percentage points across the period. [✂] net margin has declined consistently since 2007, falling [✂] percentage points ([✂]), with a [✂] percentage point fall in 2011.[123] This fall in net margins contrasts with [✂] gross margins (which have been relatively steady over the period, remaining in a narrow band of [✂] percentage points).

Non-Assurance

145. The margins achieved by the Big 4 firms have differed by at least [✂] percentage points over the period, with [✂] achieving the lowest margins. [✂]

146. As shown in Table 11, the lowest net margin recorded by a Big 4 firm was in Business Advisory ([✂]) and the highest in Corporate Finance ([✂]). Consulting, corporate finance and advisory tended to have the most variation in net margins across the period. For example, service lines that had greater than 10 per cent range in margin across the period were: [✂]. For Assurance, the ranges in margin were: [✂].

Profit per partner by service lines

147. Table 7 above showed that at the largest two firms (Deloitte and PwC) the total remuneration per audit partner was on average slightly higher than the total remuneration per non-audit partner. This supports the view that audit is not a 'loss leader' or an unprofitable part of the accounting firms' businesses.

148. We consider the profits per partner from Assurance and non-Assurance business in more detail below (and in Annex 1, where we set out the gross margin per Assurance and non-Assurance partner by firm).

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[123] This was due largely to a [✂] per cent increase in its allocation of central costs. The proportion of central overheads allocated to Assurance is greater than the proportion of revenue generated by Audit, meaning that when central overheads increase, Assurance is disproportionately affected. Controllable margin (immediately before central overheads are apportioned) was only [✂] percentage points lower.

Net profit per Assurance partner

149. There is no clear trend as to whether firms have increased or decreased net profit per Assurance partner across the period 2007 to 2011(Table 12).

TABLE 12 **Net profit per Assurance partner**

					£ million	*%*
	2007	*2008*	*2009*	*2010*	*2011*	*CAGR*
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Note: N/A = not available.

Net profit per non-Assurance partner

150. There is no clear trend as to whether firms have increased or decreased net profit per non-Assurance partner across the period 2007 to 2011. [✂]

151. There is no clear trend whether the Assurance or non-Assurance business generates a greater level of profit per partner.

TABLE 13 **Net profit per non-Assurance partner**

					£ million	*%*
	2007	*2008*	*2009*	*2010*	*2011*	*CAGR*
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Note: N/A = not available.

Views of the firms

152. Deloitte said that the profitability of its audit services had been less over the last five years than for its non-audit services and that the profitability of its audit services had varied significantly, which meant that any profitability analysis needed to take into

account the macroeconomic environment and the susceptibility of margins to changes in the volume of work due to the higher proportion of fixed costs in the business.[124]

153. Deloitte said that the overlap of the range of gross margins between audit and non-audit provided some evidence that audit prices and profits were not excessive since the provision of non-auditor services occurred in multiple, highly competitive markets.[125]

154. Deloitte said that audit was the most high-risk line of service; it considered that the nature of the risk was of a different order from that faced in relation to its other activities. Unlike in other areas of Deloitte's work, it was not allowed to limit the liability. The liability risk faced on audit was existential in nature (ie it was sufficient to put the entire firms' continued viability at risk).[126] It said that the ability to self-insure on the part of at least some firms should not be understood as being comparable to the ability to obtain commercial insurance. Deloitte was able to obtain commercial reinsurance for only part of the risk that it self-insured.[127]

155. In terms of the relative risk of audit and non-audit business, Deloitte said that audit relationships were all or nothing as the totality of audit revenue was always at risk (there was generally only one firm per audit). In contrast, non-audit work was shared among firms, and losing a mandate left open a possibility to win the next mandate which might come up for tender relatively shortly. This reduced the risk of non-audit relationships relative to audit relationships.[128]

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[124] Summary of Deloitte's response to the MFQ, paragraph 7.4.
[125] ibid, paragraph 7.12.
[126] Deloitte response to 'Profitability' 1&2 working papers, paragraphs 2.4–2.5.
[127] Deloitte response to 'Profitability' 1&2 working papers, paragraphs 2.6–2.12.
[128] Deloitte response to 'Profitability' 1&2 working papers, paragraphs 2.13–2.19.

156. Deloitte said that audit relationships could not be distinguished from non-audit relationships by 'repeat business' or 'significant long-term relationships'. It also considered that the level of volatility of audit margins (which was a function of income and cost) was similar to that of non-audit margins. Deloitte said that it took steps to mitigate the commercial risks with respect to non-audit work, which included: long-term planning to assess the likely conditions of supply and demand; careful management of the cost base, including with respect of staff costs; and diversification, to ensure that Deloitte could exploit countercyclical opportunities such as restructuring versus mergers and acquisitions.[129]

157. Deloitte said that any reference to Assurance service lines profitability as a proxy for profitability in the reference market was overstated. It noted that the Assurance service line covered a broad set of services (the majority of which are outside the reference market).[130]

158. KPMG agreed that KPMG UK's non-audit functions made reasonable comparators for the audit function, given the similarities in the businesses. It believed that ROCE was the most appropriate measure to use for this comparison in order to compare the economic profitability of the service lines. KPMG found the ROCE of its Audit function to be 12.7 per cent and the ROCE of its UK business to be 13.2 per cent.[131]

159. KPMG said that it did not agree with the CC's hypotheses that the risk profile of audit was lower than that of other services. It said that there were a number of factors that implied that audit was more risky overall than other functions. These included the Audit function's higher level of specific risk (as illustrated by, for example, the collapse of Arthur Andersen's worldwide firm as a result of the Enron scandal). In

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[129] Deloitte response to 'Profitability' 1&2 working papers, paragraphs 2.13–2.19.
[130] Deloitte response to 'Profitability' 1&2 working papers, section 4.
[131] KPMG response to 'Profitability' 1&2 working papers, paragraph 5.4.2.

KPMG's view, the calculation of its practice protection insurance premium by its external insurers provided strong evidence that its Audit function was more risky than other functions.[132]

160. PwC did not accept that its audit business was low risk. It said that its audit business, unlike the majority of its non-audit businesses and most other professional services, faced substantial reputational risk for the firm and for individual partners and un-limited financial liability in relation to audit client litigation. The long-term nature of audit client relationships and PwC's limited ability to adjust the minimum scope of audit engagements in the face of downward fee pressure also increased the risk of its audit business.[133]

161. In particular, PwC said that:

(a) It was true that in recent years its efforts to ensure quality and its investment in risk management (reinforced by regulatory requirements) had reduced the number of claims against PwC that, if successful, could cause the firm to collapse and wipe out partners' capital and retained earnings. Nevertheless, PwC bore more costs of claims against the firm with respect to audit than to other services. Around [✂] per cent of the value of past claims against PwC was related to audit services, despite audit comprising less than one-quarter of its revenue.

(b) Furthermore, although a lot of its audit engagements were repeat business, each year's work was based on an annually renegotiated contract. As part of this renegotiation, both price and scope were closely reviewed by its clients and therefore subject to substantial volatility.[134]

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[132] KPMG response to 'Profitability' 1&2 working papers, paragraphs 5.4.3–5.4.4.
[133] PwC response to 'Profitability' 1&2 working papers, section 6.
[134] PwC response to 'Profitability' 1&2 working papers, A5–A14.

CC discussion—profitability by service line

162. The analysis above indicates that Assurance (which is largely comprised of audit services) is not a loss leader. Relative to other service lines it is profitable—generally less so than tax, but (except at [✂]) it is not consistently the lowest-margin work undertaken by the firms. Taking into account the Deloitte and PwC information that audit is lower margin than Assurance as a whole, we find that this still generally results in audit margins being comparable to other lines of service. We noted that Assurance work (that is not statutory audit work) is often sold alongside the audit (for example, audit-related work, controls work) and may be closely related to the audit. We considered that therefore it may be a somewhat artificial exercise to calculate profitability separately. We found that Assurance margins were generally more stable than the other individual lines of service. We recognize that the service lines are made up of various products and service and the mix of these services between firms may affect the individual service line margins.

163. That audit margins overlap with non-audit margins does not of itself mean that audit is competitive. We have not undertaken an assessment as to the competitiveness of non-audit services. Further, we consider that it can be argued that the risk profile of audit is lower than that of, say, consulting—the income stream is less lumpy, the costs base is fairly stable, and there is a high proportion of repeat business and significant long-term clients.

164. Whilst the firms argued that audit was the most high-risk line of service, this is primarily based on their view that their liability for audit work is uncapped and 'existential' in nature. We consider that the risk of audit is to a large extent mitigated by the firms (and the costs of this mitigation are captured in the margins shown above). Measuring and incorporating the risk of one-off, low-probability events is complex. We were not persuaded that the 'all-or-nothing' nature of an audit relationship com-

pared with numerous opportunities to win other work (which may be provided by a number of different firms) was necessarily a driver of increased risk once the engagement was won. We consider that demand characteristics of audit imply that it has relatively low systematic risk compared with many non-audit services.

165. There is no general trend as to whether profits per partner are higher or lower for Assurance compared with the firms' other lines of business.

Assessing audit engagement profitability

166. We sought to understand the relative financial performance of different audits by using engagement level data provided by the firms relating to the UK element of FTSE 350 and Top Track large private client audits (fees, hours of staff employed by grade, the cost per hour of each grade of staff's time and other direct engagement costs). The detailed results of our analysis of the data supplied by audit firms on their audit engagements are at Annex 2. Our method of calculating profitability and the data cleaning applied to the engagement level data is detailed in Annex 6.

167. We considered a number of characteristics to understand whether there were any indications that competition and competitive pressures varied within the market. The analysis did not seek to conclude on the relative profitability of the audit business of different firms and for a number of reasons should not be considered to be comparable to a firm level gross margin.[135] We also sought to identify and investigate the characteristics of engagements which demonstrate consistently higher profitability relative to other audit engagements. The details of the identification of these engagements are set out in Annex 4.

[135] Our analysis includes an estimate of partner labour costs which are not included in statutory financial statements, and the use of 'total hours' to calculate a cost per hour will understate the effective cost per hour of a member of staff's time and thus overstate profit margins.

168. We consider the following characteristics in our analysis:

(a) market segment of the client company (eg FTSE 100/250 or other);

(b) the firm undertaking the audit;

(c) the industry sector of the client company;

(d) the length of firm tenure and effect of switching on engagement profitability; and

(e) effect of reporting month on engagement profitability.

Observations

169. The analyses include a measure of time recorded by partners on the engagement, with their cost included at twice the cost per hour as a director in the respective firm. This was because we did not identify any consistent and reliable estimate of the 'salary' element (that is, the cost of a partner's labour) of partner remuneration for all firms. We tested the sensitivity of our findings to the assumed partner salary figures and did not find this to have effect (see Annex 2, paragraph 7) we therefore did not rerun the analysis using an estimated hourly cost based on our working assumption for partner salary as set out in paragraph 43 above. We believe that this may understate partner costs for some firms and thus overstate profitability; engagements where partner time makes up a greater proportion of total hours will thus be affected to a greater extent.

170. Further, this approach effectively assumes an average partner salary for partner time on each engagement. We understand from Table 2 above that there may be a considerable range in partner salaries within firms, and whilst large, complex engagements may have a mix of both senior and junior partners working on them, it is not clear whether this mix would result in the partner hours being incurred at the average partner salary rate. If, for example, FTSE 100 audits (which are generally large and complex) had a mix of partners working on them that collectively had a partner salary average that was higher than the firm average, the profitability on our

measure could be overstated relative to less complex audits (with a lower average partner salary cost).

171. We found that there was a higher proportion of partner involvement in FTSE 100 audits compared with the FTSE 250 audits, and in FTSE 250 audits compared with other audits for all firms (see Annex 2, paragraph 46). It is not possible to infer with certainty why this relationship between type of company and the relative level of senior staff engagement exists.[136] However, we considered that there were a number of plausible causes, including:

(a) FTSE 350, and specifically FTSE 100, companies are generally inherently more complex due to their size and range of operations and by extension the technical accounting issues experienced will be more complex, and as a result more senior staff time is required to review appropriately the audit work.

(b) For a large public client there may be a greater potential financial repercussion of audit failure, either through litigation or loss if there is a perceived lack of quality; this may lead to more partner and director involvement.

(c) Larger clients may expect greater levels of partner and director engagement, both in reviewing the audit and in face-to-face meetings with client staff.

172. The analysis should not be considered an assessment of the profitability of the individual audit practices of the different firms. Rather it assesses the direct costs of performing the UK element of an audit relative to the fee received. Firms may be able to achieve a greater gross margin on audit engagements on average than other firms as the result of investment in IT, methodology or training, and these costs are not considered.

[136] As our database does not include the nature of the hours recorded (such as whether they are review time or client liaison), we cannot draw a firm conclusion. However, because partner cost is dependent on our assumptions (ie twice director cost), the profitability of larger audits (where there is greater partner involvement) is necessarily more sensitive to the impact of these assumptions.

173. The results of the analysis of the five characteristics above lead to the following observations.

Profitability of engagements by market segment

174. With regard to market segment:

(a) FTSE 100 audits are on average more profitable than FTSE 250 audits by between two and six percentage points.

(b) The profitability of engagements within the FTSE 100 and the FTSE 250 has remained broadly consistent over the period 2006 to 2011.

(c) The average engagement profitability of non-FTSE-350 audit engagements is on average greater than for FTSE 250 engagements but lower than for FTSE 100 audit engagements and the average profitability of FTSE 350 engagements as a whole is similar to other engagements.[137]

Profitability of engagements by firm

175. With regard to firms' profitability:

(a) There is greater year-on-year variation and change over the period 2006 to 2011 in engagement profitability when analysing individual firms' performance compared with looking at the average profitability of engagements from all firms.

(b) The firms do not demonstrate any consistent trends in performance (ie the firms do not individually or collectively show any consistent year-on-year increase or decrease in profitability over the period 2006 to 2011).

(c) The individual firms have achieved a relatively wide range of average engagement profitability (the average engagement profitability achieved by the largest six firms for the period 2006 to 2011 ranges by 20 percentage points).[138]

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[137] 'Other' refers to large private companies and companies which were in the FTSE 350 at some point in 2006–2011 but not in that given year and should not be considered to be representative of a firm's non-FTSE-350 client base.

[138] Some caution should be observed, as the cost per hour has been calculated by each firm and may be subject to differences in methodology. However, we do not believe that this difference should be significant.

(d) The profitability of the firms does not appear to show any pattern in respect of size of firm (positive or negative). [✂] is the least profitable firm on a gross margin basis, achieving margins approximately [✂] percentage points lower than the next lowest firm.[139] [✂] performance relative to the other firms is stronger when aggregate rather than average engagement profits are considered, suggesting that its smaller clients achieve low margins.

Profitability of engagements by industry

176. The average profitability of FTSE 350 engagements when grouped by industry for the period 2006 to 2011 varied by some 12 percentage points (the average profitability of engagements for each of the ten industry groupings was between 53.0 and 64.6 per cent).

177. 'Industrials' industry engagements consistently achieved the lowest average audit margins, whilst 'Financials' industry audits achieved the highest average engagement profitability.[140] However, when margins were calculated on an aggregate basis, 'Oil and Gas' achieved the highest margins (whereas on an average basis they were low to medium). This indicates that oil and gas companies which pay a greater audit fee appear to offer a greater margin to an auditor than oil and gas companies with a relatively small audit fee.[141]

Average profitability of engagements by tenure and the effect of switching auditors

178. With regard to the effects of tenure and switching, the narrow time frame (we have at most six data points for each firm/company relationship) and the level of switching makes reaching definite conclusions difficult. The data indicates that:

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[139] This is gross profit, and may not reflect the overall profitability of the assurance service line, as the overall profitability of the service line will depend on the utilization of staff on fee-earning engagements.
[140] These industry classifications are per the Industry Classification Benchmark, developed by Dow Jones and FTSE. There are further sub-classifications, which the engagements have not been analysed by due to the potentially large number of categories and low number of corresponding data points.
[141] Average profitability is calculated by taking the average level of profit for each individual engagement, whilst aggregate profitability is calculated by summing revenues and costs of all engagements and then calculating a single profit figure.

(a) Profitability broadly increases over the first five years of an engagement and auditors with tenures of over five years achieve greater profitability.

(b) Profitability of engagements does not continue to rise with tenure indefinitely, but appears to level off after five years.

(c) There is no indication that firms consistently 'low-ball' to reduce engagement profitability to zero (ie only covering direct costs) or a loss in the first years of an engagement before increasing fees significantly in subsequent years.

179. However, these findings may be influenced by a number of factors (such as whether certain types of engagement tend to have a certain length of tenure and also a certain level of profitability). Due to the frequency of auditor switching in the FTSE 350, robust conclusions on this are difficult as we have a limited number of data points.

Effect of reporting month on profitability

180. Parties provided information on their competitive strategies, and some firms stated that in certain circumstances they would price audits according to seasonal demand.[142] To establish if such strategies were prevalent, we looked at the profitability of engagements by the reporting month of the client. We identified some variation in the profitability of engagements dependent on the reporting month of clients, but there is no evidence to indicate widespread price discrimination based on the timing of work in the large company market.[143]

181. As our engagement database relates only to large companies, we do not know if such pricing strategies may be more prevalent for the audit of small companies,

[142] Appendix 16.
[143] If firms have excess capacity outside peak demand for larger firms, we might expect this to manifest itself on the pricing of smaller company audits.

where audit testing may be undertaken over a shorter period, or later after the year end compared with the largest companies.

The characteristics of higher-profitability FTSE 350 audit engagements

182. We identified a number of engagements which had shown a consistent level of profitability (over a period of three or four years) that was greater than the average for the firm that undertook the audit (see Annex 4 and Annex 5). We considered the nature of the higher-profitability clients by looking at descriptive statistics from the engagement and public data sets and by reviewing the responses those companies' CFOs or ACCs gave to our first survey.

Descriptive statistics

183. We found that the high-engagement-profitability companies demonstrated the following characteristics:

(a) A greater proportion were from the FTSE 100 compared with the FTSE 350 as a whole.

(b) There was an association between assets and profitability but not turnover and profitability.[144]

(c) A greater proportion of the high-engagement-profitability companies were financial services, real estate and insurance companies compared with other FTSE 350 companies.

(d) High-engagement-profitability companies were less likely to have switched auditor in the past five years (but this characteristic may be the result of the need to demonstrate consistent profitability over three or four years to be selected as a consistently high-engagement-profitability company).

[144] Tested by calculating the Pearson's chi-squared statistic (see Annex 3, paragraph 2).

(e) High-engagement-profitability audits were more likely to have audit fees in the top quintile, and less likely to have audit fees in the lowest quintile, compared with other FTSE 350 companies.

Survey results

184. Of the 50 companies that we identified as being consistently more profitable for firms than average, we had surveyed 25. IFF, which conducted the survey, provided data on this subset compared with other surveyed companies. The results of the survey indicated that:

(a) High-engagement-profitability companies have longer tenures than other FTSE 350 companies.

(b) High-engagement-profitability companies considered sector-specific expertise and experience to be more important in (re)appointing an auditor compared with other FTSE 350 companies.

(c) High-engagement-profitability companies considered price to be less important in (re)appointing an auditor compared with other FTSE 350 companies.

(d) High-engagement-profitability companies were less likely to have gone to tender in the last five years than other FTSE 350 companies.

(e) A substantial increase in price was less likely to cause a high-engagement-profitability company to switch auditor than other FTSE 350 companies.

(f) High-engagement-profitability companies were less likely to have been approached by a rival audit firm than other FTSE 350 companies.

(g) High-engagement-profitability companies were more likely to have a higher turnover than other FTSE 350 companies.

The views of the firms on engagement profitability analysis

185. The firms responded to the 'Engagement profitability' working paper published on our website.[145] All six firms noted that the analysis was dependent on the appropriate estimation of partner salary costs. Several firms stated that our analysis understated partner labour costs and thus overstated profits, though we were unable to identify a more appropriate salary benchmark to use, as is discussed in paragraphs 27 to 31 above.

186. EY said that it did not think that the methodology adopted was appropriate for measuring profitability for a number of reasons including that it did not include any measure of indirect costs, that partner costs were not included accurately and that it was incorrect to calculate cost per hour on the basis of 'total hours'.

187. BDO noted that for those audits where partner time made up a greater proportion of the hours recorded (such as FTSE 100 engagements) the calculated level of profitability would be more sensitive to the assumptions used in the estimation of partner costs. PwC stated that profitability might be overstated on larger audit engagements, where senior partner time made up a relatively greater proportion of hours recorded. KPMG noted that given the issues around the estimation of partner costs, partner costs might be underestimated and therefore margins artificially overstated. KPMG noted that for audits that were more complex and global in nature, requiring a higher proportion of partner time (such as FTSE 100 engagements), any overstatement would be greater.[146]

188. GT noted that the initial increase in profitability could also reflect various other factors, such as an incumbent auditor taking advantage of its position and reducing

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[145] CC, 'Engagement level profitability analysis' working paper.
[146] We recalculated profitability on a sector basis using an assumption of partner time being charged at four times director rates and found a similar, but diminished, relationship in profitability.

the level of resource devoted to an engagement. Both GT and BDO noted that a steady level of profitability in respect of tenure may be an indicator of an increased likelihood of excess profits under a CAPM framework. In contrast, PwC noted that fees were often fixed for the first three years in tender proposals and that the CC's evidence indicated that fees in fact declined after the first years of engagement which demonstrated that there was ongoing competitive pressure on fees preventing audit firms from taking advantage of a possible opportunity to increase them.

189. Deloitte and PwC said that they did not believe that any short-term dip in profitability as the result of incurring familiarization costs was a barrier to entry. PwC stated that this was because these costs were incurred by all audit firms when they won new appointments.

Assessment of service line performance using management accounting information

1. This annex examines the management accounts of the six largest firms to assess their relative financial performance in a number of metrics.

Financial performance of audit firms

2. We extracted data on revenue and costs from the six largest firms' management accounts and processed it into a standardized format to make the reported financial performance of each firm and its service lines more comparable.[1] However, there are some limitations to this approach which we have considered.[2]

3. For the purposes of this analysis, gross profit and margin are calculated as being the difference between 'net revenue' and client service staff costs.[3] Net profit and margin[4] is calculated as the difference between 'net revenue' and all costs attributable or apportioned to a service line.[5] Where any central overheads were not allocated by the firm, our analysis allocated them between client service lines (ie not over support or administrative business units) on the basis of net revenue.

4. Oxera said that as a matter of mathematics, an approach that allocated unallocated costs on the basis of revenue brought the margins of different activities closer to the mean and could have a circularity problem of hiding monopoly profits. It considered

[1] The standardized measures were: revenue being net of all discounts, disbursements and other adjustments; gross margins calculated using only staff costs; and where firms did not allocate all overheads, any unallocated element was allocated on the basis of revenue.
[2] These are discussed in paragraph 44 onwards.
[3] Support staff may be included if part of 'staff costs'.
[4] In assessing profit, margins have been used (profit expressed as a percentage of revenue), to allow a relative comparison, rather than the absolute level of profit generated.
[5] Partner costs other than expenses are excluded.

that a different approach should be used.[6] We considered this but note that for the Big 4 firms there are relatively few unallocated costs.

5. Firms are managed in different ways and through different service lines. Those service lines clearly similar in nature to 'assurance', 'tax' and 'corporate finance' were labelled as such, with others grouped as appropriate as 'consulting'.[7]

6. Accounting measures of profitability such as gross and net margins are difficult to compare because of the exclusion of partner costs. Accompanying analysis is required which includes a consideration of per-partner measures of financial performance (ie the amount of net profit divided by the number of partners).

Accounting measures of profitability

Revenue

7. In 2011, the firms generated between [✂] and [✂] per cent of their revenue from Assurance (Table 1).

8. [✂][8]

9. [✂]

10. [✂]

11. [✂]

[6] Oxera response to 'Profitability' 1&2 working papers, paragraph 4.2.
[7] Services labelled as 'advisory' are included within consultancy.
[8] We note that if any specific products were switched from Assurance to another service line, this would be a potential driver of this trend.

TABLE 1 **Revenues of the firm including by Assurance and non-Assurance service lines**

					£ million	*%*
	2007	*2008*	*2009*	*2010*	*2011*	*CAGR*
Assurance						
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG		[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Non-Assurance						
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
All service lines						
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Assurance as a proportion of firm revenue					*per cent*	*Change %*
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG		[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Notes:
1. FY 2008 was the first year after GT merged with Robson Rhodes.
2. N/A = not available.

Gross profit margins

Assurance

12. Table 2 sets out the gross margins (pre-partner costs) achieved from Assurance.

TABLE 2 **Gross margins (pre-partner costs) achieved from Assurance**

per cent

	2007	*2008*	*2009*	*2010*	*2011*	*Average*
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
High	[✂]	[✂]	[✂]	[✂]	[✂]	
Low	[✂]	[✂]	[✂]	[✂]	[✂]	
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Notes:
1. KPMG management accounts not provided for 2007.
2. All gross margins are stated before partner costs.
3. Average calculated on an aggregate basis for the period 2007 to 2011
4. N/A = not available.

Non-Assurance

13. Table 3 sets out the gross margins (pre-partner costs) achieved from non-Assurance.

[✂]

TABLE 3 **Gross margins (pre-partner costs) for non-Assurance**

per cent

	2007	*2008*	*2009*	*2010*	*2011*	*Average*
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
High	[✂]	[✂]	[✂]	[✂]	[✂]	
Low	[✂]	[✂]	[✂]	[✂]	[✂]	
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Notes:
1. Average calculated on an aggregate basis for the period 2007 to 2011.
2. N/A = not available.

14. Direct year-on-year comparison of each service line's profitability is difficult as the structure of service lines ([✂]) changes in the period, as well as non-observable reallocations of different services between different service lines.

15. [✂]

TABLE 4 **Gross margins (pre-partner costs) from individual non-Assurance service lines**

per cent

	2007	*2008*	*2009*	*2010*	*2011*
Deloitte					
Consulting	[✂]	[✂]	[✂]	[✂]	[✂]
Corporate finance	[✂]	[✂]	[✂]	[✂]	[✂]
Tax	[✂]	[✂]	[✂]	[✂]	[✂]
EY					
Advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Business advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Risk advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Tax	[✂]	[✂]	[✂]	[✂]	[✂]
Transaction advisory	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG					
Advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Performance & technology	[✂]	[✂]	[✂]	[✂]	[✂]
Risk & compliance	[✂]	[✂]	[✂]	[✂]	[✂]
Tax	[✂]	[✂]	[✂]	[✂]	[✂]
Transactions & re-structuring	[✂]	[✂]	[✂]	[✂]	[✂]
PwC					
Advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Tax	[✂]	[✂]	[✂]	[✂]	[✂]
BDO					
Tax	[✂]	[✂]	[✂]	[✂]	[✂]
Restructuring	[✂]	[✂]	[✂]	[✂]	[✂]
Corporate finance	[✂]	[✂]	[✂]	[✂]	[✂]
Forensic	[✂]	[✂]	[✂]	[✂]	[✂]
Other	[✂]	[✂]	[✂]	[✂]	[✂]
GT					
Advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Corporate finance	[✂]	[✂]	[✂]	[✂]	[✂]
Forensic and investiga-tive services	[✂]	[✂]	[✂]	[✂]	[✂]
Outsourcing	[✂]	[✂]	[✂]	[✂]	[✂]
Restructuring and reorganization	[✂]	[✂]	[✂]	[✂]	[✂]
Tax and pensions	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Note: N/A = not available.

All service lines

16. [✂]

17. [✂]

18. [✂]

TABLE 5 **Gross margins (pre- partner costs) achieved by all client facing service lines**

per cent

	2007	*2008*	*2009*	*2010*	*2011*	*Average*
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
High	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Low	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Notes:
1. KPMG management accounts not provided for 2007.
2. Average calculated on an aggregate basis for the period 2007 to 2011.
3. N/A = not available.

Net profit margins

Assurance

19. [✂]

20. [✂]

TABLE 6 **Net margins (pre-partner costs) achieved from Assurance**

per cent

	2007	*2008*	*2009*	*2010*	*2011*	*Average*
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
High	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Low	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Notes:
1. KPMG management accounts not provided for 2007.
2. All unallocated costs in firms' management accounts have been apportioned on the basis of revenue.
3. Average calculated on an aggregate basis for the period 2007 to 2011.
4. N/A = not available.

Non-Assurance

21. [✂]

TABLE 7 **Net margins (pre-partner costs) achieved from non-Assurance**

per cent

	2007	*2008*	*2009*	*2010*	*2011*	*Average*
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PWC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
High	[✂]	[✂]	[✂]	[✂]	[✂]	
Low	[✂]	[✂]	[✂]	[✂]	[✂]	
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Notes:
1. Average calculated on an aggregate basis for the period 2007 to 2011.
2. N/A = not available.

22. Table 8 displays the net margins achieved from individual non-Assurance service lines for the firms. The difference between the best- and worst-performing service lines for each firm, each year, varied from [✂].[9]

23. [✂]

24. [✂]

25. [✂]

[9] [✂]

TABLE 8 **Net margins (pre-partner costs) achieved from individual non-Assurance service lines**

per cent

	2007	*2008*	*2009*	*2010*	*2011*
Deloitte					
Consulting	[✂]	[✂]	[✂]	[✂]	[✂]
Corporate finance	[✂]	[✂]	[✂]	[✂]	[✂]
Tax	[✂]	[✂]	[✂]	[✂]	[✂]
EY					
Advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Business advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Risk advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Tax	[✂]	[✂]	[✂]	[✂]	[✂]
Transaction advisory	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG					
Advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Performance & technology	[✂]	[✂]	[✂]	[✂]	[✂]
Risk & compliance	[✂]	[✂]	[✂]	[✂]	[✂]
Tax	[✂]	[✂]	[✂]	[✂]	[✂]
Transactions & restructuring	[✂]	[✂]	[✂]	[✂]	[✂]
PwC					
Advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Tax	[✂]	[✂]	[✂]	[✂]	[✂]
BDO					
Tax	[✂]	[✂]	[✂]	[✂]	[✂]
Corporate finance	[✂]	[✂]	[✂]	[✂]	[✂]
Forensics	[✂]	[✂]	[✂]	[✂]	[✂]
Business restructuring	[✂]	[✂]	[✂]	[✂]	[✂]
Other	[✂]	[✂]	[✂]	[✂]	[✂]
GT					
Advisory	[✂]	[✂]	[✂]	[✂]	[✂]
Corporate finance	[✂]	[✂]	[✂]	[✂]	[✂]
Forensic & investigative services	[✂]	[✂]	[✂]	[✂]	[✂]
Outsourcing	[✂]	[✂]	[✂]	[✂]	[✂]
Restructuring & reorganization	[✂]	[✂]	[✂]	[✂]	[✂]
Tax & pension	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

All service lines

26. [✂]

27. [✂]

TABLE 9 **Net margins (pre-partner costs) achieved by all client-facing service lines**

						per cent
	2007	*2008*	*2009*	*2010*	*2011*	*Average*
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
High	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Low	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Notes:
1. KPMG management accounts not provided for 2007.
2. All unallocated costs in firms' management accounts have been apportioned on the basis of revenue.
3. N/A = not available.

Partner-centric measures of financial performance

28. Because of the difficulty of identifying an appropriate cost of employment for partners, the analyses above do not include any element of partner cost in them. To allow some consideration of the relative structure of the firms and the number of partners that share in the results of the firms, we have performed some analyses that look at performance on a 'per-partner' basis. If certain firms achieve a greater net profit margin than others, we may find that because of the different number of partners, the 'per-partner' profit may exhibit a different trend.

29. These analyses thus need considering with respect to the number of partners (Table 13). [✂]

30. [✂]

31. Table 10 sets out the number of partners by firm split between Assurance and non-Assurance.

TABLE 10 **Number of Assurance and non-Assurance partners by firm**

	2007	2008	2009	2010	2011	CAGR %	Period growth %
Deloitte							
Assurance	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Non-Assurance	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY							
Assurance	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Non-Assurance	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG							
Assurance	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Non-Assurance	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC							
Assurance	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Non-Assurance	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO							
Assurance	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Non-Assurance	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT							
Assurance	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Non-Assurance	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Notes:
1. GT and BDO figures taken from 'Other business info' submissions.
2. N/A = not available.

Revenue per partner

Assurance

32. Table 11 presents revenue divided by the relevant number of Assurance partners.

[✂]

33. [✂]

TABLE 11 **Revenue per Assurance partner**

	£ million					%
	2007	2008	2009	2010	2011	CAGR
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Notes:
1. GT data is from 'Other Business info', other figures from management accounts.
2. N/A = not available.

Non-Assurance

34. [✂]

35. [✂]

TABLE 12 **Revenue per non-Assurance partner**

					£ million	%
	2007	*2008*	*2009*	*2010*	*2011*	*CAGR*
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Note: N/A = not available.

All service lines

36. Table 13 shows the revenue per partner for each firm between 2007 and 2011.

TABLE 13 **Revenue per partner**

					£ million	%
	2007	*2008*	*2009*	*2010*	*2011*	*CAGR*
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Note: N/A = not available.

Gross profit per partner

Assurance

37. [✂]

38. [✂]

39. [✂]

TABLE 14 **Gross profit per Assurance partner**

					£ million	%
	2007	*2008*	*2009*	*2010*	*2011*	*CAGR*
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Note: N/A = not available.

Non-Assurance

40. [✂]

TABLE 15 **Gross profit per non-Assurance partner**

					£ million	%
	2007	*2008*	*2009*	*2010*	*2011*	*CAGR*
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Note: N/A = not available.

All service lines

41. [✂]

TABLE 16 **Gross profit per partner**

					£ million	%
	2007	*2008*	*2009*	*2010*	*2011*	*CAGR*
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Note: N/A = not available.

Net profit per partner

42. Details of the net profit per partner split between Assurance and non-Assurance are shown in the main text.

All service lines

43. [✂]

TABLE 17 **Net profit per partner**

					£ million	*%*
	2007	*2008*	*2009*	*2010*	*2011*	*CAGR*
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Caveats on use of the data

44. The data used for this assessment of financial performance has been taken primarily from management accounts data. The different firms report performance in different ways including by geography and by service line. For four of the firms (the Big 4), management accounts data is presented on a service line basis, and for two of the firms (GT and BDO), management accounts are focused mainly or partially on a geographic basis. For the firms which do not report primarily on a service line basis, we contacted the firms and sought additional or clarifying information.

45. The main areas that need to be considered when comparing firms are:

(a) Grouping of products into service lines—the 'products' included by a firm in a given service line will vary and the margins attracted by each product will vary and, as a result, will affect the relative margins of service lines.

(b) Products offered by different firms—it may be the case that different firms offer different products such as some niche areas of consulting or advisory work. This annex does not seek to consider the effect of the non-audit profit mix.

(c) Cross-service line working—staff which are nominally allocated to service lines may work on occasion in assisting other service lines. Examples with respect to audit include reviews of tax liabilities and actuarial valuation of pension and other provisions. The method that is used to measure this cross-service line work may vary between firms, and this will affect margins.[10]

(d) The ratio of partners to staff—as discussed elsewhere, the difficulty in establishing an appropriate employment cost for partners has meant that we have had to exclude their costs from our assessment of gross and net margins. If firms have different ratios of partners to staff, differences in underlying profitability will be masked.

(e) Allocation of indirect costs—firms will allocate (or may not allocate totally) indirect costs incurred in the course of running their business to service lines. To capture the financial performance of service lines, these costs will need to be fully allocated to a service line. If the basis of allocation used by each firm differs, margins may not be fully comparable.

46. Management accounts are prepared on a number of different bases, and may or may not include the impact of accounting estimates, such as provisions. Because of this, further analysis would be necessary to compare the figures included for all service lines and the financial statements of the firms to ensure that the margins discussed in this appendix (including annexes) are consistent with final, audited data prepared in accordance with financial reporting standards.

[10] For instance, the treatment of tax staff working on an audit could be either to *(a)* allocate some audit revenue to the tax service line (where the cost of employing the staff sits) or *(b)* allocating the staff cost to audit. Furthermore both measures may include some allocation of financial contribution and above the direct cost of employing a member of staff.

Engagement level profitability analysis

1. This annex discusses the basis of our assessment and is then structured on a number of assessments of engagement profitability as follows:

   (a) market segment (FTSE 100, FTSE 250 and other clients);

   (b) firm (BDO, Deloitte, EY, GT, KPMG and PwC);[1]

   (c) industry (the ten top-level Industry Classification Benchmark categories);

   (d) the length of tenure including:

   (i) the number of years into the audit engagement; and

   (ii) year of most recent switch in auditors;[2] and

   (e) the reporting month of the client.

Assessment of engagement profitability

2. We used two methods of calculating engagement profitability for the purpose of this analysis:

   (a) The first is the average profitability of engagements. This is obtained by calculating the gross profit margin for each individual audit engagement and then finding the arithmetic mean of individual engagement profitabilities (ie we calculate mean of the gross profit margins for engagements in a particular firm/sector etc). This has the benefit that all engagements are weighted equally.

   (b) The second method is an assessment of aggregate profitability, which compares the total revenues and total costs from all engagements (in a firm/sector/index etc) together and calculating the profit margin. This is less susceptible to the figure being skewed by small audits, and reflects the overall value of profit generated by the firms from engagements of that type, but not 'the average audit'. The financial performance of large audits (as measured by audit fee or costs) will

[1] Other firms are not considered separately because of the low number of audit clients they have in the data set.
[2] These two analyses differ, as the first considers the profitability by the nth year post-appointment, whilst the second groups clients into three bands based on when the auditor was appointed.

have the greatest impact on the profitability measure and thus one large audit that generates a high or low margin might skew the measure compared with the margin achieved by most audits. However, it should be noted that this should not be used to reflect the overall profitability of a firm's audit business.

Average profitability of engagements by market segment

3. Table 1 displays the average profitability of audit engagements for all firms within the cleaned data set,[3] using cost data calculated on a number of bases but excluding partner time. In all instances, profitability of audit engagements in the FTSE 100 is greater than those for FTSE 250 companies. The profitability of other audit engagements is similar to the FTSE 250. However, because the firms auditing clients in each market segment differ, any differences in their underlying profitability will also impact on profitability of a segment in a given year, as will movements of companies between segments.

4. It should be noted that in this analysis the category of companies labelled as 'other' represents both large private companies and companies which were in the FTSE 350 at some point in the period 2006 to 2011 but not in a given year. 'Other' should not therefore be considered to be representative of a firm's non-FTSE-350 clients and any calculation of the profitability of the clients labelled as 'other' should not be considered to reflect the profitability of 'non-FTSE-350' clients as a whole.

5. The average engagement profitability of all engagements remained broadly steady for the entire period. FTSE 100 average profitability (using the total hours basis) ranged from 68.7 to 72.3 per cent (3.6 percentage points) and FTSE 250 average profitability ranged from 66.3 to 67.3 per cent (1.0 percentage points), with average non-FTSE-350 engagement profitability ranging from 66.3 to 68.5 per cent (2.2 per-

[3] See Appendix 6.

centage points). This steady level of profitability is noteworthy, but masks a much greater level of variation in the average engagement profitability for each firm and the profitability of individual engagements over time.

6. Profitability may be overstated for larger or more complex audits as more senior partners may be involved in the delivery of these engagements, and the relative cost of these individuals may not be fully captured in our assessment.[4]

TABLE 1 **Average engagement profitability (excludes partner hours)**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Period average*
Total hours							
FTSE 100	69.8	69.1	69.7	71.2	72.3	68.7	70.2
FTSE 250	66.3	66.9	67.0	67.3	67.0	66.8	66.9
Other	67.0	67.3	66.7	66.3	68.5	68.2	67.3
Combined	67.2	67.4	67.3	67.6	68.5	67.7	67.6
Standard hours							
FTSE 100	55.7	53.6	54.3	56.8	58.4	52.8	55.3
FTSE 250	50.1	50.0	49.7	49.9	49.9	49.5	49.8
Other	52.2	51.2	50.1	49.5	52.5	51.4	51.1
Combined	51.9	51.1	50.7	51.0	52.4	50.8	51.3
Chargeable hours							
FTSE 100	68.1	67.4	68.0	69.2	70.0	66.2	68.2
FTSE 250	64.6	65.3	65.3	65.3	64.4	64.4	64.9
Other	65.6	65.8	65.0	64.3	66.0	65.9	65.4
Combined	65.6	65.8	65.6	65.6	66.1	65.3	65.7

Source: CC analysis.

7. Table 2 shows the average profitability of audit engagements for all firms within the data set, but differs from Table 1 in that partner time is included as a cost, at either the same or at twice the rate per hour as directors. Whilst this is unlikely to accurately reflect the salary element of a partner's remuneration, it attempts to capture the resource requirement of audits more fully. We found that increasing the ratio to four times director salary did not change the relative average financial performance of engagements. We therefore did not consider it necessary to rerun this analysis with data based on our working assumptions for partner salary discussed in paragraph 43 of the appendix.

[4] See discussion on partner remuneration in body of the appendix.

8. For the remainder of this annex, all profitability measures are net of partner costs, charged at twice director cost rates on the basis of total hours.[5]

9. In responding to this analysis, [✂] said that its own analysis showed that the average margins on its non-FTSE-350 engagements were greater than its FTSE 350 margins but agreed that its FTSE 100 margins were greater than its FTSE 250 margins.[6]

TABLE 2 **Average engagement profitability (including partner hours)**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Period average*
Total hours 1 x directors							
FTSE 100	65.4	64.5	65.6	67.1	67.8	64.3	65.8
FTSE 250	61.7	62.6	63.0	63.0	62.5	62.2	62.5
Other	63.2	63.4	63.0	62.8	64.8	64.7	63.7
Combined	65.4	64.5	65.6	67.1	67.8	64.3	65.8
Total hours partners 2 x directors							
FTSE 100	61.1	59.9	61.4	63.0	63.4	59.9	61.5
FTSE 250	57.1	58.2	59.0	58.8	57.9	57.5	58.1
Other	59.3	59.6	59.3	59.3	61.1	61.2	60.0
Combined	61.1	59.9	61.4	63.0	63.4	59.9	61.5
Standard hours 1 x directors							
FTSE 100	50.9	48.6	49.7	52.2	53.4	47.8	50.5
FTSE 250	45.0	45.3	45.3	45.2	44.9	44.4	45.0
Other	48.0	47.0	46.1	45.7	48.4	47.5	47.1
Combined	47.3	46.5	46.4	46.6	47.8	46.2	46.8
Chargeable hours1 x directors							
FTSE 100	58.9	57.6	58.7	60.3	60.2	56.5	58.7
FTSE 250	54.9	56.0	56.3	55.8	54.4	54.0	55.2
Other	57.3	57.3	56.8	56.6	57.9	58.0	57.3
Combined	56.6	56.8	56.9	56.9	56.8	56.0	56.7

Source: CC analysis.

Aggregate profitability of engagements by market segment

10. Table 3 is based on the same revenue and cost data as Table 2 ('total hours' with partners at twice the cost of directors) but calculated on an aggregate basis. The aggregate profit margins achieved for each segment are similar but greater than the equivalent figures in Table 2. The relative profitability of FTSE 100 engagements

[5] We have chosen to use total hours, as this reflects the cost of employing a member of staff for 1 hour, regardless of the relative proportion of hours devoted to fee-paying engagements, corporate projects or other activities such as training.
[6] Our data set includes only large private companies and companies which have at some point been in the FTSE 350, and thus does not represent the full population of the respective firms' audit business.

compared with FTSE 250 engagements compared with other engagements is similar to that exhibited in Table 2.

TABLE 3 **Aggregate engagement profitability (total hours—includes partners at twice directors cost)**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Average*
FTSE 100	62.9	63.6	64.1	65.0	67.4	65.8	64.8
FTSE 250	59.9	60.6	61.0	60.9	59.2	58.9	60.1
Other	60.6	61.3	62.0	60.7	64.1	62.0	61.8
Combined	61.8	62.5	62.9	63.2	65.0	63.5	63.2

Source: CC analysis.

Average profitability of engagements by firm

11. Table 4 shows that despite the consistent levels of profitability achieved in each segment above, there is significant variation achieved by individual firms and by each firm each year. Due to the small number of clients held by other firms, this analysis focuses on the six largest firms (and thus the combined averages will differ from those above).

TABLE 4 **Average engagement profitability by firm (all clients, total hours, including partner)**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Period average*	*Range*
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Combined	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

12. [✂] achieved the greatest average level of engagement profitability. [✂] achieved the highest average margins of [✂]. [✂] showed a very high level of variability over the period with a range of around [✂] percentage points, though much of this is due to a significant increase in average engagement profitability from [✂], which lasted until [✂].

13. Due to the relatively low number of clients that BDO and GT have in the data set, it is unclear if their relative performance is due to the firms' operational model or the nature of the specific clients.

14. [✂] was notable for its lower average engagement profitability figures of between [✂] and [✂] per cent and has a lower average profitability for the period at [✂] per cent than the other firms.

15. In respect of trends over time, there is little within the data to indicate an overall improvement or worsening of profitability for the firms. Figure 1 shows this data graphically. [✂] and [✂] show a slight improvement over the period; [✂] shows a very flat level of profitability; and [✂] shows an overall decline in profitability. However, all of these trends show year-on-year fluctuation and are not fully conclusive of any ongoing improvement or worsening in financial performance.

FIGURE 1

Average engagement profitability of the six largest firms over time (truncated vertical axis)

[✂]

Source: CC analysis.

16. Table 5 examines the profitability of engagements for the same six firms by market segment. Because BDO and GT have only a small number of clients (that relate to between one and seven data points each per year for the FTSE 250), we treat their average figures with care.

17. Each firm's relative engagement profitability for each market segment is consistent with that shown in Table 4. [✂] achieved a greater margin than the other Big 4 firms, with [✂] showing a much lower margin than the other Big 4 firms.

TABLE 5 **Average engagement profitability by firm and segment (six firms, total hours, including partner)**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Period average*	*Range*
FTSE 100								
BDO	[✂]			[✂]	[✂]	[✂]	[✂]	[✂]
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PWC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Combined	61.1	59.9	61.4	63.0	63.4	59.9	61.5	3.5
FTSE 250								
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PWC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Combined	57.0	58.2	58.9	58.7	57.9	57.5	58.0	1.9
Other								
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PWC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Combined	58.6	59.0	58.7	58.7	60.6	60.9	59.4	2.3

Source: CC analysis.

Aggregate profitability of engagements by firm

18. Table 6 repeats the analysis in Table 4 but uses an aggregate profitability basis, this shows a similar pattern of performance to that shown above.

TABLE 6 **Aggregate engagement profitability by firm (all clients, total hours, including partner time)**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Period*	*Range*
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PWC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total	61.7	62.4	62.9	63.2	64.9	63.5	63.1	3.2

Source: CC analysis.

19. Table 7 is based on the same categorization of data as Table 5 but uses aggregate data and shows similar patterns in terms of segment trends.

TABLE 7 **Aggregate engagement profitability by firm by segment (total hours, including partner time)**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Grand total*	*Range*
FTSE 100								
BDO	[✂]			[✂]	[✂]	[✂]	[✂]	[✂]
DEL	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PWC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Combined	62.9	63.6	64.1	65.0	67.4	65.8	64.8	4.4
FTSE 250								
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
DEL	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PWC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Combined	59.9	60.6	60.9	60.9	59.2	58.9	60.1	2.1
Other								
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
DEL	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PWC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Combined	60.4	61.1	61.8	60.4	63.9	61.9	61.6	3.5

Source: CC analysis.

Average profitability of engagements by industry

20. Table 8 examines the average profitability of engagements of companies in different industries for all firms and all clients, with Table 9 showing the same data but for only the six largest firms and only for their FTSE 350 clients. Analysis by firm by industry has not been performed due to the increasingly small number of data points.

21. The tables indicate a degree of variation in individual industries with the period average for all firms ranging from 54.5 to 64.1 per cent (9.6 percentage points), and for the six largest firms and FTSE 350 companies ranging from 52.8 to 64.6 per cent (11.8 percentage points), though this greater range for the FTSE 350 may be due to a reduction in the number of data points. In both analyses, the industry with the lowest margin was industrials, and the industry with the highest margin was financials. The causes of these differences are not evident.

TABLE 8 **Average engagement profitability by industry (all clients in database, all firms, all segments, total hours, including partner)**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Period average*
Oil and gas	60.4	61.2	59.9	62.8	61.5	60.0	61.0
Basic materials	58.2	59.0	60.3	60.2	63.1	58.7	59.9
Industrials	54.7	53.8	55.6	53.6	54.9	54.4	54.5
Consumer goods	55.8	57.0	58.7	58.2	58.6	57.0	57.5
Health care	53.1	55.1	55.8	52.6	61.6	58.3	56.0
Consumer services	58.4	58.9	60.3	60.7	60.5	61.0	60.0
Telecommunications	62.2	51.6	59.6	63.6	64.8	62.1	60.7
Utilities	58.8	61.9	62.1	56.6	58.1	58.6	59.4
Financials	64.0	64.6	63.0	65.4	64.7	62.9	64.1
Technology	59.7	60.7	57.6	57.9	56.1	59.9	58.7

Source: CC analysis.

TABLE 9 **Average engagement profitability by industry (FTSE 350, six firms, total hours, including partner)**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Period average*
Oil and gas	62.1	60.5	58.3	63.0	58.8	54.2	59.5
Basic materials	59.0	63.0	65.1	63.4	62.6	58.9	61.9
Industrials	53.6	52.7	54.5	51.9	51.9	52.2	52.8
Consumer goods	55.6	54.7	57.6	54.1	57.6	52.4	55.3
Health care	52.6	59.6	57.8	50.8	61.1	60.5	56.9
Consumer services	56.1	56.1	59.2	60.7	57.9	60.0	58.3
Telecommunications	62.4	49.0	58.0	61.7	62.9	60.2	59.1
Utilities	55.7	60.1	61.6	59.7	62.5	59.7	59.7
Financials	63.9	65.3	63.6	66.3	66.2	62.3	64.6
Technology	60.7	60.8	58.3	61.4	54.3	59.4	59.0

Source: CC analysis.

Aggregate profitability of engagements by industry

22. When considering profitability by industry on an aggregate basis, we note that oil and gas clients are more profitable than any other industry (Table 10) but, when considered on an average engagement basis as above, show low or average financial performance. This suggests that higher margins are achieved from larger oil and gas clients (using audit fee as a proxy for size). Similarly healthcare, which is on an average profitability basis a relatively poor-performing sector, is, when considered on an aggregate basis, relatively profitable. In all industries, aggregate margins were greater than average margins.

TABLE 10 **Aggregate engagement profitability by industry**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Period*
Oil and gas	72.8	69.6	68.1	65.9	69.9	66.5	68.9
Basic materials	60.1	62.1	65.4	64.0	65.4	62.3	63.2
Industrials	57.6	57.4	58.7	56.8	57.5	56.9	57.5
Consumer goods	58.0	57.5	61.1	60.9	63.7	61.3	60.5
Health care	60.9	62.6	62.7	54.7	67.2	66.5	62.2
Consumer services	61.1	60.7	61.0	63.0	63.2	62.6	61.9
Telecommunications	55.1	53.3	60.5	64.9	65.8	63.5	60.6
Utilities	61.5	60.9	62.7	59.9	60.9	60.6	61.1
Financials	63.0	66.2	65.4	67.4	68.5	66.9	66.4
Technology	64.0	65.2	61.3	60.6	62.2	62.9	62.8

Source: CC analysis.

TABLE 11 **Aggregate engagement profitability by industry (FTSE 350, six firms, total hours, including partner)**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Total*
Oil and gas	73.4	70.1	68.6	66.1	70.0	66.2	69.2
Basic materials	60.8	61.8	67.1	64.5	65.7	62.0	63.6
Industrials	57.4	56.9	57.9	56.5	57.0	57.0	57.1
Consumer goods	58.2	56.4	59.9	59.8	63.8	61.1	59.8
Health care	61.6	63.7	64.1	55.0	67.4	68.0	62.9
Consumer services	60.8	60.6	61.0	64.3	62.6	62.7	62.0
Telecommunications	57.8	52.7	61.1	64.5	65.6	63.4	61.1
Utilities	60.1	60.1	63.0	60.9	61.9	61.7	61.2
Financials	62.7	66.1	65.4	68.0	68.4	66.8	66.4
Technology	64.0	67.6	62.3	62.5	62.5	63.6	63.9

Source: CC analysis.

Average profitability of engagements by year of engagement

23. Table 12 shows the average profitability of audit engagements by each year of an engagement. Year zero relates to the first year of an engagement. Because of the low level of switching, and the limited time frame of the data set (2006 to 2011), there are relatively few data points.[7]

[7] Because of issues caused by companies and their auditors having different year ends, there may be some audit clients where the year of engagement (that is, the nth year that the same auditor has performed the audit) may be mis-stated by +/–1 year, and may be further complicated where a company has changed its financial year during the period examined. However, we would expect a long-term trend to emerge.

TABLE 12 **Engagement profitability by year of engagement (total hours, includes partners)**

per cent

	0	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*Period*
Average engagement profitability												
FTSE 100	54.2	48.4	58.0	62.6	63.3	64.5	63.9	62.7	59.3	63.0	63.6	61.3
FTSE 250	51.7	51.1	55.6	57.8	58.2	55.9	59.3	60.2	57.7	60.8	59.0	57.8
FTSE 350	52.6	50.5	56.2	58.8	59.4	57.7	60.3	60.9	58.2	61.4	60.5	58.7
Other	57.8	56.5	56.7	54.4	55.1	59.8	61.9	61.1	59.1	60.9	59.3	58.4
Combined	55.1	53.8	56.5	56.8	57.8	58.6	60.9	61.0	58.5	61.2	60.1	58.6
Number of data points												
FTSE 100	18	13	17	21	29	23	31	38	36	37	34	297
FTSE 250	32	53	52	77	95	86	107	91	84	98	71	846
FTSE 350	50	66	69	98	124	109	138	129	120	135	105	1,143
Other	47	78	76	80	77	77	83	84	73	60	62	797
Combined	97	144	145	178	201	186	221	213	193	195	167	1940

Source: CC analysis.

24. The large drop in engagement profitability in engagements one year after appointment in FTSE 100 engagements is due to a single loss-making engagement. Excluding this engagement increases average FTSE 100 engagement profitability by five percentage points and FTSE 350 by one percentage point (with minimal impact on other years).

25. Comparing average engagement profitability at years 0, 3, 5 and 10 indicates a general upward trend, which is shown graphically in Figure 2. In FTSE 100 and FTSE 250 engagements, there is evidence to indicate that profitability does increase over time. Engagement profitability in the second year of engagement (year 1 in the table and chart) appears to fall compared with the first year of the engagement, which is against expectation, but this may be an issue in the data over whether the first year of an engagement has been coded as year 0 or year 1.

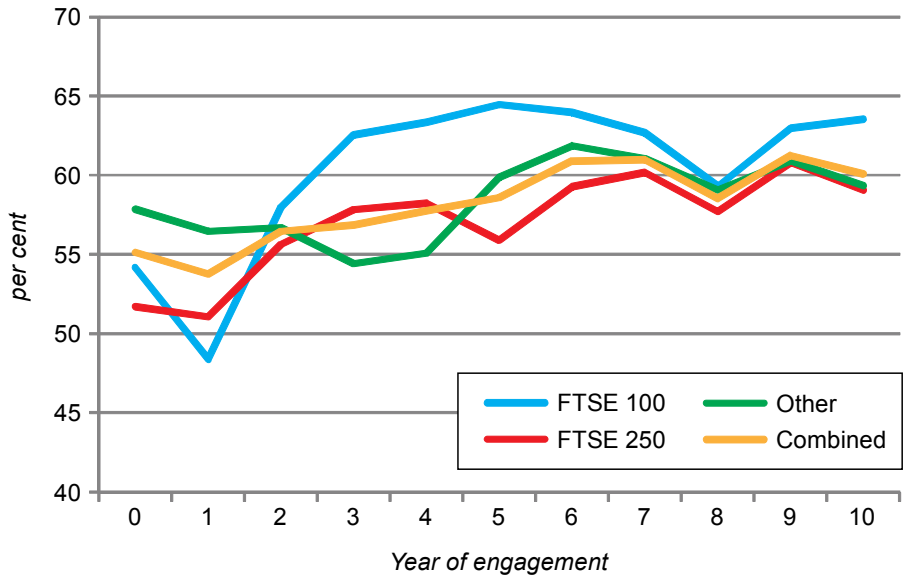
26. It should be noted that although 11 years of engagement profitability is shown in Table 12 and Figure 2, these figures relate to different engagements over the period 2006 to 2011. There may be additional factors, such as the overall state of the

economy, that affect the relative profitability in different years, though this impact is likely to be distributed across the 11 years (years 0 to 10).[8]

27. There are no clear consistent trends in respect of tenure when comparing different market segments, other than a general upward trend and a noticeable dip in profitability in year 8 of engagements, which may correspond to partner rotation. However, there is sporadic fluctuation in the data, making conclusions difficult to draw. Figure 3 (paragraph 29) extends this trend, which indicates that profits appear to remain constant in the long term, though this is not conclusive.[9]

FIGURE 2

Average engagement profitability over length of engagement (total hours, includes partners, truncated scale)



Source: CC analysis.

28. However, because this assessment of profitability is based on how many years' experience an auditor has with a client, it does not adequately consider the impact of

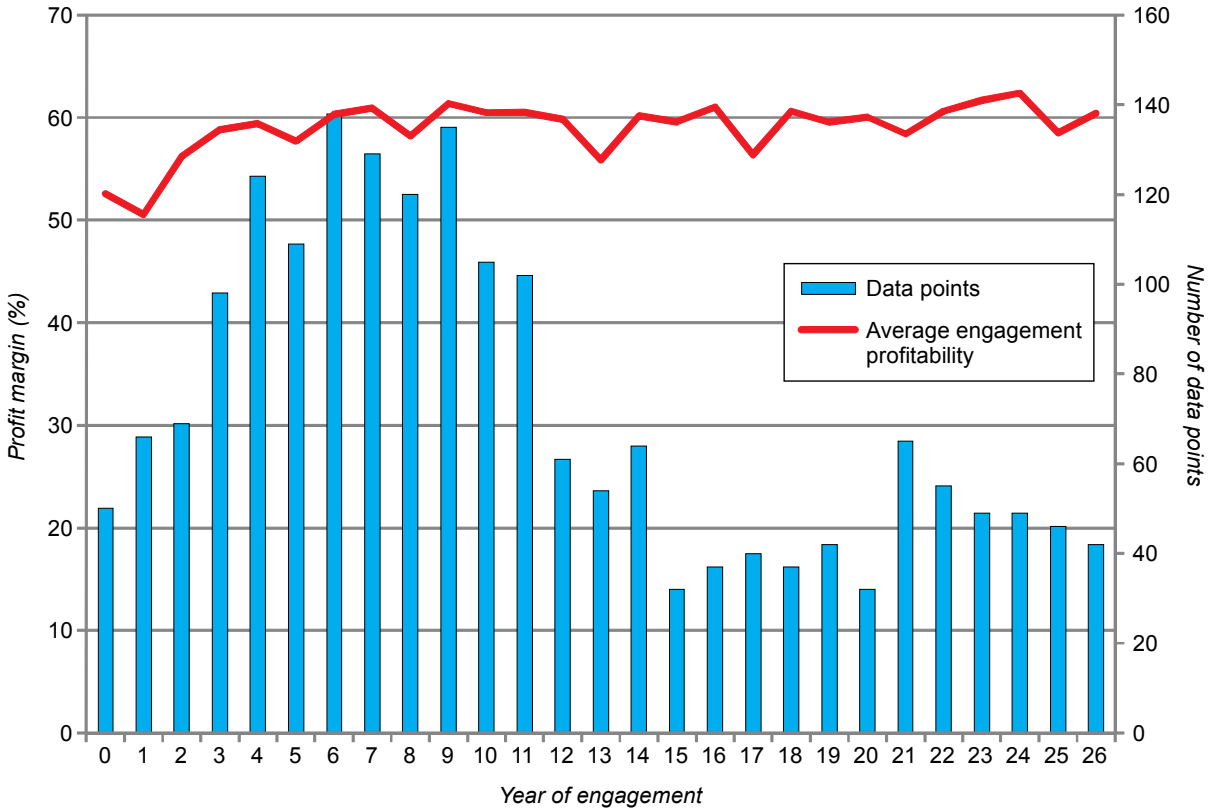
[8] For example, in any of the years 2006 to 2011, there will be a number of engagements in a given year of the relationship.
[9] We also considered the impact of the underlying profitabilities of different firms and the number of data points from each firm for each year of tenure to understand whether the average profitability was being driven by which firms' engagements were most predominant in the data. We indexed the profitability of each engagement to that firm's average engagement profitability for FTSE 350 clients and also for FTSE 350 and large private companies, so that each firm's 'average' equalled 100. These analyses displayed a very similar curve to that shown in Figure 3 with some smoothing out. However, this still does not control for the nature of the audited companies.

underlying average profitability in a given year. Furthermore, our engagement database includes data for a maximum of six years for a given auditor/company relationship (assuming no switching), so the data presented in Figure 2 and Table 12 for each year of an audit engagement is based a number of different clients and different years (for instance, data relating to the tenth year of an engagement will relate to company–auditor relationships that began between 1996 and 2001, whereas those in year 0 will relate to company–audit relationships formed between 2006 and 2011).

29. Examining the year-on-year trends in average engagement revenue and direct engagement costs does not indicate any consistent trend, and thus the changing level of profitability appears to be a combination of both revenue and cost effects.

FIGURE 3

Long-term FTSE 350 profitability



Source: CC analysis.

30. Table 13 sub-analyses the data in Table 12 by identifying profitability by both the year of the engagement and the first year of the engagement, with Table 14 showing the same for FTSE 350 clients (each 'cohort'[10] can be followed left to right on each line). This analysis has the benefit of allowing comparisons to be made over time between different 'cohorts' of clients. However, as each figure is based on a smaller number of data points, there is a greater volatility and no clear trend is evident.

TABLE 13 **Engagement profitability by year of appointment (all companies, total hours, including partner time)**

Year of appointment	*Year of relationship* 0	1	2	3	4	5	6	*Average*
Engagement profitability (%)								
2000							[✂]	[✂]
2001						[✂]	[✂]	[✂]
2002					[✂]	[✂]	[✂]	[✂]
2003				[✂]	[✂]	[✂]	[✂]	[✂]
2004			[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2005		[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2006	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]		[✂]
2007	[✂]	[✂]	[✂]	[✂]	[✂]			[✂]
2008	[✂]	[✂]	[✂]	[✂]				[✂]
2009	[✂]	[✂]	[✂]					[✂]
2010	[✂]	[✂]						[✂]
2011	[✂]							[✂]
Average	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Data points								*Total*
2000							77	77
2001						24	25	49
2002					40	38	35	113
2003				47	47	46	44	184
2004			25	23	24	23	21	116
2005		19	19	20	22	21	19	120
2006	15	39	35	37	34	34		194
2007	22	32	33	34	34			155
2008	17	17	17	17				68
2009	10	15	16					41
2010	23	22						45
2011	10							10
Total	97	144	145	178	201	186	221	1,172

Source: CC analysis.

[10] That is, those companies which all switched in a given year.

TABLE 14 **Engagement profitability by year of appointment (FTSE 350, total hours, including partner time)**

Year of appointment	*Year of relationship* 0	1	2	3	4	5	6	*Average*
Engagement profitability (%)								
2000							[✂]	[✂]
2001						[✂]	[✂]	[✂]
2002					[✂]	[✂]	[✂]	[✂]
2003				[✂]	[✂]	[✂]	[✂]	[✂]
2004			[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2005		[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2006	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]		[✂]
2007	[✂]	[✂]	[✂]	[✂]	[✂]			[✂]
2008	[✂]	[✂]	[✂]	[✂]				[✂]
2009	[✂]	[✂]	[✂]					[✂]
2010	[✂]	[✂]						[✂]
2011	[✂]							[✂]
Average	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Data points								*Total*
2000								
2001							52	52
2002					28	10	12	22
2003				25	29	26	26	80
2004			11	12	12	28	23	105
2005		10	11	14	15	14	12	61
2006	9	13	14	20	17	13	13	76
2007	9	17	19	21	23	18		91
2008	4	5	7	6				89
2009	2	5	7					22
2010	20	16						14
2011	6							36
Total	50	66	69	98	124	109	138	654

Source: CC analysis.

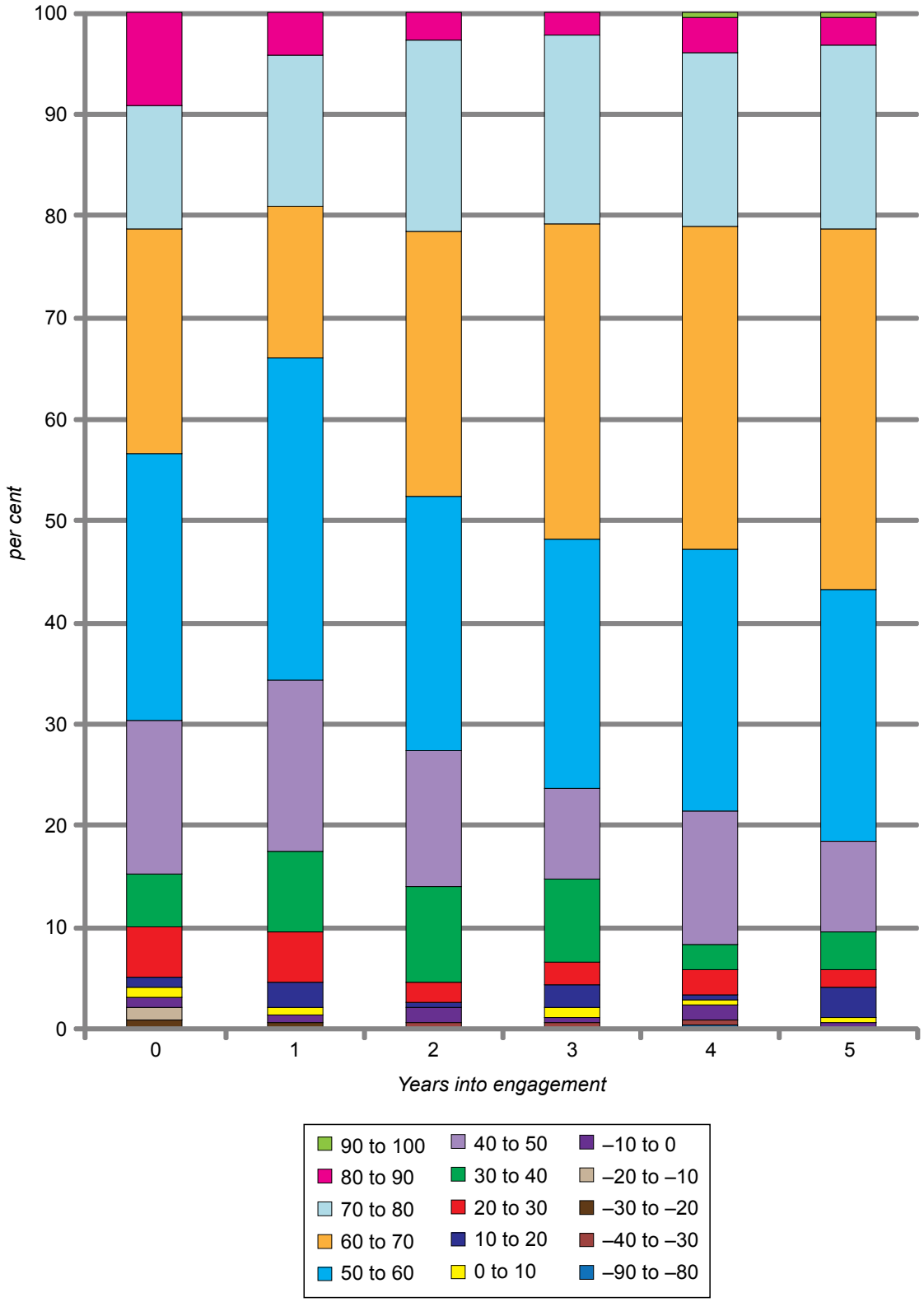
31. Figure 4 shows the proportion of engagements for each 'year of engagement' that achieved different levels of profitability. The chart shows that the distribution of engagement profitability changes with the length of the relationship.

32. The principal change in the distribution is the proportion of audits achieving profit margins of 20 to 60 per cent and 60 per cent and above. In year 0, 45.1 per cent of engagements achieved average engagement profitability of 30 to 60 per cent, and this proportion increased by 16.4 percentage points in year 1 to 61.5 per cent of engagements before falling by 22.3 percentage points to 39.2 per cent. The proportion of engagements achieving 60 to 100 per cent margins was 51 per cent in year 0, decreasing to 33.8 per cent before increasing to 56.6 per cent by year 5.

33. The proportion of audits achieving margins of less than 30 per cent (including losses) remained between 4.7 and 9.5 per cent for each of years 0 to 5 of an engagement relationship with no clear trend, year-on-year.

FIGURE 4

Distribution of engagements by level of profitability in different years of engagement (all clients)



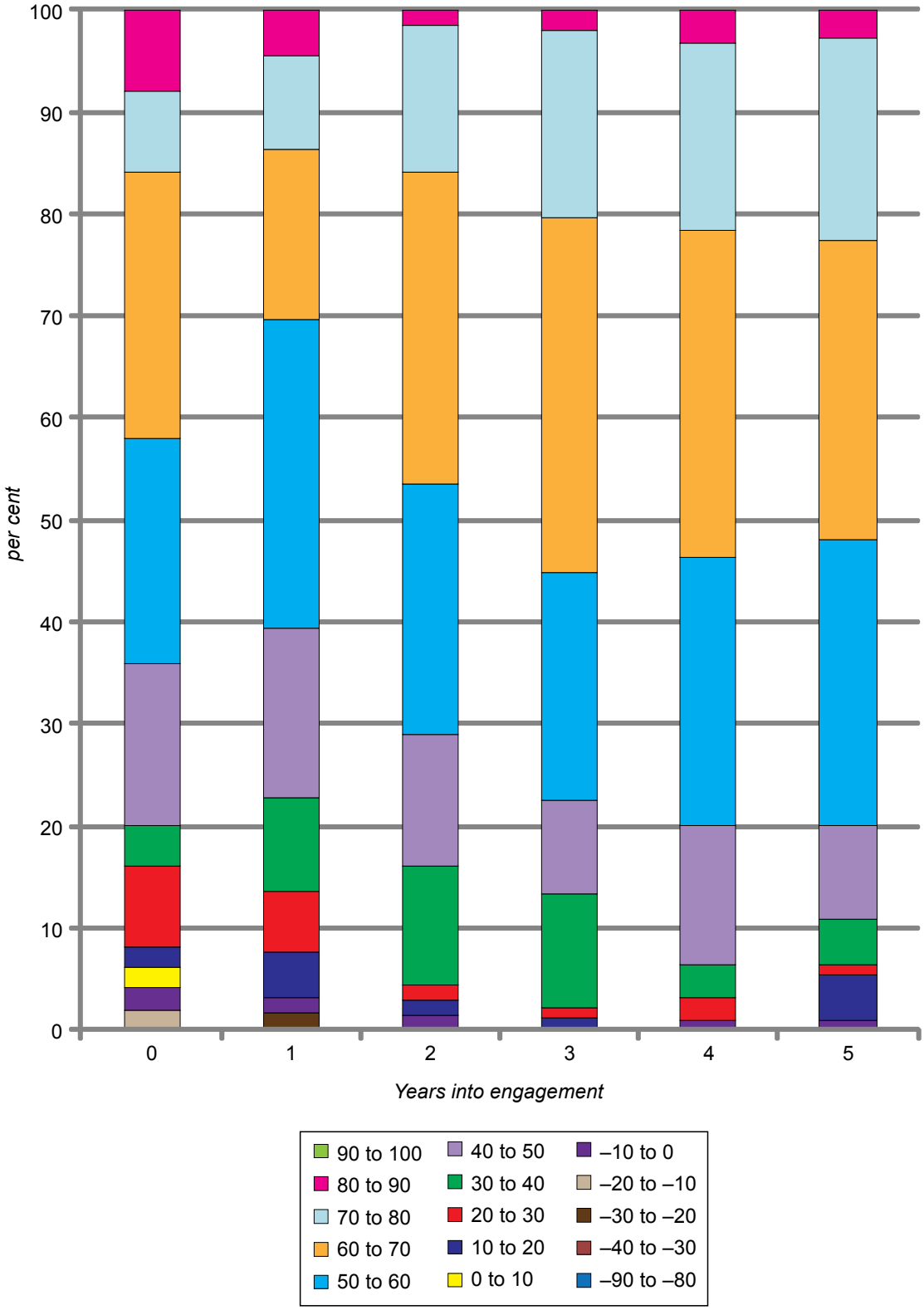
Source: CC analysis.

34. Figure 5 shows a similar trend in profitability FTSE 350 clients, with the majority of engagement profit margins for these clients from year 1 shifting from under 60 per cent to over 60 per cent. [11]

[11] FTSE 350 engagement data accounts for just over half of the data points for all clients and is potentially more susceptible to variation due to each data point being a larger proportion of the sub-population.

FIGURE 5

Distribution of engagements by level of profitability in different years of engagement (FTSE 350)



Source: CC analysis.

Effect of date of last switch in auditors on engagement profitability

35. To establish further whether there was an underlying financial benefit to firms in having long-term audit relationships, we subdivided the population into whether or not a client had switched auditor since 2001. We found that average audit profitability for companies which had switched post-2001 was 56.9 per cent over the period 2006 to 2011. In contrast, the average engagement profitability for other engagements (ie switched in 2000 or earlier) was 60.4 per cent for the same period. We then examined those engagements where the switch had occurred in 2000 or earlier in greater detail, and subdivided the population into two groups—those companies which switched in 1994 or earlier, and those which switched between 1995 and 2000 inclusive.[12]

36. Engagements where the relationship had been founded in 1994 or earlier had over the period a slightly lower (2.4 percentage points) profit margin than those with switches between 1995 and 2000. In five out of the six years, the average engagement profitability for relationships founded before 1994 was greater than those switching in 2001 or later.

TABLE 15 **Average engagement profitability by date of last switch (FTSE 350)**

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Period average*
Companies switching in 2001 or later							
Average engagement profitability (%)	56.3	56.3	57.2	58.2	57.4	55.7	56.9
Number of data points	96	113	122	142	147	155	775
Switches occurring in 1995–2000							
Average engagement profitability (%)	61.8	62.2	62.0	61.9	61.4	60.6	61.6
Number of data points	114	109	107	105	101	101	637
Switches occurring in 1994 or earlier							
Average engagement profitability (%)	56.8	57.9	60.3	60.4	60.7	59.5	59.2
Number of data points	129	126	120	117	112	106	710
Companies switching in 2000 or earlier							
Average engagement profitability (%)	59.1	59.9	61.1	61.1	61.0	60.1	60.4
Number of data points	243	235	227	222	213	207	1,347
FTSE 350 average engagement profitability (%)	58.3	58.7	59.7	60.0	59.5	58.2	59.1
Total number of data points	339	348	349	364	360	362	2,122

Source: CC analysis.

[12] The dates were chosen to create three broadly similar sized groups.

37. The analysis was repeated, with the subdivision being based on the length of the audit relationship each year (2006 to 2011). Whilst the analysis in Table 15 grouped data by the year of first engagement and thus kept the same engagements in each category, the data in Table 16 groups data by the length of relationship each year. This analysis has the benefit of considering whether the overall length of experience affects profitability, whilst also subdividing data into a small number of categories maintaining sufficient data points to make pertinent observations.

38. The relative profitability of engagements in years 0 to 5 is lower than for all other engagements. However, the relative profitability of the other three categories is broadly similar, but fluctuates over the period 2006 to 2011, due to a decline in average profitability in categories 6–10 years over the period, compared with overall improvements in the categories 11–20 and over 20 years.

39. Part of this change in margins is likely to be the differing nature of the clients, and thus as we move through the period 2006 to 2011, the data points for certain engagements will transfer between the categories. If a client is particularly profitable (or not), and is in year 5 of the relationship, its results will transfer to categories 6–10 years for the remainder of the period. For this reason, the results of Table 16 need to be considered with those in Table 15.

TABLE 16 **Average FTSE 350 engagement profitability by year of audit relationship**

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Period average*
0–5							
Average engagement profitability (%)	56.3	55.7	57.4	58.2	59.7	53.5	56.8
Number of data points	96	101	87	81	78	75	518
6–10							
Average engagement profitability (%)	61.9	62.4	61.0	60.8	57.8	57.8	60.4
Number of data points	107	112	100	120	113	80	632
11–20							
Average engagement profitability (%)	56.8	56.6	59.4	60.4	61.4	60.4	59.5
Number of data points	62	61	83	87	89	122	504
Over 20							
Average engagement profitability (%)	57.1	59.0	60.9	60.1	59.8	59.6	59.4
Number of data points	74	74	79	76	80	85	468
FTSE 350 average engagement profitability (%)	58.3	58.7	59.7	60.0	59.5	58.2	59.1
Total number of data points	339	348	349	364	360	362	2,122

Source: CC analysis.

Average profitability of engagements by reporting month

40. In Appendix 16, we noted that some parties believed that the largest audit firms tendered for certain audits at very low prices to utilize staff in off-peak periods. Seasonal pricing of a good or service is an interaction of supply and demand. The 'seasonal' demand for audit is a product of two factors: the first is the distribution of company financial years across a calendar year, and the second is the statutory requirement to submit filed accounts.

41. For private companies, there is a deadline of nine months, and for FTSE 350 companies, preliminary results must be published within four months and audited results within six months. As such, there is greater flexibility in scheduling audit work with a private company of a given size and complexity.

42. Table 17 shows an analysis of our engagement database and the last month of the reporting year (eg a company with a March financial year end would be included as '3'). The table does not show the distribution of all the firms' clients (it includes only large companies (companies which were in the FTSE 350 during the period and

large private companies) included in the engagement database), but we believe these to be the clients which consume a significant level of the firms' resources. Approximately half of clients have a December year end, whilst approximately a further fifth have a March year end. The combined concentration of company year ends in March and December is greatest in the FTSE 100 (79.9 per cent of FTSE 100 audit engagements, 68.5 per cent of FTSE 250 and 67.3 per cent of other companies).

TABLE 17 **Distribution of last month of reporting year for audit engagements by segment**

per cent

Month	*FTSE 100*	*FTSE 250*	*Other*	*All clients*
1	2.78	2.28	4.48	3.21
2	2.45	1.21	2.89	2.07
3	21.57	19.49	17.39	19.05
4	0.65	5.56	5.39	4.62
5	0.33	1.88	1.14	1.32
6	3.59	5.69	6.61	5.67
7	1.80	2.08	1.82	1.93
8	0.33	2.34	1.59	1.69
9	7.19	7.50	5.16	6.55
10	0.00	2.14	3.11	2.13
11	0.98	0.94	0.68	0.85
12	58.33	48.89	49.73	50.91

Source: CC analysis.

43. Because FTSE clients must publish audited results relatively soon after the year end, there is less ability for audit firms to flex their workloads. Whilst a large proportion of substantive testing could be performed before the year end, there will still be a significant element of testing of disclosures, balances and the consolidation that will need testing and reviewing. However, if interim results are also audited, this may require certain testing to be phased across the year.

44. We can use profitability of engagements as an indicator of seasonal pricing, as, all things remaining equal, it would suggest that the audit fee is greater. Table 18 shows that there is some variation. However, the actual range of profitability remains in a tight band of broadly 55 to 65 per cent and there is not a consistent pattern in the FTSE 100 and 250. There are some outliers but these are caused by a small number

of data points (see Table 17). Figure 6 shows some peaks in March, June, July, September, and November to January relative to months immediately either side, but the month-on-month variation is not significant. If there is seasonal pricing, it is not evident from within the FTSE 250, or large private companies, or may be masked by other factors which we are unable to control here.

TABLE 18 **Average engagement profitability by last month of reporting period**

per cent

'Month'	*FTSE 100*	*FTSE 250*	*Other*	*All*
1	[✂]	[✂]	[✂]	[✂]
2	[✂]	[✂]	[✂]	[✂]
3	[✂]	[✂]	[✂]	[✂]
4	[✂]	[✂]	[✂]	[✂]
5	[✂]	[✂]	[✂]	[✂]
6	[✂]	[✂]	[✂]	[✂]
7	[✂]	[✂]	[✂]	[✂]
8	[✂]	[✂]	[✂]	[✂]
9	[✂]	[✂]	[✂]	[✂]
10		[✂]	[✂]	[✂]
11	[✂]	[✂]	[✂]	[✂]
12	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

FIGURE 6

Engagement profitability by last month of reporting year

[✂]

Source: CC analysis.

Factors affecting profitability

45. In considering profitability of audit engagements, there are a number of factors that need to be considered that may be an underlying driver of financial performance. These include:

(a) the grade mix of staff resource;

(b) the relative cost of staff for each firm and each year;

(c) the level of revenue relative to the level of audit work; and

(d) the level of other direct costs incurred.

Grade mix of engagement teams

46. Table 19 shows the proportion of hours recorded by firms' staff that relate to partners. For all firms, there is an increase in the proportion of the number of hours that relates to partner involvement in the FTSE 100 compared with the FTSE 250, and the FTSE 250 when compared with other firms.[13] Table 20, which includes the number of hours recorded by partners and directors, shows the same trend.

TABLE 19 **Proportion of total engagement hours recorded by partners**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Period average*
BDO							
FTSE 100	[✂]			[✂]	[✂]	[✂]	[✂]
FTSE 250	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Other	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Deloitte							
FTSE 100	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
FTSE 250	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Other	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY							
FTSE 100	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
FTSE 250	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Other	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT							
FTSE 250	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Other	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG							
FTSE 100	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
FTSE 250	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Other	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC							
FTSE 100	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
FTSE 250	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Other	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

[13] [✂]

TABLE 20 **Proportion of total engagement hours recorded by partners and directors**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Period average*
BDO							
FTSE 100	[✂]			[✂]	[✂]	[✂]	[✂]
FTSE 250	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Other	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Deloitte							
FTSE 100	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
FTSE 250	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Other	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY							
FTSE 100	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
FTSE 250	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Other	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT							
FTSE 250	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Other	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG							
FTSE 100	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
FTSE 250	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Other	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PwC							
FTSE 100	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
FTSE 250	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Other	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Staff costs

47. Table 21 shows the 2011 staff cost rates used for the analysis above. It is not clear if differences in cost rates are due to the overall number of hours that the firms are able to extract from their staff (such as through unpaid overtime) or underlying salary costs.

48. Of note is the cost of a director's time, with [✂] estimating this cost to be £[✂] per hour, which is higher than other firms. Given the scale of variation between firms (for example, [✂] cost is [✂] per cent greater than [✂] director rate), it seems unlikely that this is driven by the total number of hours worked, rather that [✂] pays relatively well, or that director at [✂] is a relatively senior role.

49. The role of director may vary by firm and if the firms have mapped multiple grades to each of the standard grades requested for CC analysis (or vice versa), there may be some distortion in the average cost per hour [✂]. Although director time does not account for a large proportion of engagement hours, the significantly greater cost per hour compared with junior staff means that any variation will have a disproportionate affect on overall profitability.

50. Growth rates on costs per hour over the period have also been considered, and the only firm showing an increase in costs in all grades is [✂]. There are no notable significant ongoing increases in costs per hour; however, changes in the total cost of employing staff may be offset by changes in productivity.

TABLE 21 **Staff cost per hour in 2011 (total hours) and CAGR, 2006 to 2011**

	Trainees	*Other qualified*	*Manager*	*Senior manager*	*Director*
					£
Cost per hour					
BDO	[✂]	[✂]	[✂]	[✂]	[✂]
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]
PWC	[✂]	[✂]	[✂]	[✂]	[✂]
					per cent
CAGR					
BDO	[✂]	[✂]	[✂]	[✂]	[✂]
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]
PWC	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Note: Staff rates were requested for audit or assurance staff. Staff in the same grade but based in other service lines may have a different pay range.

Revenue per hour

51. Table 22 (in paragraph 54) sets out the average level of revenue per hour generated from each audit engagement. Over the period 2006 to 2011, FTSE 100 audits attracted on average between £5 and £25 an hour more than FTSE 250 audits, with an average difference over the period of £15 per hour. Non-FTSE-350 audits generated a broadly similar level of revenue per hour to FTSE 250 audits.

52. Revenue per hour generated by individual firms varied to a greater extent than the average for each market segment, though as there are fewer data points for each individual firm (compared with the market as a whole), averages are more susceptible to the impact of a single data point, either as a result of changes in the efficiency of individual audits, or of companies moving between market segments, or switching between firms. When revenue per hour is considered for the FTSE 350 as a whole, there is less variation.

53. Average revenue per hour from FTSE 100 engagements has remained between £104 and £119 per hour each year with an average of all FTSE 100 engagements over the period generating £112 per hour. The range for the FTSE 250 is £90 to £104, with an average of £97. The range for the FTSE 350 was £98 to £106, with an average of £102.

54. [✂] generated substantially less revenue per hour than the other Big 4 firms, with its average for the period for the FTSE 100 being £[✂] per hour and for FTSE 250 engagements at £[✂] per hour, which appears to be the cause of its relatively low engagement profitability compared with the other firms. [✂] generated the greatest level of revenues per hour at £[✂] per hour more than [✂].

TABLE 22 **Average revenue per hour per engagement, 2006 to 2011**

£

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Period average*
FTSE 100							
BDO	[✂]			[✂]	[✂]	[✂]	[✂]
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PWC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
All firms	111	112	112	119	115	104	112
FTSE 250							
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PWC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
All firms	94	98	96	97	91	99	96
FTSE 350							
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PWC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
All firms	99	102	101	103	98	100	101
Other							
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PWC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
All firms	95	100	128	98	100	97	103
All clients							
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PWC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
All firms	98	101	111	101	99	99	101

Source: CC analysis.

Other direct costs

55. Other direct costs incurred by the firms on engagements formed a small but significant element of total cost of an engagement. Over the period 2006 to 2011, non-staff direct costs on average accounted for 7 per cent of the UK audit fee. However, the average level varied significantly by firm, with [✂] on average incurring non-staff direct costs of [✂] per cent of UK audit fees, which is [✂] percentage points more than the other firms, and may be a contributing factor of its relatively low engagement

profitability. The other firms on average incurred direct non-staff costs of between 4 and 7 per cent of UK audit fees.

TABLE 23 **Average direct non-staff costs as a proportion of revenue**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Period*
BDO	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Deloitte	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
EY	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
GT	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
KPMG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PWC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Average	**8**	**7**	**7**	**7**	**6**	**6**	**7**

Source: CC analysis.

Characteristics of the higher-profitability FTSE 350 audit engagements

1. Having calculated the relative profitability of audit engagements, we sought to identify whether those which had been consistently more profitable have certain characteristics which might explain why this is the case. We investigated the characteristics of the client company and the behaviour of these companies in the appointment of their auditors using information provided by the public data set and the results of the CC survey.

Descriptive statistics

2. Using the public data set, we compared certain characteristics of the higher-profitability engagements with those of the other FTSE 350 engagements. In particular, we looked at FTSE 100 and FTSE 250 indexation, turnover, industry, tenure, audit fee and global activities. We tested for an association between company characteristics and high profitability by calculating the Pearson's chi-squared statistic.[170]

3. Among the group of higher-profitability companies, a greater proportion were FTSE 100 companies compared with other companies (44 per cent of higher-profitability companies compared with 26 per cent of others) (see Table 1).

TABLE 1 **Split of high profitability and other FTSE 350 engagements by index designation**

Index	*High profitability*	*Other FTSE 350*
FTSE 100	44%	26%
FTSE 250	56%	74%
	50	295

Source: CC analysis.

[170] The Pearson's chi-squared test compares the *observed* distribution of companies that are and are not in the high profitability group across the company characteristic to what we would *expect* to observe if the company characteristic was independent of whether a company was in the high profitability group.

4. Overall there is an association between assets and membership of the higher-profitability group, but not turnover (see Table 2).

TABLE 2 **Split of high profitability and other FTSE 350 engagements by company asset and turnover ranking (ranked by size)**

	High profitability	*Other FTSE 350*
Total assets		
Lowest 20%	2%	23%
2	16%	20%
3	33%	18%
4	18%	20%
Highest 20%	31%	18%
	49	293
Total turnover		
Lowest 20%	18%	21%
2	22%	20%
3	16%	21%
4	16%	21%
Highest 20%	27%	19%
	49	292

Source: CC analysis.

5. There were also differences between industries. A greater proportion of higher-profitability companies were in the financial sector than other companies: 28 per cent of higher-profitability companies were in financial services compared with 21 per cent of other companies; 8 per cent of higher-profitability companies were in real estate compared with 1 per cent of other companies; and 8 per cent of higher-profitability companies were in insurance compared with 4 per cent of other companies (see Table 3).

TABLE 3 **Split of high profitability and other FTSE 350 engagements by industry segment**

Industry	*High profitability*	*Other FTSE 350*
Banks	4%	1%
Basic Materials	0%	3%
Consumer Goods	2%	9%
Consumer Services	20%	18%
Financial Services	28%	21%
Health Care	2%	2%
Industrials	10%	19%
Insurance	8%	4%
Mining	4%	5%
Oil & Gas	4%	6%
Real Estate	8%	1%
Technology	4%	5%
Telecommunications	0%	2%
Utilities	6%	2%
	50	295

Source: CC analysis.

6. In the higher-profitability group, a lower proportion of companies had been with their auditor for 0–5 years (12 per cent compared with 22 per cent among other companies) (see Table 4). This could be driven by our definition of higher-profitability companies, though, as a company needed to be with its auditor for at least three years (see Annex 4).

TABLE 4 **Split of high profitability and other FTSE 350 engagements by length of auditor tenure**

Tenure	*High profitability*	*Other FTSE 350*
0–5 years	12%	22%
6–10 years	30%	21%
11–20 years	32%	33%
21+ years	26%	23%
	50	295

Source: CC analysis.

7. Among the lowest (highest) 20 per cent of audit fees paid in 2010, a lower (higher) proportion were in the higher-profitability group: 12 (28) per cent of companies in the higher-profitability group were in the lowest (highest) 20 per cent of audit fees compared with 22 (18) per cent of other companies (see Table 5).

TABLE 5 **Split of high profitability and other FTSE 350 engagements by company audit fee ranking (ranked by fee size)**

Audit fee	*High profitability*	*Other FTSE 350*
Lowest 20%	12%	22%
2	26%	19%
3	18%	20%
4	16%	21%
Highest 20%	28%	18%
	50	293

Source: CC analysis.

8. Based on the number of countries in which the company operated, the higher-profitability companies do not appear to be markedly different from the other FTSE 350 companies (see Table 6).

TABLE 6 **Split of high profitability and other FTSE 350 engagements by number of countries the company operates in**

No of countries	*High profitability*	*Other FTSE 350*
1	19%	24%
2–5	33%	21%
6–20	21%	26%
21–50	17%	21%
51+	10%	8%
	48	279

Source: CC analysis.

Survey results

9. Of the 50 higher-profitability engagements, we had surveyed 25 companies.

10. We compared the findings of the survey for these companies with those of the remaining FTSE 350 companies. The tabulations provided by IFF are published on our website as Set 6.[171]

[171] www.competition-commission.org.uk/our-work/statutory-audit-services/evidence/cc-commissioned-survey.

11. In particular, we identified responses where there were statistically significant and material differences between the findings for the two groups. In testing for significance, we used a standard T-test with a finite population correction:

$$t = \frac{pA \quad - p_B}{SE_t}$$

Where p_A and p_B are the percentages of the two groups and *SE* is the joint standard error. We compared the results with a theoretical critical value $t_{0.025,193}$ corresponding to 95 per cent confidence level, 193 degrees of freedom for a two-tailed test. In order to have a more binding testing, we restricted degrees of freedom to 100.

12. The key findings are as follows:[172]

(a) The average tenure is longer for the higher-profitability clients. In particular, the higher-profitability engagements were more likely to have a tenure of between 11 and 20 years. (44* per cent of the higher-profitability companies had a tenure of 11 years of more compared with 24* per cent of other FTSE 350 engagements).

(b) The sector-specific expertise and experience of the auditor was more important in the (re)appointment of the auditor to the higher-profitability clients than other companies (80* per cent of higher-profitability companies said that this was important compared with 69* per cent of other FTSE 350 companies).

(c) Price was less important in the (re)appointment of the auditor for the higher-profitability clients than for other companies (36* per cent of higher-profitability companies said that this was important compared with 51* per cent of other FTSE 350 companies).

(d) 12* per cent of the higher-profitability clients compared with 24* per cent of other surveyed FTSE 350 companies had been to tender in the last five years.

[172] The * indicates that differences are statistically significant (see Appendix 3, paragraph 9).

(e) A substantial increase in price was less likely to trigger a switch in auditor among the higher-profitability clients—although this result is based on small numbers (44* per cent compared with 68* per cent said that this was likely).

(f) A smaller percentage of higher-profitability clients had been approached by rival firms, 48* per cent in the last five years compared with 66* per cent of other FTSE 350 companies.

(g) The higher-profitability clients have a high turnover. In particular, 36* per cent have a turnover of between £5 billion and £10 billion, compared with 20* per of the other FTSE 350 companies surveyed, and 32* per cent have a turnover of £10 billion or more, compared with 11* per cent of the other companies.

13. We noted that there were no significant differences between higher-profitability and other FTSE 350 clients in terms of the size of the audit fee, the importance of the international network, and the proportion of the fee that is accounted for by non-UK activities.

Identification of higher-profitability engagements

1. We defined the 'higher-profitability' audit engagements to be those that *(a)* for each firm were relatively more profitable FTSE 350 audit engagements compared with the other FTSE 350 audit engagements and *(b)* had been consistently so for a number (three or four) of years.

2. To avoid issues of comparability of data, we focused on engagements which were relatively profitable for each firm, using a standard set of criteria. We used two separate criteria to establish a list of higher-profitability engagements and combined the list of identified engagements.

Criteria applied for selection of engagements

3. We first applied two criteria to identify those engagements which had a consistent level of profitability for each firm, regardless of the level of profitability.

4. The first selection criterion ('Criterion 1') identified engagements where each of the following was true:

   (a) we had a minimum of four years engagement data over the period 2006 to 2011;[1] and

   (b) the engagement 'profitability' calculated for each year was within a ten percentage point band.

5. The second set of criteria ('Criterion 2') identified engagements where the following was true:

   (a) the client was present in the database in 2009, 2010 and 2011; and

[1] Because the data was to be used as a way of identifying a subset of the engagement data, it was necessary for the auditor to have undertaken the audit in 2011, which was a secondary data cleansing check. In practice, therefore, the four years relate to 2008–2011.

(b) there was a less than 20 per cent variation in the year-on-year engagement profitability over the three years.

6. The second criterion considers the variance year-on-year as a proportion of the gross margin of the preceding year. Depending on the scale of the gross margins achieved on an engagement, this may be more or less selective than the ten percentage point range of Criterion 1 and will thus potentially identify different companies. Further, as it requires the engagement to have occurred in three consecutive years ending in 2011 (the first criterion requires four years of engagement data over a six-year period including 2011), it will again potentially identify different companies.

7. As each firm achieves a different average profitability, the use of a ten percentage point band in Criterion 1 will mean that the relative strictness of the selection criteria will vary for each firm. However, we do not believe this would have a significant impact.

8. We then filtered the two lists to identify those engagements where the average engagement profitability for the period 2006 to 2011 was greater than the average for the firm. We selected the ten engagements from each of the two criteria which had the highest average profitability.[2] Criterion 1 identified 36 clients and Criterion 2 identified 42 clients. When the two lists were combined, 19 companies featured on both lists, which gave a total of 59 different engagements.

9. The identified engagements were then manually reviewed. We excluded all engagements where the 2011 audit fee was less than £100,000. This excluded nine engage-

[2] For each firm this would potentially identify up to 20 engagements (the ten most profitable engagements identified from each criterion). However, by further requiring that engagement's average profitability to be greater than the firm's average, this limited the number of clients to less than ten for each criterion for each firm.

ments, of which three had a nil audit fee, indicating that they had switched auditor. The final combined list therefore comprised 50 engagements.

List of selected high profitability audit engagements

Company name	*Audit firm*
[✂]	[✂]

Understanding the engagement data

Calculating profitability

1. The calculation of engagement profitability is based on hourly cost rates for each 'grade' of staff, which were provided by the parties.[1]

2. Gross profit is calculated as:

$$Gross\ profit = UK\ audit\ fee - Direct\ non\ staff\ costs - staff\ costs$$

where staff costs are calculated as:

$$\sum_{\substack{i=Unqualified\ to \\ Director(+Partner)}} Usage\ of\ grade_i\ in\ hours \times average\ hourly\ cost\ of\ grade_i$$

3. UK audit fee is calculated for all parties (other than PwC and Deloitte) as reported UK audit fee minus international direct costs.[2] This adjustment is necessary as in some instances overseas subsidiary audits are invoiced to the UK parent company by the UK auditor on behalf of other overseas firms.

4. The hourly cost of labour is dependent on the assumption made about the number of hours over which to distribute annual staff costs. We requested three measures, which were 'total hours' (the average annual number of hours recorded on time-sheets by employees in each grade), 'chargeable hours' (the average annual number of hours recorded on timesheets for client engagements) and 'standard hours' (the number of hours an employee is contracted to work). The ratio of the respective cost rates varies by grade and by firm.

[1] The 'grades' were partner, director, senior manager, manager, other qualified and unqualified.
[2] PwC and Deloitte had excluded this element from their supplied fee data.

5. The hourly cost rates do not factor in any potential pay differences of staff working on different clients. If there is an assumed premium paid to staff on larger, more complex audits (particularly at senior level), either as a result of greater experience or relative performance (recognized financially through different positions in pay bands or consolidated performance-related pay), the calculated profit margin will not be accurate for the specific individuals on that engagement. However, in the responses to parties on their pricing of audit engagements, the need to recover any such premium has not been raised. Similarly, the typical measure of engagement level profitability used in the firms, revenue recovery rate, is based entirely on scale rates and not the relative pay of individuals on an engagement team.

6. The number of data points for the FTSE 100 and 250 in some instances is greater than would be expected (ie 100 and 250 data points respectively) due to issues around switching and different reporting years for the firms. Lines of data showing only a relatively small number of hours or no audit fee charged have been excluded (see below).

7. These gross profit margins do not factor in any non-direct costs and they are not intended to represent the overall profitability of the firms, or their audit or assurance business; instead they are intended to reflect the relative level of staff resources employed for their respective audit engagements. The proportion of staff time spent on audits will vary across firms and this will affect overall profitability of the firm, as will any engagements not included in this data set. Given the limitations in estimating a salary for partners for all firms, the data presented here should be approached with caution.

Data cleaning

8. Our initial review of the data indicated that there were a number of outliers in respect of both revenue and profitability. We filtered data points on the following areas:

   (a) where market segment was blank (FTSE 100/250/Other)—735 data points;

   (b) negative revenue—43 data points;

   (c) profit margin of more than 100 per cent—716 data points;

   (d) profit margin of less than minus 100 per cent—12 data points;

   (e) manual exclusions—12 data points (Camden Motor Group as it does not have a parent company and L'Oreal as it is a French company);

   (f) any audit fee less than £5,000—685 data points (excludes negative audit fees);

   (g) any engagement data which pre-dates that auditor's appointment in the public data set by more than one year—159 data points; and

   (h) any engagement where the relationship between the company and the auditor is not present in the public data set—173 data points.

9. In total, 1,150 out of 4,614 data points were excluded from the engagement data set.

10. Of the 2,273 data points in the raw data set labelled as FTSE 100/250, 151 were excluded on the above criteria, of which 119 were excluded for a low or negative audit fee, with 98 of these reporting no audit fee.

Liability, insurance and settlements

Introduction

1. This appendix:

   (a) considers the potential liability facing auditors, including the extent to which such liability may be limited;

   (b) sets out data on the extent of litigation from statutory audit clients and settlements paid as a result;

   (c) describes the amount of professional indemnity insurance (PII) cover and costs of that cover for each of the Big 4 and the Mid Tier firms[1]; and

   (d) sets out data on complaints about firms made to regulatory bodies.

Potential liability of auditors

2. This section *(a)* sets out the main heads of legal liability that auditors may face, *(b)* how incorporation as LLPs may limit the quantum that might have to be paid should such liability be established, *(c)* describes the possible use of liability agreements as a further way to limit firms' liability for mistakes in performing an audit; and *(d)* describes the legal structure of the firms' international networks and how it may limit liability.

Heads of liability

Negligence

3. Appendix 8, paragraph 56, sets out an auditor's liability in negligence. In particular, in a claim in negligence against an auditor the claimant must prove: *(a)* that the relationship between the auditor and the claimant was capable of giving rise to a duty of care; *(b)* that the loss flowing from the auditor's breach of that duty was caused by

[1] Insurance data from GT is insufficient to enable this firm to be included in the tables.

the auditor's negligent report, and was foreseeable; *(c)* that a sufficient relationship of proximity exists between the auditor and the claimant; and *(d)* that it is fair, just and reasonable in the circumstances that liability should be imposed.

Professional

4. Appendix 8 describes the various regulatory bodies and boards concerned with registration, standards and ethics. The sanctions that these bodies can impose for a defectively performed audit include financial penalties and the ultimate sanction of withdrawal of registration and hence of eligibility to perform audits. We note that this risk and the risk of reputational damage arising from regulatory investigations and criticism is unlikely to be commercially insurable. We asked firms about complaints to regulatory bodies in the last ten years. The results are summarized in paragraphs 62 to 70 below.

Criminal

5. Section 507 of the Companies Act creates a criminal offence in relation to inaccurate auditors' reports. The offence consists of knowingly or recklessly causing a report to include anything that is misleading, false or deceptive, or omitting a required statement of a problem with the accounts or audit. The individuals potentially caught by the offence are the auditor, if a sole practitioner, and their employees and agents; and the directors, members, employees and agents of an audit firm. However, the offence only applies to such an individual if they are an accountant who would be qualified to act as auditor of the company in their own right. This offence is therefore applicable to audit firm partners. The maximum penalty is an unlimited fine.

Limited liability partnerships

6. Prior to the Limited Liability Partnerships Act 2000 (LLPA 2000), a partnership did not have its own legal identity: each individual partner was jointly and severally liable for

claims against the partnership. Since the LLPA 2000, an LLP is available as a form of corporate entity with a separate legal personality thus reducing the individual exposure of the partners. In the event of a claim against the firm, the partners' liability is generally limited to the amount of their capital contribution to the firm.

7. Each of the Big 4 and Mid Tier are now established as LLPs. EY stated that if a negligence claim against the firm were successful, it would usually be paid by the firm's insurance cover (subject to a deductible or excess). In the:

> unlikely event that insurance cover was exhausted, the other assets of the Firm would be used to pay the claim. If those assets were exhausted and the Firm were wound up, as the Firm is a limited liability partnership, its members' (ie the Partners') liability would be limited to the amount of capital they contributed to the Firm. Unlike in a general partnership, the partners' personal assets are in principle protected.

8. However, Deloitte add that the 'protections of LLP status and insurance mitigate the risks for the partners personally, in that their personal assets are protected, but the assets of the firm, and the partners' and employees' future income, remain at risk'.[2]

Liability limitation agreements

9. Section 534 of the Companies Act allows an auditor to enter into a 'liability limitation agreement', a contractual limitation of an auditor's liability to a client company. The agreement can cover liability for negligence, default, breach of duty or breach of trust occurring in the course of an audit of accounts. The agreement must be authorized by the shareholders of the client company.[3] Without this, the agreement will not be effective. The agreement must relate to the audit of one specified financial year and

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[2] Deloitte response to the 'Liability, insurance and settlements' working paper, 5 October 2012.

[3] Section 536(2) of the Companies Act relates to authorization by shareholders of a private company. Section 536(3) relates to authorization by shareholders of a public company: *(a)* by resolution in general meeting before the company enters the agreement; or *(b)* by resolution in general meeting approving the agreement after it has been entered.

the limitation may be expressed in any terms specified in the agreement, not necessarily as a fixed financial amount or formula.

10. However, section 537 provides that the agreement will not be effective to limit an auditor's liability if the limitation would result in the company recovering an amount that is less than what is 'fair and reasonable' in all the circumstances of the case and having regard to the auditor's responsibilities (under Part 16 of the Companies Act), contractual obligations and the professional standards expected of the auditor. An agreement that purports to limit the auditor's liability to less than this amount has effect as if it limited the auditor's liability to that amount. In assessing what is fair and reasonable, the courts do not take into account circumstances arising after the loss or damage in question has been incurred nor the chances of the company successfully claiming compensation from any others responsible for the loss or damage.

11. We asked the Big 4 and Mid Tier firms whether they had entered into agreements with audit clients to limit liability for negligence, and report their responses below.

Big 4 firms

12. Each of the Big 4 firms told us that they had not entered into such agreements in relation to statutory audits of FTSE 350 companies. Although theoretically possible, such provision for liability limitation agreements in the Companies Act had not proved acceptable to companies in practice.

13. EY said that there were two reasons for this. First, company management and shareholders had been historically disinclined to seek or grant shareholder approval. Second, the United States Securities Exchange Commission (US SEC) had decided

not to permit such agreements on the basis that an auditor's independence might be affected.

14. Deloitte supported this, stating that whilst such agreements are 'in theory, possible, the need for companies to obtain shareholder approval has made the legislation to allow such agreements ineffective in practical terms and certainly within the listed company market'.

15. One firm stated that it did not anticipate that the position was likely to change in the foreseeable future.

> The firm, therefore, anticipates facing unlimited liability for its FTSE 350 audit work for the foreseeable future, meaning the entire assets of the firm are at risk. This is because of the potentially catastrophic impact on the firm in the event of an audit failure, both in terms of the impact on reputation and on financial resources. Whilst we have appropriate insurance arrangements in place, there is no affordable insurance to underwrite the largest potential losses (which are those that would arise from auditing FTSE 350 companies, given their scale). Even taking insurance into account, an audit failure in the context of a FTSE 350 company could put the firm out of business. A damaged reputation can put an audit firm out of business in a very short space of time [✂]. The most effective way to mitigate the risks we face is by providing a high quality audit service.

16. KPMG explained that as part of its statutory audit, KPMG or KPMG Audit Plc may 'agree with the client to extend its work beyond the minimum necessary'. Such 'extended audit' work is required by the FRC's Ethical Standard 5 (non-audit services provided to audited entities) to be undertaken on the same principal terms and

conditions as the audit (and therefore, in practice, on an unlimited liability basis). KPMG's standard audit engagement letter for a statutory audit provides for a limitation on liability in respect of any other ancillary services such as work in relation to a preliminary announcement or corporate governance statements. The amount of the limitation is negotiated with the client 'but for a major client would typically be in the order of £[✂]'.

17. PwC told us that it had not been able to agree a cap on liability with any of its FTSE 350 clients and that it now discontinued attempts to secure such caps.

Mid Tier firms

18. The Mid Tier also had not generally entered into such agreements. Baker Tilly stated that the regime introduced by the Companies Act was 'extremely limited in its capability' and 'no real compulsitor can be brought to bear by an audit firm'. Also, it would not seek to limit liability given that other firms would offer unlimited liability as part of their overall offering. [✂]

19. GT did not have such agreements with public company clients 'in line with the market and restrictions placed upon us by other jurisdictions'. It had, however, limited liability for negligence with some private company audit clients.

20. PKF said that unlimited liability of auditors was a potential barrier to taking on some of the larger audits, but noted that this should not be overstated.[4]

21. BDO said that auditor liability did not affect its decision to compete for larger audit clients, because the market currently did not accept limitation of liability for larger

[4] PKF hearing summary, paragraph 7.

audits (other than in exceptional cases). However, BDO had limited its liability for negligence in respect of [✂] FTSE 350 clients: [✂].

Legal structure of international networks

22. Firms are members of international networks. The nature and legal structure of a network means that each firm is legally independent, owned by its partners, rather than any other entity within the network, and as a result is financially liable only for its own actions.[5]

23. If international networks adopted a traditional business structure based on a parent company and a number of subsidiaries, there would be a potential risk of the assets of firms being at risk from an act of negligence in an overseas territory.

24. However, as the collapse of Arthur Andersen shows, reputational damage to a firm in one jurisdiction may have an adverse impact on firms across the international network.

Litigation and settlements

25. Where a company considers that its auditors have not acted with due care and attention, it may seek redress either through litigation or negotiation on making a complaint to the firm.[6]

26. Deloitte told us that in the last ten years it had had [✂] claims arising out of its statutory audit work across its entire audit business. [✂] In addition, Deloitte had had [✂] complaints arising out of its statutory audit work across its entire audit business, [✂].

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[5] See Appendix 25.
[6] Additional liabilities might arise from financial penalties levied by regulators- see paragraph 4 above.

27. EY told us that it had had [✂] audit-related claims in this period, of which [✂] failed, [✂] settled, [✂] abandoned and [✂] ongoing.

28. KPMG also had [✂] claims in this period, of which [✂] dismissed [✂] settled, [✂] discontinued and [✂] pending.

29. In the same period, PwC had [✂] claims, [✂] struck out. The other claims were either settled by mediation or negotiation [✂] or were not pursued. [✂] still pending. PwC told us that it had had [✂] other complaints during this period, all of which were settled.

30. In the ten years in question, Deloitte settled [✂] at £1 million or more ([✂]); PwC had [✂] occasions when total claims paid out in a particular year were £1 million or more ([✂]); KPMG had [✂] such occasions ([✂]); and EY had [✂].

31. BDO had [✂] occasions when the total claims paid out in a year were £1 million or more [✂]. We have no comparable data for the other Mid Tier firms.

32. However, GT stated that in the last ten years it had had to [✂].

Professional Indemnity Insurance

33. PII is a form of liability insurance that protects professional individuals and firms from claims by dissatisfied clients. It usually covers claims in negligence.

34. We asked the Big 4 and Mid Tier firms to provide an overview of how they insure the risks faced by the firm and individual partners, including the PII arrangements in place for the statutory audit business in the UK, any excess and any maximum sums insured and the annual cost of the insurance over the last ten years.

35. Historically, audit firms would seek PII cover in the commercial insurance market. According to Deloitte, until the mid-1980s, the large firms were able to secure cover in this way. This became increasingly costly and the insurance market had a 'decreasing appetite' to provide cover on a basis that made 'economic sense'. KPMG also noted, 'in recent decades it has been progressively more difficult for the largest firms to obtain the insurance cover required on a consistent and cost effective basis from the commercial market'. PwC added that 'PII cover provided by third party insurance companies was not available on a commercially affordable basis to large accountancy firms'.

36. This led to the larger firms developing captive insurance arrangements either used by the individual firms or acting akin to a mutual across a firm's international network. These arrangements would seek to provide PII cover and to reinsure part or all of that cover in the commercial reinsurance market.

37. Captive insurance is insurance provided by a company that is formed primarily to cover the assets and risks of its parent company or companies. A captive insurer is essentially an 'in-house' insurance company with a limited purpose and is not available to the general public. Captive insurance is an alternative form of risk management through which companies can protect themselves financially while having more control over how they are insured.

38. Reinsurance is the practice of mitigating insurance risks by sharing those risks with another insurance carrier in exchange for paying that other carrier a part of the premium. The practice makes it possible for larger policies to be written, but still have the protected party only deal with the main insurance provider. This simplifies things for the customer and generally does not affect rates.

39. Each of the Big 4 firms have captive insurance arrangements, usually establishing a different entity for each level of potential liability (ie company A for claims up to £45 million; company B for claims between £45 million and £100 million; company C for claims above £100 million). By syndicating the liability in this manner firms appear to be more readily able to obtain reinsurance in the commercial market.[7] They also may have arrangements for a mutual insurer to cover their international networks.

40. Of the other large audit firms in the UK, BDO, GT and PKF used captive insurance arrangements. Mazars and Baker Tilly used the commercial market.

41. We requested details of the premiums paid, the sum insured and the claims paid out by the large audit firms over a ten-year period. We note that these premiums typically cover all professional business carried out by the firm, including but not limited to, statutory audit.

42. Direct comparison of the costs of insurance is problematic because of the factors that may be taken into account in pricing insurance. These factors include the total sum insured per claim and the number of claims permitted; the likely frequency and size of payouts; and whether there is any uninsured excess. In addition there may be difficulties in comparing premiums paid to a captive insurer with those paid to a third party; for example, due to differences in any profit-sharing arrangements.

Value of claims and the cost of insurance

43. As noted above the data obtained from the firms is not directly comparable and given the infrequency of claims (below) it may be difficult to draw conclusions about trends in claims data. However, it is possible to make a number of observations which are discussed in the following sections.

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[7] We assume that by reinsuring each element of risk separately, the captive is able to obtain the most beneficial rates.

Frequency of claims against insurance in relation to statutory audit clients

44. As noted in paragraphs 30 and 31 above, in the last ten years there have been relatively few successful claims of a significant size (£1 million or above). The five largest firms have settled [✂] such claims in this period, with a total value of £[✂].

45. We set out in Table 1 the total value of claims from statutory audit clients against insurance[8] for each firm in each year from 2002 to 2011. The value of claims fluctuates widely from year to year and between firms. For instance, in 2003 KPMG claimed £[✂] from its insurance arrangements in relation to statutory audit clients, compared with £[✂] the previous year and £[✂] the following.

TABLE 1 **Value of claims against insurance**

£'000

	KPMG	*DEL*	*EY*	*PwC*	*BDO*	*BT*	*Mazars*	*PKF*
2002	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2003	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2004	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2005	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2006	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2007	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2008	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2009	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2010	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2011	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total value	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

Note: PKF data relates only to the period 2006 to 2011.

46. EY argued that in assessing the level of risk, the cyclical nature of negligence claims needed to be taken into account and a longer period of time looked at. Claims tended to increase in difficult economic conditions. Although the last eight years were marked by relatively low levels of settlements, EY was starting to see an increase in volume and size of claims. There was no guarantee that claims would remain at their present level in the future. EY stated that

[8] We note, however, that, firms may choose not to recoup the costs of settling a claim from insurance arrangements and may have an excess or deductible to pay. We also note the claims may not reflect all costs, including legal costs.

> the (perceived) deep pockets of [auditors] means that the auditor remains an attractive target for litigants who believe they have suffered loss, irrespective of whether negligence by the auditor is apparent or not. The incidence of such claims is likely to increase in the next few years as the phase of the economic cycle moves on.[9]

47. KPMG also argued that cycles applied to professional negligence litigation and that a ten-year time frame and single jurisdiction did not provide an adequate picture.[10]

48. PwC stated that claims by FTSE 350 companies against audit firms had declined over the last 12 years for three reasons: a sustained emphasis on quality, enhanced risk management processes and a reasonably stable economic environment up until 2008.[11]

Premiums paid and level of cover

49. Table 2 shows the total value of premiums paid by the firms in relation to PII arrangements with captive or commercial insurers. These related to all professional business carried out by the firm, including statutory audit. With the exception of [✂], the value of annual payments of premiums by firms had decreased for all firms. In the period 2002 to 2011 there were significant year-on-year fluctuations in the premiums paid by some firms ([✂]) including some increases in premiums paid ([✂]).

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[9] EY response to 'Liability, insurance and settlements' working paper.
[10] KPMG response to 'Liability, insurance and settlements' working paper, 5 October 2012. KPMG refers to various examples including [✂]. Further, Deloitte, in its response to the 'Liability, insurance and settlements' working paper, 5 October 2012, also cites various examples, including *ADT v Binder Hamlyn 1996*.
[11] PwC response to 'Liability, insurance and settlements' working paper, 19 October 2012.

TABLE 2 **Total value of premiums paid**

	KPMG	DEL	EY	PwC	BDO	BT	Mazars	PKF
								£'000
2002	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
2003	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
2004	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
2005	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	
2006	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2007	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2008	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2009	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2010	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2011	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis.

50. Table 3 sets out the level of insurance cover carried by the largest firms on a per-claim basis. The number of claims that can be made varies by firm. This appears to indicate that Mid Tier firms were able to obtain insurance cover at comparable levels to the Big 4 firms, on a per-claim basis.

TABLE 3 **Level of insurance cover per claim carried by firms, 2011**

Firm	Level of cover £'000
KPMG	[✂]
Deloitte	[✂]
EY	[✂]
PwC	[✂]
BDO	[✂]
Mazars	[✂]

Source: CC analysis.

51. GT had PII cover of [✂]. Its total premium cost for 2012/13 was £[✂] for the relevant 12-month period. GT believed that 'the level of our insurance cover in the commercial market is [✂]'.

52. We considered whether it was possible to compare the premiums paid by Mid Tier and larger firms for comparable levels of cover; for example, by calculating the cost per £ of cover. However, for the reasons discussed in paragraph 42 we did not consider this comparison to be meaningful, in particular due to differences in the number of claims permitted under each policy, differences in the periods covered by

each policy, and differences in the excess. In addition, because the Mid Tier firms had smaller clients, the probability of a large negligence claim could be lower and hence the premiums may be lower for this reason.

53. However, GT [✂], though 'there might be an issue' were it to focus on auditing banks because of the scale of such organizations and the recent market problems experienced by the sector.

54. BDO did not believe it would be problematic to obtain PII cover should it win FTSE 350 audit appointments and RSM Tenon was of the same view.

55. BDO and GT expressed concern that the Big 4 firms may be thought to have the 'deepest pockets', or largest insurance cover, should a problem arise and that this may influence choice of auditor appointment. However, no examples had been provided.

Firms' submissions on the nature of risk

56. Audit firms were of the view that the provision of statutory audit was a high-risk enterprise. Incidence of claims may be regarded as low but these claims could have high impact consequences. Mazars argued that the risk arising from negligence claims should not be underestimated, as one large successful claim has the potential of destroying a firm.[12] EY stated that the risk of negligence claims arising from its audit practice was regarded as a 'significant business risk'.[13]

[12] Mazars response to 'Liability, insurance and settlements' working paper.
[13] EY response to 'Liability, insurance and settlements' working paper.

57. Deloitte was of the view that one factor was that liability limitation agreements in relation to FTSE 350 clients were in practice ineffective.[14] EY too stated that whilst LLP status provided a measure of protection, the inability to secure liability limitation agreements meant that the firm was not protected 'against a catastrophic claim which may exhaust the firm's insurance cover'.[15] KPMG also stated that audit was the 'riskiest part of our business due principally to the inability in practice to limit our liability. Over the last 20-30 years, the number of significant asserted and successful claims and the level of insurance premiums attributable to our Audit function reflect this'.[16]

58. Firms maintained that the risk of professional negligence claims had been minimized, though not eliminated, by adopting enhanced quality assurance measures. Deloitte stated that the low level of claims did not mean that audit was not a 'high risk environment' but rather 'that firms had risk management and quality procedures which enabled them to operate in that high risk environment'.[17] KPMG provided that these measures included client acceptance, audit risk assessment and engagement review processes which helped to ensure the quality of an individual audit and investments in training, methodology and quality assurance processes.[18] EY sought to minimize the risk through a combination of training and other quality control and risk management measures and to protect against the consequences of claims through insurance.[19]

59. Deloitte also argued that it was not correct to conclude that adequate insurance was available to cover potential losses and that commercial insurance cover remained

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[14] Deloitte response to 'Liability, insurance and settlements' working paper.
[15] EY response to 'Liability, insurance and settlements' working paper.
[16] KPMG response to 'Liability, insurance and settlements' working paper.
[17] Deloitte response to 'Liability, insurance and settlements' working paper.
[18] KPMG response to 'Liability, insurance and settlements' working paper.
[19] EY response to 'Liability, insurance and settlements' working paper.

scarce in the market.[20] EY stated that it was not possible to 'purchase insurance that would cover the severity of the potential claims that might be brought against audit firms. The commercial market still believes the Big 4 to be high risk; and it is unlikely EY in the UK could purchase commercially reasonably priced cover', hence the continued need for captive insurance. EY was 'able to maintain a level of insurance that it hopes will be enough to satisfy litigants, but the reality is the firm's capital is always at risk'.[21] PwC stated that whilst insurance may be accessible to all firms and therefore not a barrier to entry or expansion, the risk of unlimited liability and the price of mitigating it was a material cost for firms. Notwithstanding the improved claims record in more recent years, PwC was not able to obtain commercial insurance cover on terms that were economically acceptable.[22]

60. It is also argued that the risks faced by audit firms were not limited to risks associated with negligence claims. As the collapse of Arthur Andersen showed, reputational damage could cause irreparable harm, even in the absence of a negligence claim. Further, BDO stated that the risk was one of confidence 'because audit is a product of confidence' and Andersen failed 'because people lost confidence in their audit'.

61. KPMG provided that reputational damage was most likely to arise either through a number of audit failures, pointing to systemic failings, or a deliberate act involving senior personnel at the firm and undermining the firm's reputation for integrity.[23] KPMG stated that 'isolated audit failures are financially damaging, reputationally survivable. Losing our reputation for integrity and honesty is deadly'.

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[20] Deloitte response to 'Liability, insurance and settlements' working paper.
[21] EY response to 'Liability, insurance and settlements' working paper.
[22] PwC response to 'Liability, insurance and settlements' working paper.
[23] KPMG response to 'Liability, insurance and settlements' working paper.

Complaints to regulatory bodies

62. Finally, we asked firms to provide details of complaints made by statutory audit clients to any external regulatory body over the last ten years, including complaints instigated by the regulatory body itself.

63. BDO outlined [✂] instances of references to external regulatory bodies. [✂] are ongoing. Only one resulted in a financial award when in 2005 the DTI referred BDO to the ICAEW. BDO were fined £10,000 and ordered to pay costs of £15,799.

64. Deloitte listed eight instances of complaints to regulatory bodies relating to their audit work in the past ten years. Two resulted in Deloitte being reprimanded and fined: (a) following an investigation (which commenced in April 2002) the ICAEW concluded that insufficient audit evidence was obtained regarding valuation of assets for which a fine of £130,000 and a £15,000 costs award was imposed; (b) following an investigation (which commenced in May 2007) that audit opinions had been signed by someone other than a "Responsible Individual", the ICAEW imposed a fine of £10,000 and costs of around £5,000. Neither of these instances relate to companies within the reference market.

65. EY detailed 10 instances of complaints to external regulatory bodies. In three instances, EY was reprimanded and ordered to pay fines and costs: in June 2010, EY were investigated by the ICAEW and in January 2012 EY were reprimanded and fined £40,000 and ordered to pay costs of £10,055 for failing to conduct its 2003 and 2004 audits in accordance with Statements of Auditing Standards and ISAs; in July 2007, the ICAEW reprimanded EY and fined it £40,000 and costs of £17,020 for failing to comply with Statement of Auditing Standard 400; in June 2010, EY were reprimanded by the Joint Disciplinary Scheme (JDS) and ordered to pay £500,000 fine and costs of £2,411,634. The Investigation began in May 2001. It appears that a

partner was also reprimanded and proceedings against another partner abandoned due to ill health. In July 2008, a former EY audit partner and senior manager agreed consent orders with the US SEC that found they had failed to properly audit accounts receivable and inventory balances. The partner and senior manager neither admitted nor denied the findings. Both were suspended 'from appearing or practicing before the [US] SEC for 2 years'. Proceedings were not however instituted against EY itself.

66. GT did not maintain records in a format which allowed for the relevant data to be practicably extracted.

67. KPMG listed 13 complaints to external regulatory bodies. In three instances, between 2003 and 2008 KPMG were reprimanded and fined and costs awarded. In September 2005, the ICAEW ordered that KPMG pay £[✂] and pay £[✂] costs for various failures in unqualified audit opinions on accounts between 1996 and 1997. In 2006 KPMG was fined £[✂] and ordered to pay £[✂] by the ICAEW to [✂]. In 2008 KPMG was fined £[✂] and ordered to pay costs of £[✂] by the JDS.

68. Mazars said that no statutory audit clients have complained to external regulatory bodies. [✂]

69. PKF listed [✂] instances of complaints to external regulatory bodies. [✂]

70. PwC outlined [✂] instances of complaints over the ten year period to February 2012 made in respect of statutory audit clients. The majority of these were instigated by the external regulatory bodies themselves. Investigations into three of those complaints were ongoing as at February 2012. In relation to JP Morgan Securities Limited PwC accepted that the private opinions it had issued to the FSA under the CASS rules in respect of the years ended 31 December 2002 -2008 had been

incorrect. The AADB Tribunal reprimanded PwC and fined it £1.4 million plus costs in December 2011. The other instances did not lead to formal investigations or found in PwC's favour.

The strategies of individual firms

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1. This appendix reviews the individual competitive strategies of BDO, Deloitte, EY, GT, KPMG, Mazars, PKF and PwC.

BDO

Summary

2. BDO's intention was to become the leading audit practice in the mid-market, acquiring the largest share of AIM clients and increasing its presence in FTSE companies. BDO had adopted a one-firm strategy in its interaction with clients, developing 'one-firm linkages' between staff in each service line.

3. It considered itself and GT to be the only non-Big-4 firms capable of delivering high quality audit through an international network.

Revenue and margins

4. BDO's strategy for its audit business included increasing revenues from £[✂] million in FY12 to £[✂] in FY15 ([✂] per cent increase, CAGR [✂] per cent). This revenue was to be generated through an increased focus on financial services and 'managed clients and targets' and would also see the number of audit partners increase from [✂] to [✂].

5. New revenues would be sought from increasing the firm's share of AIM and LSE listed companies. This revenue growth would also be driven by all partners allocating

at least [✂] per cent of their time to 'clients and markets' with the intention of increasing sales of all service lines.

6. BDO targeted margins within the audit practice for improvement through increased efficiencies. However, gross margins would only increase by [✂] percentage points to [✂] per cent by FY15. Efficiency in the firm's audit approach was being driven by technological developments, including the use of an Audit Practice Tool and methodology 'Audit 2010'. The network spent [✂] on developing the new audit software platform.

Pricing

7. Where a client had a manageable level of risk, BDO would set a price commensurate with that risk (subject to what the market would tolerate), but stated that it would not accept a high-risk client in exchange for a risk premium.

8. The firm produced guidance on fees which required partners to begin fee negotiations with an assessment of the cost to the firm and then to amend this based on a number of factors:

   (a) potential to leverage in other service lines;

   (b) whether the client has long-term audit relationships or switches regularly;

   (c) seasonality and resource availability; and

   (d) competitive strategies of other firms including whether key rivals have conflicts of interest.

Attraction, retention and acceptance of clients

9. BDO designated key clients and targets as 'Managed Clients' and 'Managed Targets' for whom the firm developed client-specific strategies. The strategies were developed by a client team which represented each of the firm's service lines. Target companies

were identified on the basis of sitting in the firm's 'market footprint', that they would generate significant fees or would enhance BDOs 'branded credentials'.

10. BDO believed that the Big 4 had an inherent advantage in the number of their alumni that were in positions of influence, with respect to audit engagements, and as part of its audit practice strategy was encouraging its partners to develop contacts actively.

11. BDO had developed a client listening programme, surveying its clients. The consolidated findings were then reviewed to assess any issues arising with the firm's client base.

12. BDO would only accept an engagement if its 'preconditions for audit' were present, namely *(a)* the use by management of an acceptable financial reporting framework in the preparation of the financial statements; and *(b)* the agreement of management and, where appropriate, those charged with governance of the premise on which an audit is conducted. [✂]

Potential audit clients

13. BDO had targeted potential clients in niche market sectors such as [✂]. The ability of BDO to find out about possible tenders before official commencement was dependent on the quality of its existing relationship with a client: if the firm had a good working relationship, it believed it would be aware before official announcement.

Increasing revenue from potential and existing clients

14. The firm had adopted the strategy of identifying 'managed clients' and targeting these for increased sales, with the intention that [✂] per cent of 'managed clients' should buy from three or more of BDO's services. A small number of 'managed target'

clients were allocated to partners based on industry expertise and these partners were then responsible for putting together a team from across all service lines and pursuing any opportunities as they arose. For each 'managed target' the partner and their team would meet every [✂] months to discuss developments in the firm's relationship and any issues affecting the client. The effectiveness of the targeting process was assessed over a [✂]-year period. When meeting clients and targets, staff would produce a 'know before you go' briefing that listed the firm's interaction to date.

Services offered

15. BDO differed from the Big 4 by not having a consultancy service line and thus did not offer as broad a range of services to its clients but did provide other service lines including corporate finance and business systems advice. As part of BDO's drive to increase the audit practice's revenue, it was developing new assurance products to offer to the market.

People

Partner remuneration

16. Partners were remunerated in three bands or tranches; the first was a fixed amount, the second corresponded to the number of equity points (and thus the capital the partner had contributed), and the third was based on the individual's performance. The number of equity points that a partner was allocated was dependent on the role the partner undertook.

17. Partners were appraised on a number of criteria, including their generation of revenue. There was, however, no minimum income level and audit partners' performance would not be based on cross-selling of other service lines.

18. Each partner had to contribute [✂] per cent of first tranche profits as capital with an additional £[✂] per equity point.

Retention of partners

19. BDO believed that the Big 4 firms targeted its partners, with the firm losing one partner in the last five years to EY. [✂] However, because of this, [✂]. The firm's partnership agreement included non-compete clauses.

20. BDO considered itself priced out of targeting Big 4 firm partners, though it stated that it had recruited three Big 4 firm partners in the past five years.

Experienced staff

21. BDO stated that as part of its strategy it had recruited a number of staff from the Big 4 firms.

Graduate recruitment

22. The firm recruited both graduates and school leavers, and operated a scheme of summer placements, 90 per cent attendants of which were offered to join the graduate intake. The firm targeted 23 universities and attended 60 events nationally, and worked with careers services to provide skills sessions and presentations to students. Both graduate and school leaver programmes were supported by current trainees of the firm.

Alumni

23. BDO operated an alumni network as a 'rich source of information and potential business relationships' and acknowledged the potential of BDO winning work through the recommendation of alumni. The network had only recently been actively

developed and the firm now employed a dedicated alumni officer to expand and oversee the network.

Reputation and brand

24. BDO focused its marketing activity on thought leadership and the creation of forums. Advertising was limited, with the firm considering that personal engagement was a more effective business development strategy.

25. Thought leadership publications were assessed to ensure that they demonstrated:
    (a) an understanding of a client's needs;
    (b) content that was timely and relevant;
    (c) outputs tailored to clients' preferences; and
    (d) added value to the client.

26. The firm undertook research on brand awareness every year and noted that awareness of BDO had increased, particularly in London and the South-East. The firm also surveyed financial journalists to gain an appreciation of their views of audit firms.

Competitors

27. BDO in its audit strategy stated that 'there has been a considerable increase in competition in the market', which in part was driven by the Big 4 firms entering the mid-market. BDO noted that 'the mid tier firms [other than BDO and GT] all suffer from a lack of consistent quality within both their domestic and international audit practices. There is not the investment in knowledge or the strength in depth seen in the Big 4'. However, BDO considered that it was able to compete with its own strong central technical accounting team. BDO considered that GT was the only other non-

Big-4 firm which did not suffer from a lack of consistency in audit quality both in the UK and internationally.

28. BDO noted that the Big 4 firms were active participants in almost all tenders including non-FTSE 350 companies. In the current financial year BDO's records indicated that in only 7 per cent of the tenders it had participated it had not been told that a Big 4 firm was participating in the tender.[1]

Deloitte

Summary

29. Deloitte's strategy was to become 'the distinctive firm' with 'superior market and economic performance' and 'contributing to a sustainable and prosperous society'. Deloitte's audit strategy was to be the 'market leader in quality, innovation and efficiency of the core audit product'. [✂] in the market.

30. The firm had a broad range of strategies to attract and retain clients.

Revenue and margins

31. Deloitte considered that its ability to generate revenue was based on a number of factors:

    (a) macroeconomic conditions;

    (b) regulation—any change in the threshold for statutory audit, or on scope and responsibilities;

    (c) quality of people—determines the level of business won and retained, and the quality of the product/service;

    (d) network—strength and reputation; and

    (e) innovation.

[1] However, BDO was not aware of the firms it was competing against in around half of these instances, so the number may be smaller.

32. The firm considered the following to be determinants of its cost base:

(a) market conditions for talent;

(b) grade mix—the balance of different skilled staff; and

(c) innovation and technology—improvements in methodology were intended to enhance the quality of an audit, in part through simplifying required procedures, supported by appropriate technology and potentially off-shoring.

33. FTSE 350 audit clients made up 2 per cent of Deloitte's total client base by number. FTSE 350 audit clients generated 21 per cent of audit revenues. However, the gross margin achieved on FTSE 350 and non-FTSE-350 clients did not differ significantly, so their importance to the firm was primarily the scale of the revenue generated.

34. The audit service line's objective with respect to the quality of audit was to deliver the highest quality in the most efficient way.

Pricing

35. The profitability of audits did not include a risk premium. High risk clients were allocated a 'National Risk Partner' and would most likely be resourced with a more experienced team, who would undertake more work, which may lead to a higher price, but only to represent the increased resource cost.

36. The gross scale rate for FTSE 350 and Top Track 100 statutory audit and related services in FY11 was [✂] per hour, with a Revenue Recovery Rate (RRR) of [✂] per cent, generating a net rate of [✂]. Within audit, there had been an [✂] percentage point decrease in RRR between FY06 and FY11, indicating increasing price pressure in setting fees. Across the whole firm this decline had not been as severe, with a [✂] percentage point reduction in RRR to [✂] per cent. However, a low RRR did not

necessarily indicate a low net margin, merely that the market would not support the gross rate.

37. In setting the firm's fee negotiation position, the firm approached the fee from several different perspectives. The firm would first look at a number of ratios comparing the size of the audit fee relative to a number of financial and non-financial metrics to establish if a proposed fee seemed realistic or acceptable to a client and consistent with other firms in the client's industry.

Prospective clients

38. The firm would also undertake a budget for the expected resource requirement for each element of the audit, and calculate a 'gross' charge based on fee rates. For international audits, other member firms would be consulted for their opinions on the number of hours budgeted for the respective international subsidiaries.

Existing clients

39. For existing clients and where there was no formal tender process, the previous year's fees were revised by Deloitte on the basis of changes in scope and scale (which would be costed for the marginal resources required or released), inflation and whether a previously proposed fee covered the firm's costs appropriately. A reconciliation of the year-on-year changes in the audit might also be presented to the client to establish that the fee was linked to audit work.

Existing and prospective clients

40. Issues that affected the scope or scale of the audit compared to the previous audit cycle would be considered in relation to the previous year's audit fee (regardless of whether Deloitte was the incumbent auditor). The firm might make allowance in the desired fee if the timing of the audit work did not fall within a peak period, which led

to an improvement in utilization rates of staff. Finally, consideration of the expected market price would be made.

41. Fee negotiations were supported by a breakdown of the resources and associated costs incurred in the delivery of the audit by each of the client's business units and subsidiaries.

42. Non-audit service fees were not negotiated at the same time as audit fees.

43. Deloitte noted that the negotiation process was at least two-step, with likely downward negotiation of the proposed fee both by the Finance Director or CFO and once agreement had been reached with management, a second challenge would come from the audit committee. Deloitte estimated that one in five of its clients had raised the prospect of going out to tender during fee negotiations over the course of the past six years.

44. Deloitte was aware of at least four clients in the FTSE 350 in the past six years which had required Deloitte as incumbent auditor to 'retender' for the audit engagement, to decide whether to launch a full retender exercise.

Attraction, retention and acceptance of clients

45. In the mid-2000s Deloitte created a dedicated 'bid-support team' and placed a 'premium on partner reward' for audit partners who won FTSE 350 audits, and ensured that partners were not fully allocated to client duties in order to allow flexibility to be available for tenders. Deloitte's strategies appeared to have been successful and the firm stated that in the past decade it has won more FTSE 350 audit clients than any other firm, notwithstanding the Andersen transaction.

46. Deloitte referred to two elements that formed the basis for its strategy of pursuing new clients:

(a) a governance structure for targeting and account development; and

(b) tools to support teams to undertake the targeting.

Governance structures

47. For FTSE clients Deloitte had recently introduced the 'FTSE 100 portfolio management' programme to assist in managing the firm's portfolio of clients and services. For FTSE 100 clients, it was the firm's Executive, following discussion with the relevant client, that decided whether to bid for audit engagements and other significant pieces of work and also how to respond to a potential change in the nature of the client relationship (such as a switch from a non-audit to audit role or vice versa) and manage regulatory requirements. The Executive were also responsible for ensuring that revenue was generated in a manner consistent with the firm's overall strategy for growth and service mix.

48. Deloitte said that it considered audits of FTSE 350 clients were inherently high risk engagements. There were, however, certain characteristics of the client, or the market in which it operates, which might give rise to an even higher level of risk. For example, if Deloitte suspected that the company may have a going-concern issue, or the company may have management issues (such as new management who have little experience of running the company, or concerns around integrity or competence) or where market or environmental conditions may be exposing the company itself to unusual levels of risk. It had recently declined to tender for the audit of a FTSE 100 resources business due to its concerns over the opacity of the company's management structure.

49. Outside of the FTSE 100, client relationships were overseen by a number of structures, including, for example, the relevant industry group, with day to day supervision from the Lead Client Service Partner (LCSP). The LCSP acted as a focal point for the firm across all service lines and was responsible for achieving increases in revenue from its service offering. In respect of any audit client, the audit partner was not responsible for increasing (nor incentivized to increase) non-audit revenues.

50. Deloitte had identified ten industry groups on which it intended to focus, and for each Deloitte had identified a number of specific objectives, both in the UK and in its overseas operations.[2]

Tools

51. The supporting tools used by Deloitte included a number of services which were provided to existing or target clients, which were intended to build brand awareness and goodwill towards Deloitte, and to contribute to best business practices and governance. Some of the initiatives that Deloitte offered included:

(a) invitation to Board members of listed companies to receive membership of the Deloitte Academy;

(b) financial Controllers' Club, which provided seminars for financial controllers; and

(c) the next generation CFO programme.

52. Deloitte's designation of clients into industry groups had been to encourage specialization of staff. By developing client and industry knowledge, Deloitte's staff were able to apply industry knowledge to their clients and add value through services such as peer benchmarking. This strategy had been further embedded in its remuneration structure with one-third of its partners appraised (and remunerated) on

[2] Deloitte owns the Deloitte Swiss member firm and has a corporate finance and consulting joint venture with the Middle East member firm and an investment in the CIS firm.

the basis of 'market dimension', with specific objectives for interacting with their industry group. Despite this, the audit service line retained responsibility for assessment of audit quality which was a fundamental requirement for all audit partners.

53. If Deloitte identified that it did not have a client base or experience of a specific sector, it would target companies in the sector that it might provide non-audit services to, to develop a corporate understanding and a working relationship with the client. The firm would also consider using knowledge from other international member firms with experience in that sector. The firm might also consider recruiting specialist partners either from the market or possibly other Deloitte member firms, though these would not necessarily be working as statutory auditors. Deloitte's financial services practice was an example of this, having recruited senior figures in the banking industry, the FSA and partners from other member firms.

54. Deloitte would not expect to use an unsolicited tender, but its attempts to build relationships with potential clients were always with the ultimate hope of winning business through developing an increased awareness of Deloitte's service offering (which may in turn lead to a tender opportunity). Deloitte stated that it had records of attempting an unsolicited bid on two occasions in the past ten years in the FTSE 350, one for [✂] and one for [✂]. Both bids were unsuccessful.

55. Once Deloitte was notified of a tender opportunity, it stated that it would focus on a number of specific strategies:

(a) focus resources on preparing for meetings (40 per cent) and presentations (40 per cent) to decision-makers rather than preparing the tender document (20 per cent), which is referred to as '40:20:40';

(b) building an understanding of the target business and linking that into the proposed offering, tailoring content to the client's needs;

(c) demonstrating energy and enthusiasm to the client;

(d) identifying a suitable engagement team and matching staff with the client's style of working; and

(e) identifying strong audit managers to support the partners and directors.

56. When Deloitte surveyed its staff, of the 71 responses received, 43 (61 per cent) stated that they had no prior knowledge that a tender would occur before they received official notification. Of those who were aware, advanced notification was more likely where the firm was the incumbent auditor, or where the firm provided non-audit services, particularly with the finance department. No information on the amount of time in advance that Deloitte was aware of a prospective tender was provided.

57. In its submission, Deloitte identified 57 FTSE 100 companies and 60 FTSE 250 companies where it believed it was potentially conflicted on the basis of its or other Deloitte member firms' business relationships. However, in practice if it was perceived to be desirable (following discussion with the client) for Deloitte to pursue appointment as statutory auditor almost all of these conflicts could be avoided by ceasing to provide other services either immediately or in the medium term. APB Ethical Standard 5 allowed transition relief to an incoming auditor, so that the list of conflicts would potentially be shorter.

58. As part of its strategy refresh in 2011, Deloitte undertook a series of meetings between senior partners and 'top executives' of 20 'large' and 8 'mid-market' clients (as well as a broader programme of client interviews) to appreciate better what clients sought from a professional services provider. The firm also undertook Client

Service Assessments each year, and the results of these had fed into short guidance documents for partners on clients' expectations. This document also fed into the development of the firm's strategy.

59. Client Service Assessments were undertaken with key clients to evaluate the firm's performance. In 2011, surveys from 179 individuals were completed, of which 96 per cent indicated that their satisfaction with Deloitte was 'Good' or better. The firm would also periodically run a 'defend' programme, where audit partners were requested to review their relationships for a risk of tender and where issues were flagged, the partner responsible was asked to address the issues immediately.

Services offered

60. Deloitte was unique within the Big 4 firms of not selling its consulting arm in the early 2000s, although it did explore this as a result of the increased sensitivity around the provision of non-audit services to audit clients. Deloitte had in the past decade made a number of acquisitions to develop further its range of services such as Burlington (commercial due diligence) and Drivers Jonas (property consulting). However, in recent years the other Big 4 firms had rebuilt their consulting practices leading to a decline in market share.

61. Deloitte considered that the breadth of its service offering enhanced its audits by having the ability to resource audits with a much broader range of specialists to provide assurance on certain balances in a client's financial statements.

62. Within audit-related services, Deloitte's offering included:

(a) interim reviews and quarterly reports;

(b) bank covenant compliance work;

(c) accounting advice;

(d) assistance with Financial Reporting Review Panel enquiry letters;

(e) other work for compliance with securities regulations or other non-statutory audits; and

(f) independent assurance reports on non-financial performance.

63. Deloitte noted that interim reviews were in practice always carried out by the statutory auditor. Deloitte stated that around 10 per cent of FTSE 350 companies did not include an auditor's review with their interim results. Deloitte did not record revenue from audit-related services separately from the statutory audit in its financial system so were unable to provide a firm-wide analysis.

64. In response to client requests the firm also offered a broad range of permissible non-audit services to its audit clients, and considered that as an auditor it was best placed to undertake audit-related services and provide a broad range of covenant compliance work, accounting advice, responding to Financial Reporting Review Panel letters. Deloitte noted that it was a client's audit committee that would decide what non-audit services an auditor could offer to its clients.

People

Graduates

65. Deloitte's graduate recruitment programme targeted 35 universities each year. In addition Deloitte offered internships and an industrial placement programme. Deloitte was ranked number 2 in *The Times* Top 100 graduate employer of choice survey.

66. Deloitte also operated a number of schemes for recruiting junior staff, including one to employ school leavers post A-Levels which included studying for an accounting qualification; a gap year programme that included eight months of paid work during

the gap year, summer placements during university and an accelerated entry on to the graduate programme upon graduation.

67. [✂]

68. Junior staff had not previously received a bonus as an element of their remuneration (although they had received other awards), though this would be changing from September 2012.

Remuneration—partners

69. Deloitte had one class of equity partner, though individuals were assigned to one of four 'equity groups' based on their role. Within each group, partners would be allocated to a 'band', each of which was allocated a number of 'profit sharing units'. Each equity partner paid £[✂] per allocated profit unit as a contribution to financing the firm. The amount contributed was repaid on retirement from the firm.

70. Partners shared profits based on each individual's contribution and capability. Partners were not universally remunerated on the basis of generated income, but this might form part of their individual objectives. Deloitte's audit service line specifically included a premium on partner reward for success in winning audit bids for FTSE 350 clients. Quality was a key criterion for assessment, where 'a spotless performance would be expected from all partners'.

71. Deloitte also employed non-equity partners, who were not 'members' of Deloitte LLP and did not receive a profit share. Non-equity partners (as with other staff members) received a performance-related bonus that was linked into the firm's overall performance.

72. In the past five years, Deloitte was not aware of any statutory audit partners leaving to join another Big 4 firm. Deloitte identified one audit partner joining another (non-Big-4) firm. In contrast, over the same period, 20 audit partners left the firm to work outside of the professional services profession and 28 retired. Deloitte considered the 'experience of being a partner' to be sufficient incentive to remain with the firm. Deloitte perceived there to be a greater level of movement below partner level, with the majority of staff moving into industry.

73. Deloitte stated that external partner recruitment into the statutory audit business was at a 'very low level' and was at a rate of 'one or two per year'. In the last five years Deloitte had recruited one partner from PwC, specifically for his technical experience and to provide input into insurance client teams, but he did not lead any FTSE 350 audits himself. Deloitte had also recruited two PwC Directors into its partnership. Deloitte had recruited one partner from BDO, in Belfast to replace a retiring partner, who left Deloitte after two years. Of the 64 partners who had led FTSE 350 audits, 63 were promoted to partner from within Deloitte or Andersen (or predecessor firms).

Alumni

74. Deloitte had 22,000 former members of staff in its alumni network, of which 9,000 previously worked in the audit service line. Most of these had left the firm at a relatively junior level (eg after completing the three-year training contract). Deloitte used the alumni programme to remain in contact with its previous employees. In some cases, alumni relationships develop into business relationships. However, Deloitte noted that there were numerous examples where the presence of an alumnus in a senior position did not lead to Deloitte's appointment as auditor.

Reputation and brand

75. Deloitte UK intended to spend [✂] in FY12 on its brand which included London 2012, 'Brand', 'Innovation' and Corporate Responsibility, of which [✂] related to staff and office costs. Deloitte stated this expenditure was less than [✂] per cent of its revenue. Deloitte believed that its range of sponsorship was distinct from the other firms, and placed it closer to 'leading corporate'. Deloitte's sponsorships were each made with the intention of specific business objectives. Deloitte expected to spend a further £[✂] on marketing in FY12, of which half was non-staff costs.

76. The firm was appointed as official professional services provider for the 2012 Olympic and Paralympic Games, and as a requirement of this 'sponsorship', the firm committed to the provision of £[✂] of staff time over five years.

77. As part of its strategy to develop relationships with existing and target customers, Deloitte undertook a number of initiatives including:

(a) 'service line specific marketing collateral' which included technical briefings;

(b) thought leadership; and

(c) quarterly surveys of UK CFOs on issues around finance and capital.

Competitors

78. Deloitte did not have a dedicated team or work stream monitoring its competitors. However, the firm did consider the activities of competitors when designing its strategy (though it was keen to state that it was not a reactive document to competitors). On the completion of a competitive tender process, the firm undertook a debrief exercise, which captured what the client wanted and what different competitors were offering in the context of the winning bid. Deloitte would seek feedback on both successful and unsuccessful bids.

79. In its market analysis for its 2011 strategy refresh, Deloitte identified its principal competitors. In considering the larger Mid Tier firms (ie GT and BDO), it noted that the firms had a similar geographic reach to the Big 4 firms but with a smaller scale.

80. [✂]

81. [✂]

82. [✂][3]

83. Deloitte perceived Mid-Tier firms only to be potentially significant rivals in the mid-sized and regional markets and required significant international growth before they could challenge for large international clients.

EY

Summary

84. EY had the most distinct operating model of the Big 4 firms, with the UK firm part of an 'integrated global organization'. As part of the arrangements in the EY network, EY UK became part of a single operating unit, the EMEIA Area, and restructured its business into two distinct business units.

85. The EY global strategy was to build:

(a) 'A reputation for quality people, service quality and profession';

(b) 'A brand that attracts the best people and clients';

(c) 'The right relationships with all our stakeholders, including clients, regulators, investors, academics, media and communities, and our people'; and

(d) 'The leading share in our priority market segments'.

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[3] [✂]

86. As noted, EY UK was managed as two business units that were integrated into the EMEIA area. Financial services were managed through the Financial Services Office, which formed part of a pan-European Financial Services Office with the remainder of the UK firm acting with the Republic of Ireland member to form a UK and Republic of Ireland business unit. The two UK business units operated across all service lines and each had their own managing partner. The operation as European business units was intended to lead to senior staff and partners taking a broader appreciation of a service line or industry across EMEIA.

87. In the UK, EY had the smallest revenues of the Big 4 firms. Submissions from some of the other Big 4 firms demonstrated a perception that the US firm had increased its own influence over the UK firm. However, EY stated that this perception was incorrect.

Revenue and margins

88. [✂]

89. EY's network had a long-term project to improve the efficiency of its audit methodology to identify a 'sufficient productivity gain' to offset cost and fee pressures.

Pricing

90. [✂]

91. [✂]

Attraction, retention and acceptance of clients

92. [✂]

93. EY considered that by adopting its integrated global structure that it was better able to appeal to large international clients and that industry specialization was increasingly important for clients to allow benchmarking. However, EY did not target specific sectors for identifying prospective targets.

94. EY's client acceptance and continuance policy set out principles to determine whether to accept a new client or a new engagement, or to continue a relationship with an existing client. One of its objectives was to identify and decline clients that pose excessive risk. It said that client acceptance and client continuance decisions depended on, among other things, the absence of any perception that a company's management pressures the audit engagement team to accept inappropriate accounting and reporting or uses financial pressures to undermine audit quality. Considerations and conclusions on the integrity of management were essential to acceptance and continuance decisions. It said that its internal message consistently had been that no single client is more important than its professional reputation, including the reputation of each of its professionals.

Existing clients

95. Each year the firm undertook an Assessment of Service Quality (ASQ) with its clients, the results of which were discussed at audit committee. The ASQ included a short online survey followed up with a meeting with a senior member of the firm who had not been involved with the audit. [✂]

New clients

96. [✂]

97. [✂]

98. EY did not prepare unsolicited audit tenders though it approached firms to develop relationships and explain EY's service offering.

99. [✂]

New and existing clients

100. [✂]

101. [✂]

102. Once a tender process had completed, EY would request feedback sessions directly with the ACC and the FD if the firm was not successful.

Services offered

103. EY provided a variety of audit-related services, and considered that those which were required for compliance with a regulator (such as reviews of interim financial statements, reports on assets and grant certification) were realistically only able to be done by the statutory auditor. In a sample of ten clients, the proportion of fees received relating to audit-related services ranged from [✂] per cent to [✂] per cent. With respect of non-audit services, EY considered as an auditor it was best placed to provide any services requiring an appreciation of the controls and processes of a client and where work may be undertaken in parallel to statutory audit work.

104. Since 2006, EY had restarted the provision of advisory services, following the disposal of most of its previous advisory business to Cap Gemini in 2000. [✂]

105. EY did not perform any pro bono work for its clients or any prospective clients.

People

106. There was one class of equity partner at EY, as well as a 'small number' of salaried, Associate Partners. In 2011 [✂].

107. All partners set agreed objectives with their counsellor and line manager and were assessed against them. As part of the annual performance review, the partners were [✂].

108. [✂]

109. EY's graduate recruitment programme covered 30 universities, with the firm recruiting 330 graduates. The firm also ran an internship scheme, with the firm making employment offers to 90 per cent of interns. The firm also operated a programme for school leavers.

Alumni relations

110. EY operated an Alumni programme, but did not state the extent, nature or strategic purpose of its operation.

Reputation and brand

111. EY sponsored a number of events and publications such as the ITEM Club, the CBI national conference as well as temporary gallery exhibitions.

112. EY undertook advertising to 'support a specific marketing programme or theme'. The range of EY's thought leadership was delivered through private briefings, CFO and Financial Controller forums, workshops, access to Ernst & Young online and publications.

113. [✂]

Competitors

114. [✂]

GT

Summary

115. GT's competitive strategy for the FTSE 100 and parts of the FTSE 350 could be summarized as being based upon building 'awareness, relationships and credibility through non audit services and then leverage into the audit market' in the medium to long term. GT actively identified potential clients with whom it sought to develop relationships and also those companies which it did not believe that it had the sector expertise to audit in the short term (so as to focus its resources strategically).

116. GT's intention was to improve its institutional acceptance and by FY16 to have sustainable relationships with [✂] per cent of the FTSE, and [✂] its presence in the FTSE 350 (and very large private company) market, [✂]. This strategy was based on increasing its non-audit offering and developing long-term relationships with a smaller number of companies, but with a larger level of revenue, [✂].

117. GT also targeted large companies that had a large number of subsidiaries where bundles of those subsidiaries might be audited by a different auditor to the group audit (shared audit), in order to display international coverage.

Revenue and margins

118. In its 'Growing as one firm' strategy, GT intended by 2015 to have increased firm revenue by £[✂] with audit revenue increasing by £[✂]. £[✂] of this growth would

be from private and small listed companies, with revenues from large listed clients increasing by £[✂] to £[✂].

119. The strategy also targeted improving the gross margins of the firm from 44 per cent in 2010/11 to [✂] per cent in 2014/15. GT disclosed the composition of the planned improvement in margin but not their actions intended to achieve this.

120. GT's 2008 to 2012 Assurance Strategy identified that gross margins across different offices varied by up to [✂] percentage points. In an attempt to improve margins, audit engagement costs were targeted to be reduced by [✂] per cent for all engagements and for there to be an improvement in the balance of senior staff on audits through an improved 'Director/Partner Leverage Model'. Whilst GT had a ratio of one director for every four partners, it was noted that the Big 4 had a ratio closer to 1:1.

Pricing

121. GT stated that it priced audit fees based on a number of factors relating to the client including:

(a) the risks of the audit including the ability of the client to continue to be a going concern, the complexity of accounting and reporting requirements and its profile;

(b) market rate, the current fee, fees charged to similar businesses or that proposed by a competitor;

(c) the quality of the service provided and the level of current client satisfaction;

(d) the importance of the client in terms of brand association, profile raising or sector focus;

(e) how secure the relationship was and any recent changes in decision makers;

(f) the ability to re-engineer the audit approach and propose an innovative solution;

(g) the length of tenure; and

(h) the likelihood of the client growing.

122. GT gave no information on example pricing decisions.

Attraction, retention and acceptance of clients

Potential audit clients

123. For large company audit (FTSE 350 and large private), GT identified the sectors in which it thought it could actively compete, which was where it considered to be where it had credible sector expertise. GT attempted to develop relationships with target clients through sector teams undertaking research on issues faced by the target company, arranging client meetings with appropriate service line representatives and providing advice with subsequent follow up actions. The firm monitored the level of target client interaction.

124. GT did not make unsolicited approaches to companies with respect to performing statutory audit, unless there was a formal tender process.

125. As a medium- to long-term strategy, GT was 'promoting shared audits' to gain more large company audit experience. GT had identified companies with more than 500 subsidiaries with total audit fees of £10 million or more. GT was not, however, applying this strategy to banks and financial services companies, due to the scale of highly specialized knowledge required. It was not clear to what extent this strategy had been actively pursued to date.

126. Prior to taking on or re-engaging with a client, GT assessed the risk to it from that engagement. Part of that process was to assess the entity and the management of the entity. It looked to identify any behaviours that were inappropriate and assess attitude to risk and the understanding of the control of that risk. It needed to be

satisfied that it expected to be able to report on the entity's financial statements before it commenced the engagement.

Increasing revenue from potential and existing clients

127. GT targeted sales to individual clients through a number of standardized documents. Internal strategy was driven by 'Account plans' which GT prepared for both new and existing clients. Each client/target had an owner and an identified service team with named individuals. The Account plan included existing fees by service line and an identification of potential recurring and non-recurring fees available, as well as the value of other non-audit services provided by other firms. A SWOT analysis was performed on both the client/target and the firm's relationship with the client. A series of actions were also identified, such as invitations to functions. However, the level of detail of the two account plans submitted by GT differed. GT stated that it had firm guidelines in place to ensure that it complied with Ethics Standards in regard to provision of non-audit services to entities that it audited.

128. Other internal documents submitted included an example Business Development Strategy, which included action points, such as inviting client staff to 'Masterclass' events, where topical business issues were debated, focused meetings on matters such as governance in the FTSE 350, and meetings with senior staff which provided advance warning of a potential audit tender opportunity.

129. GT also produced a 'Pipeline measurement report' that captured the number of identified target clients, the potential recurring and non-recurring expenditure, as well as monitoring the number of incidences of contact between GT and the target companies over time. In the three months to January 2012, GT staff met with [✂] per cent of its active target clients, with [✂] meetings with targets held in January 2012 alone.

130. Externally, agendas for meetings with clients to discuss the business issues they are facing and consider ways in which GT could help were produced. These were in the style of a prospectus with customized content for that client whilst including brand information such as GT's 'Global Highlights' and a list of large corporate clients. Other external facing documents included presentations that emphasized the relationship GT had developed with the client over a number of years with specific examples of what different team members had contributed across the various service lines.

131. GT's strategy in 'national markets' included winning a 'portfolio of flagship clients', whilst also identifying the need to keep a strong presence in regional markets. With its existing clients, GT's strategy was to 'focus on clients' issues and future plans rather than pushing service lines', so that only relevant services were offered to clients.

132. GT identified the greatest risk to retaining an audit client was where there was a change in the decision makers for audit services, and particularly where the new decision maker had no experience with GT. Further, GT believed that when a company was acquired by private equity or a sovereign wealth fund, there was a greater inclination to appoint a Big 4 auditor. GT's principal strategy against this was to maintain regular client contact to strengthen the relationship.

Services offered

133. GT offered a variety of services to its audit and non-audit clients. Its strategy was to 'integrate ... services across service-lines to meet company-specific needs', essentially presenting GT as one firm, rather than a number of individual service line silos, and, as noted in paragraph 131, GT was attempting to move towards a company-driven approach in targeting further sales. Where a service was provided to

an audited entity this was always done in accordance with the firm's independence policies and the Ethics Standards.

134. GT had some large non-audit clients and it had identified, expanding non-audit as a way of obtaining [✂] work that interested staff, and increased the firm's profile.

People

Graduates

135. GT invested in its graduate recruitment campaign, winning the RAD 'Best Graduate Campaign 2011'. GT targeted most of its budget on what it identified as 'tier one' universities [✂] with a lower presence at other universities. GT sent current graduate trainees who were alumni of tier one universities to various recruitment events. The firm also paid final-year university students to work as brand ambassadors and receive a performance-related bonus based on the number of applicants from that university.

136. GT monitored statistics on recruitment from all universities to establish the effect of different approaches on application rates. GT also sponsored a number of university societies at non-'tier one' universities to 'build the brand with students who were not necessarily interested in a career in accountancy'.

Experienced staff

137. The firm actively recruited staff to join its advisory team, targeting employees from other firms and in industry who had current experience of working with large companies to establish an experience base.

Alumni relations

138. Former partners received an alumni magazine twice a year. GT held a number of annual alumni events centred on its regional offices to maintain contact with alumni.

Remuneration—partners

139. As of 1 July 2010 GT had one class of equity partner, referred to as 'full share' partners. Their entitlement to share in the firm's profit was determined by their allocation of 'units' (which across the firm accounted for [✂] per cent of distributable profit), with additional profit determined by performance-based allocations from the National Discretionary Award Pool (the remaining [✂] per cent of distributable profit).

140. Partners contributed either [✂] dependent on the number of 'units' allocated. Interest on partner capital contributions was paid at [✂].

Remuneration—staff

141. GT's Assurance strategy was to 'attract and retain quality people', though no detail was given on how this approach had specifically been implemented. Average hourly cost by grade was:

TABLE 1 **GT average hourly employment cost**

	Average hourly employment cost 2011/12 £
Partner	[✂]
Director	[✂]
Manager	[✂]
Senior	[✂]
Assistant	[✂]
Associate	[✂]

Source: GT

Reputation and brand

142. GT identified developing thought leadership as a theme of its assurance strategy to win clients, as it considered this work to be a 'hallmark of a leading professional services firm'. GT used market intelligence to identify target sectors. GT's commentary on the Budget was provided as an example of GT obtaining significant national press coverage.

143. GT monitored client satisfaction surveys, media feedback and brand awareness to establish if its strategies had any impact on the awareness and receptiveness of the market to its services. This monitoring of the market indicated that between 2008 and 2010 the number of purchasers of accounting services for large companies that were aware of GT, had increased 19 percentage points to 41 per cent of respondents.[4] Similarly, the proportion of GT clients that stated that they would recommend GT had increased 16 percentage points to 90 per cent in the period 2008 to 2011.

144. Active development of the GT brand had been focused through the identification of specific sectors to specialize in, which GT then leveraged from in its marketing and further developing the firm's experience in those sectors. GT appointed eight National Sector Leaders who acted as the firm's 'voice and face' in eight sectors, with the intention of developing an identifiable profile in that sector. GT noted that it was aware of the FRC's findings that Mid Tier firms did not demonstrate strong sector expertise and was acting to challenge this.

145. Other brand awareness activities included the sponsoring a number of publications, awards and events, such as the Top Track 250 league table and 'Mid-Cap business of the year' award and in 2012 GT was embarking on a national advertising campaign, which it had not previously done to the same degree.

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[4] Turnover of between £20 million and £300 million.

Competitors

146. GT provided an analysis of its direct competitors, identifying also competitors which it considered 'significant' in a number of segments. GT considered [✂] to be its significant primary competitors for listed companies and non-audit work. The only area where [✂] was seen to be a significant competitor was in large private companies. GT identified [✂] as significant competitors in 'other entities' but did not consider [✂] to be a primary competitor in any segment.

147. GT believed that the Big 4 aggressively targeted smaller clients during downturns to secure work at marginal cost, before increasing fees again, with a lag before small firms switched back to the Mid Tier. GT's response to the Big 4 had been to:

(a) emphasize the comparable audit quality;

(b) highlight GT's experience in sectors;

(c) promote GT's shorter decision chains;

(d) recruit experienced professionals in its advisory service to develop connections with large companies; and

(e) use advisory work ([✂] FTSE 350 clients) to develop sustainable relationships with SMTs.

Target

148. By FY16, absent any regulatory intervention, GT's aim was to [✂] of FTSE 350 advisory clients, but [✂] the average fee (currently £[✂]). In the audit service, its target was to [✂] FTSE 350 audit clients and fees.

KPMG

Summary

149. KPMG presented itself as a firm whose success was dependent on its reputation and ability to add value to its clients. Furthermore, the firm identified five strategic

imperatives (clients, expertise, organization, partners and people, and its communities) which it considered made KPMG Europe LLP 'the best firm to work with'.[5]

150. The strategy of the UK Audit function was to 'build and sustain our reputation as the best firm to work with by providing high quality and insightful assurance to our clients and constituencies with forward-thinking professionals. In the UK our ambition is to have an innovative, dynamic and value enhancing Assurance Practice'. The UK Audit Function had objectives relating to quality, market ambition, broadening its service portfolio, improving its core product (audit) and people.

Revenue and margins

151. KPMG believed that its margins were under increased pressure, from both clients demanding more from their auditor, or at a lower price, and also from an increased level of work to satisfy professional requirements, such as assessing the viability of audit clients as going concerns. KPMG thought that the level of work that needed to be undertaken to complete an audit was heavily prescribed by auditing standards with the extent of testing determined by the scale and activities of the client.[6]

152. KPMG had aimed to improve the cost efficiency of audit work. Whilst cost efficiency was not the primary objective of KPMG's eAudit software, the introduction of this had allowed the parcelling of work streams to allow different teams to work in parallel, increased standardization of the nature and level of testing, and the degree of automation over certain tasks. Another initiative had been to take advantage of the ability to parcel up work streams to allow the use of the KPMG Global Services and

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[5] KPMG Europe LLP is the entity created by KPMG UK and KPMG Germany and subsequently joined by a number of other firms.
[6] Specific audit responses to significant risks are driven by the nature of the client but are required under ISAs.

Resource Centres, part of the benefit of which was to allow work to be conducted at a lower cost per hour. These are discussed further in the international network paper.

153. KPMG observed margins by analysing changes in audit fee levels. [✂]

154. One element of margins that had been identified by KPMG as a risk was the 'increasing demands of our Regulators', noting that 'more potential client chargeable time is being spent liaising with and managing the Regulators'.

Pricing

155. KPMG's audit pricing was 'client specific', with a need to remain competitive with the caveat that this client specific focus needed to provide 'enough return to justify the employment of high quality' but 'nevertheless reflect the price challenges that existing and potential audit clients pursue in addressing their own cost pressures, particularly in response to the difficult economic environment which has prevailed in recent years and continues to prevail'. Pricing was driven in the first instance through a budgeting process of identifying the expected number of hours by grade, multiplied by their respective scale rate. KPMG then compared the 'gross cost' to the figure it was believed would be the market rate, to calculate a recovery rate and also the recovery per hour of the engagement. This hourly rate was compared with the firm's benchmark, discussed below.[7] However, when tendering for a new audit, there might not be sufficient information to enable a detailed assessment of costs and therefore estimates of resourcing would be more focused on comparative benchmarks for similar businesses.

156. The nature of pricing and fee negotiations varied by clients, with some clients accepting a standard uplift, or freeze, others negotiated on the previous year's fee

[7] Paragraph 158.

amended by changes in scope, with others demanding a full zero-based approach for all components and locations.[8] For large international clients, the fee negotiation could 'take weeks or even months to conduct'.

157. Pricing for significant clients would be discussed with pricing panels or other internal soundings between the engagement partner and the firm's management to ensure appropriateness of pricing in individual fee negotiations and sharing of best practice.

158. As with the other large firms, KPMG had a substantial peak in demand for audit staff in [✂] to service the needs of clients whose accounting period matched the calendar year. As a result, utilization rates of staff were higher during peak periods. To maintain utilization rates, some pricing decisions would be based on the need to sell staff time and thus work may be priced closer to marginal cost during off-peak periods. KPMG's benchmark of revenue generated per hour of staff time was £[✂]. Depending on the level of work coming into the firm, it might decide not to undertake work if it perceived that there would be an opportunity cost of employing resources on a less profitable assignment.

159. For KPMG, the level of risk attributed to a client affected price but only with respect of the increased level of work needed to mitigate that risk, rather than charging a specific risk/reward premium.

160. A change in pricing model in the industry was monitored as a Board level risk because of the pressure on quality and potential loss of clients.

[8] A zero-based approach would be a calculation of necessary resources without reference to previous years' engagements.

Attraction, retention and acceptance of clients

161. KPMG stated that the 'key drivers to ensure client retention are maintaining and ensuring client satisfaction levels through innovative and proactive client service. This involves the delivery of high quality audits in an efficient manner and to deliver insights and value adding ideas as a by product from the audit'.

162. The critical success factors that KPMG identified for its audit business included high staff quality, specialist expertise, its network, efficient and standardized approaches, the strength of its 'bench', extensive experience, knowledge and understanding of a client's business, appropriate working relationship with the client at all levels of seniority and strong quality assurance processes. KPMG identified that it was able to replace any individual on an audit with an equally skilled person within a short timeframe.

163. KPMG believed there were no clients that it could not audit and, whilst there were some clients where non-audit work was currently being undertaken by KPMG which was not compatible with the role of the auditor, it did not believe that it would be conflicted from undertaking the audit given a reasonably short period of notice. However, certain business relationships, for example in terms of its banking and finance providers ([✂]), could be more difficult to resolve in the short term.

164. KPMG thought that the key to retention of a client was through maintaining and improving client satisfaction levels by offering 'innovative and proactive client service'. KPMG suggested that during fee negotiations clients might threaten to switch audit firm or tender the audit, but did not necessarily go through with this. In a number of instances, KPMG reduced their fee to avoid this risk. In some instances, price had been driven by the intervention of prospective tenders from rivals, forcing price down, such as in the example of [✂].

165. The identification and targeting of new clients was driven at several levels. KPMG International identified a number of very large international companies for member firms to target through 'agitation targeting' where partners actively approached targets to encourage companies to consider revising their audit arrangements whilst promoting KPMG's service offering.

166. KPMG Europe LLP, the UK firm's parent also operated the 'Top Tier programme' that identified additional potential targets, which may be approached with either targeted campaigns or long-term positioning.

167. Each business unit also operated a 'top [✂] programme' of large listed or mid-market clients that were monitored. Within the firm, internal strategy was to remind partners (and staff) of the 'need to actively pursue business development opportunities'.

168. However, whilst the firm may adopt a proactive approach to courting clients, a full unsolicited tender was relatively unlikely:

> On occasion, when we do have sufficient information and relationships with a company to suggest a meaningful alternative audit approach, we may provide an informal and indicative alternative proposition to a company as a means of enticing an audit tender. However, we do constantly make approaches to clients to encourage target clients to issue a competitive tender [...] However, it would be rare for us to submit unsolicited full audit proposal bids to FTSE 350 companies given the nature and extent of information that is required to prepare a meaningful audit bid.

169. Additionally, the firm monitored changes in senior staff of FTSE 350 companies, [✂].

170. Prior to engaging in any tender activity KPMG would 'seek to gather information regarding the current audit arrangements (eg timing of work, team size, locations covered, deliverables in addition to the audit opinion, etc) and information in relation to the potential audit client itself'. This information was gathered to 'articulate a compelling and value adding alternate audit proposition, demonstrating a thorough understanding of the client's business and the risks it faces and instilling the confidence that the audit will not only be conducted to the highest standards but also in the most efficient manner'.

171. The firm's Head of Audit met the Head of Sales on a monthly basis to discuss the level of business being achieved by the audit firm, indicating that generating revenue was one of several constant objectives of the Head of Audit. Further, partners were expected to spend up to [✂] per cent of their time on marketing and business development.

172. Between 2006 and 2010 the KPMG Audit Committee Institute surveyed its members 'to better understand the challenges and issues facing audit committees'. In 2010 and 2011 KPMG itself surveyed finance directors to establish what they were looking for from auditors to better focus their offering. The firm also subscribed to brand surveys to establish its relative strengths compared with other firms and sought client feedback from key stakeholders to identify how to modify its approach. In 2011, 86 per cent of audit partners initiated client satisfaction surveys, which led to 916 responses that the firm could consider.

173. KPMG had a Client Acceptance / Continuance process to decide whether it wished to do business with a particular client. There were two key factors that may influence this decision, namely the impact on KPMG's reputation of the proposed association and the financial viability of the potential client. The impact on KPMG's reputation

depended on a number of issues, including who owned the client, its governance structure, considerations over the integrity of management, and the type of industry (or industries) in which the client operates. At case study Company A, KPMG made an internal decision not to seek reappointment. In its resignation letter it said that it was not confident that in future it could carry out an audit of the Company to the appropriate standard as its relationship with certain directors had become increasingly strained.[9]

Services offered

174. KPMG saw innovation in audit, as a 'variation on a theme' with more feedback on systems and controls and a 'more vibrant and exciting way of presenting audit findings' and further [✂]. Innovation in delivery was driven by how clients operated. KPMG was keen for there to be innovation in the format of the audit report, tailoring to circumstances of companies of different sizes but were not able to do so since the wording of auditors' reports was narrowly prescribed by regulations and standards.

175. In addition to statutory audit services, KPMG's audit practice had developed a number of assurance products that it could offer to its non-audit clients such as the 'Maximum Assurance initiative' and 'Extended Assurance offering'.

176. The specific assurance products that KPMG's audit functions offered to its clients have been developed and included:

(a) accounting and advisory;

(b) extended and internal controls;

(c) future and business combinations;

(d) regulatory and contractual;

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[9] KPMG note that this decision was with respect to an audit engagement acceptance rather than a more general client engagement, and KPMG continue to have a client relationship with the company.

(e) resource;

(f) revenue and data;

(g) sustainability; and

(h) tax assurance.

177. KPMG acknowledged that the knowledge gained from statutory audit provided the firm with a great deal of insight into a client's business and allowed the firm to deliver audit-related and some other services, subject to independence and regulatory considerations, where the client might benefit from KPMG's pre-existing understanding and ultimately add value.

People

178. KPMG identified the development of a broader range of assurance activities provided a broader working experience for its audit staff, whilst also utilizing knowledge acquired in the course of statutory audit.

Remuneration—partners

179. Partners were remunerated from the distributable profit of the firm and comprised two elements: a base component, and a performance-related element. In 2011, [✂] per cent of distributable profits were paid as the base component (2010: [✂] per cent). The base component was linked to a standard pay spine based on four categories of partner role and the value of the base component for an individual would remain steady subject to retaining the same role, whilst the performance-related element was driven by a combination of an individual's and the firm's performance.

180. Audit partners were not remunerated on the basis of sales of non-audit services to audit clients.

Remuneration—staff

181. KPMG monitored the market for staff by subscribing to 'keypad data' survey on salaries. KPMG stated that its newly qualified staff were paid a 'market leading' annual payment[10] but there remained a high turnover at qualification and the firm faced competition from inside and outside the audit industry.

182. All staff were eligible to receive a performance-related bonus, subject to 'stretch' principles whereby, for example 'Outstanding' performers would receive a higher bonus than 'Effective' performers. The proportion of an individual's remuneration based on performance increased with seniority: for 2011 graduates on average received [✂] per cent of their remuneration as a performance-related bonus, whilst Managers received [✂] per cent and Directors [✂] per cent.

Recruitment

183. Within the Audit practice, over the eight years to 2011, one audit partner joined KPMG from another Big 4 firm, and one audit partner left to join a Mid Tier firm and even when considering audit directors, movement in and out of the firm was 'very limited'. KPMG stated that 'nearly all' of its audit partners were 'home grown', that is, that the partners had been at the firm for many years. When the firm had to recruit externally at director or partner level it was to address specific gaps in its team of approximately 250 Responsible Individuals and had typically been caused by regional skill shortages where staff had not been willing to relocate or in sectors where there had been rapid growth. KPMG previously considered buying other firms, but decided against this strategy on the basis of 'cultural fit' and 'quality'.

184. Recruitment of graduates was described as a rigorous multi-stage process with various levels of filtering including psychometric assessment before interview by a

[10] Which includes salary and bonus.

Partner; candidates were subject to ‘strict academic requirements’, requiring a 2.1 and ABB at A-level. KPMG stated that staff quality at a junior stage was important due to the difficulty in recruiting high quality audit staff later in careers, stating that ‘without a high quality intake at this level it is difficult to substantially change ... capability’.

185. KPMG supplemented its recruitment programme for graduate trainees by offering summer internships to university students, with 90 per cent of penultimate year interns subsequently joining the graduate intake. The firm also partnered with three universities, and funded students through an accountancy degree and provided employment upon graduation as entry-level trainees in the firm’s Audit function. The programme lasted for six years overall, where KPMG also funded a professional accountancy qualification alongside the university degree.

186. In 2012 KPMG was starting an apprentice scheme within Risk Consulting to take school leavers to train for the AAT qualification, which allowed an accelerated route to qualification with a CCAB body.

Alumni

187. KPMG operated an alumni programme for 25,000 former employees and operated a social networking website as well as offering alumni the opportunity to receive technical updates and access to online seminars. KPMG stated that promotion of the network was partly because they were aware that alumni may go on to be future purchasers of professional services and also because they could use the views of alumni for market intelligence.

Reputation and brand

188. KPMG perceived the value of its brand to be driven by its reputation for quality and this quality was driven, inter alia, by having top quality staff. Any activities such as sponsorship and advertising were for the purposes of making others aware of that reputation. KPMG considered that association with trade bodies and events for instance would allow potential clients to become aware of the firm's work and in some instance meet its staff. Audit-specific advertising was rare and typically low-value and focused.

189. Similarly, KPMG considered that thought leadership demonstrated that the firm had an awareness and knowledge of issues facing potential clients in different sectors and was of 'most importance in demonstrating and communicating our commitment to value and excellence' and 'may contribute at the margin' to winning new clients.

190. KPMG sought to differentiate itself through the quality of its service provision:

(a) quality of its opinions to stakeholders;

(b) insight arising from its audit which is fed back to management and the Board throughout the audit; and

(c) quality of its reporting to the management team and AC.

191. KPMG gave the example of declining to participate in the tender for the audit of [✂] (for which it was auditor) as the firm felt unable to undertake an audit of a suitable quality (given their knowledge of the scope required) for the reduced audit fee that [✂] sought. However, it was not clear whether the opportunity cost of the engagement was of equal or greater bearing in deciding not to participate.

Competitors

192. KPMG believed that the ability of a rival firm to grow in the large company market depended on its willingness to 'effectively invest in quality, across its different facets', with investment based on time and effort rather than large capital outlays. It cited Deloitte as an example of this.[11]

193. KPMG's assessment of the other market participants was that the other firms had actively competed on price, with formal and informal tenders being lower than existing audit fees. Further, the apparent fee strategy of each firm varied by the sector of a prospective client.

194. [✂]

195. KPMG believed that [✂] and [✂] were both attempting to increase market share and improve margins through standardization of audit work. Further in the case of [✂], KPMG believed that it had received a 'subsidy' from its network to allow it to compete more aggressively on price to win market share and was also using its network's outsourcing arrangements to improve margins.

196. [✂]

197. With respect to recruitment, KPMG believed that over the last five years [✂] had tried to recruit junior partners, [✂] and senior managers from other firms to boost resource profile, mainly in northern offices, whilst over the last decade [✂] targeted [✂] staff who were senior but had hit a ceiling in their career progression.

[11] KPMG main submission, paragraph 309.

198. KPMG found that there were a number of companies that tendered but retained the incumbent auditor.

Mazars

Summary

199. Mazars was a relatively new entrant to the UK audit market, and had a heavy focus on servicing French clients (19 of the 20 largest clients in the global firm were French companies). The firm saw the Barnier EC proposals on joint audits of large PIEs to be a major opportunity for the firm. It would be a familiar operating model to that employed in France. The firm's principal strategy was to attempt to gain a foothold in listed companies by targeting small and mid-cap clients with audit services, whilst supplementing this with non-audit work for larger clients.

200. The UK firm was part of an integrated global firm (in contrast to other large firms which were members of international networks), though its global presence was significantly smaller than some other non-Big-4 firms, with a presence in only 69 countries, compared with 100 or more for the other firms.[12] Mazars did not have any FTSE 350 audit clients and as a result they could not provide as much information to us as other firms.

201. In the recent past, the firm managed to achieve targets for growth in revenue in non-audit, but not in audit work.

Revenue and margins

202. In Mazars's submissions, its primary strategy to improve profitability was to improve efficiency, with no stated intention to increase fees, which may be a competitive strategy to avoid becoming less attractive to clients on the grounds of price. Mazars

[12] Mazars notes that the territories that it is present in account for 95 per cent of global GDP.

hoped to drive efficiencies through improved staff utilization rates, new IT audit tools and improved audit approaches.

Pricing

203. In setting fees for services, Mazars attempted to determine the resource requirement for an engagement and calculate the associated costs using scale/charge-out rates. It was the firm's strategy to attempt to recover [✂] per cent of charge-out rates for staff, though it may go down to [✂] per cent depending on the desirability of the relationship and the utilization rates of staff.

Attraction, retention and acceptance of clients

204. Mazars had adopted a strategy of increasing its share of the small and mid-cap market outside France to continue to build credibility to allow it to potentially enter the large company audit market. Mazars strategy when targeting clients involved putting together a standard information pack including general background as well as 'analysis of key shareholders', which would then feed into a bespoke plan.

205. Mazars did not have a source of information regarding when FTSE 350 companies would tender for an auditor. The firm did not submit unsolicited bids to FTSE 350 companies as they did not believe they would be effective.

206. The firm had been proactive in attempting to contact the FTSE 350, one example being after the firm had won an award for 'audit firm with best service' it wrote to 'key targets' in the FTSE 350 with a bottle of champagne but received no responses which resulted in a meeting. The firm found instead that use of its existing contacts to obtain access to key stakeholders had been more successful at generating meetings, but given that all firms did this, there has been little perceived gain.

207. Mazars considered that its globally integrated structure was the optimal structure to win international clients as it allowed a greater sense of consistency across its global operations. As an extension of this global structure, the strategy for targeting Public Interest Entities was determined centrally at a global level for the reason that Mazars should act as one firm. The firm also focused on operating on the basis of industry sectors delivering across service lines, rather than each service line going individually to market.

208. The firm did not undertake systematic client satisfaction surveys but used client care interviews for its largest clients.

209. Mazars had been forced by a client [✂] to lower its fees in order to retain the engagement.

210. Before taking on new clients, Mazars assessed them for: risk of fraud; concerns regarding the integrity or reputation of the potential client or its management; adverse media coverage of the potential client or its management; evidence that the potential client has a poor attitude towards its advisers or regulators; if there are any going concern issues; or if there were difficulties engaging with the potential client on its standard terms and conditions of business.

Services offered

211. Mazars provided a variety of services to its clients. However, it stated that the level of non-audit services that it provided to audit clients was one of the lowest in the profession, but did not provide data to set this in context. Mazars offered a range of advisory/consulting services but in its submitted strategy documents, the firm stated it was investing in Business Advisory services and developing a broader assurance practice.

People

212. Mazars had a two-tier partnership structure, with some partners also being members of a central network firm. Partners who were members of the global firm ('CARL Partners' and shared in international profits) contributed between £[✂] and £[✂] of capital. Other partners contributed either £[✂] or £[✂] of capital. The firm intended to increase the number of CARL partners.

213. The loss of partners to the Big 4 was relatively low despite Big 4 partners earning two or three times more. Mazars perceived the greatest risk of loss of staff was around partners who had niche or specialized industry knowledge and may be targeted by other Mid Tier firms.

214. Mazars attracted some Big 4 partners when they retired or approached retirement, but Mazars was unable to pay salaries or offer experience similar to Big 4 for public interest entities, but could for Owner/Manager Businesses (private companies).

Competitors

215. Mazars perceived the Big 4 to be able to use their existing client base to their advantage such as being able to offer free benchmarking against other clients in the sector (at presumably little or no cost to the firms). The firm considered its larger clients to be at a greater risk of switching to the Big 4. This was particularly an issue for companies with international subsidiaries where Mazars did not have a member firm.

PKF

Summary

216. PKF was managed partially on a regional basis and partially on a service-line basis, which contrasted with the other firms, which were predominantly organized by service lines.[13]

217. PKF only tendered for one or two FTSE 350 audits each year and did not put substantial resource into attacking the market beyond this. PKF believed that the Mid Tier firms present in the FTSE 350 were due to clients moving into the FTSE 350 rather than Mid Tiers being appointed out of choice.

Revenue and margins

218. PKF's Audit and Assurance Business Plan included the following points:

(a) retaining the firm's position as a top eight audit firm;

(b) expanding PKF's share of the listed audit market; and

(c) increasing fees above inflation (a target increase of 3.5 per cent).

Pricing

219. The firm's price negotiation strategy was based on three factors:

(a) desire to win or retain a client;

(b) experience of the client (such as the likelihood of overruns and quality of draft accounts); and

(c) timing of audit relative to peak demand.

[13] Some service lines such as corporate finance and management consulting are managed as service lines in their own right, whereas assurance and tax are managed on an office by office basis. Neither assurance or audit are reported separately internally for management accounts purposes.

220. The firm's assessment of the risk of a client fed into the pricing of an audit. However, PKF did not state if this was a risk premium or as a recovery of increased audit procedures.

Attraction and retention of clients

Potential audit clients

221. PKF monitored a pipeline of potential new clients, and attempted to engage in contact with them until it decided there was not a realistic possibility of being selected to provide services. PKF did not provide information to indicate how it identified potential clients and how long a client might be courted before removal from the pipeline.

222. With respect to seeking larger clients, PKF stated that the current situation with respect to auditor liability did not discourage it from seeking larger audit engagements, but that the ability to limit liability would 'enhance our appetite' to audit larger businesses. PKF noted that to take on more than four FTSE 350 clients would require recruitment of additional staff. However, PKF's peak period of April to July would dovetail with new clients with a December year-end.

223. PKF had particular experience in mining and investment trusts and it considered that winning further work in these industry sectors would be easier than in other sectors.

Increasing revenue from potential and existing clients

224. PKF did not provide a specific response on this area.

Services offered

225. PKF offered a range of service lines. However, within those service lines, PKF appears to include some specialisms, such as within the management consultancy

service line, PKF advertises ‘hotels consultancy’ and PFI/PPP consulting, both of which are relatively niche products. PKF acknowledged that its range of consultancy services is not as broad as the Big 4 firms.

People

Partners

226. PKF had two classes of equity partner, ‘full profit sharing’ and ‘fixed share’. [✂]

Graduate recruitment

227. PKF acknowledged that the remuneration (including non-pay benefits) offered by some of the Big 4 to their graduate trainees may be a little more than that offered by PKF. In promoting the firm, PKF emphasized the wider range of client experience it could offer to trainees through working on smaller audits compared with working on one large FTSE 100 client. The firm had established ‘links with some universities’, but the nature and extent of those links were not clear.

Reputation and brand

228. PKF’s sponsorship and advertising spend was ‘very limited’ with individual investments of £1,000 to £10,000.

Competitors

229. PKF did not submit any significant comment on its competitors other than that the firm on occasions struggled to compete with the Big 4 on price because of a ‘propensity to ‘lowball’ on price’, which PKF perceived to be a strategy to utilize excess staff resources and generate revenue at low or no margin to generate revenue growth. The firm noted that the Big 4 had significant business development teams for developing client relationships.

PwC

Summary

230. PwC stated that: 'Our ambition is to become the iconic professional services firm, always front of mind, whenever professional services are mentioned.' To this end, PwC sought to be recognized as leading its profession and to achieve stretching revenue growth targets by providing universally high quality services to its clients and a distinctive proposition for its people. The firm supported this approach with a broad range of client interactions and sponsorship and association with events and publications. PwC had, like other firms, developed a 'one firm' strategy, to enable its vision of PwC as 'a powerhouse of a commercial enterprise that does the right thing for our clients, our people and our communities'.

231. In accordance with UK contract law, PwC had previously attempted to seek agreement with its audit clients to limit its liability under the provisions of the Companies Act 2006, but this did not prove persuasive to its clients and it had decided not to pursue this further.

Revenue and margins

232. [✂] In FY09 there was also a firm-wide profit target of increasing profit per partner from £0.8 million in FY09 to £[✂] million in FY12. [✂] FY11 firm-wide profit per partner was £763,000,[14] despite turnover growth of 9 per cent between FY09 and FY11.[15] This could be explained by a 7 per cent decrease in firm-wide profit,[16] reflecting pricing pressures and increasing costs.

233. [✂]

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[14] PwC UK Annual Report 2011, p30.
[15] Percentage difference between 2009 and 2011 turnover figures in PwC UK Annual Report 2009, p4; PwC UK Annual Report 2011, p30.
[16] Percentage difference between 2009 and 2011 figures for profit available for division among members in PwC UK Annual Report 2009. p35; PwC UK Annual Report 2011, p35.

234. The firm stated that its large investments, relating to core IT, or audit systems such as the audit software Aura, were appraised on the value added to the business, its contribution to PwC's competitive position and its enhancement of quality of service. PwC stated that like many IT projects, the benefits to PwC were, as well as increased quality, improved efficiency and competitiveness.

Pricing

235. [✂][17] In PwC's experience, there was a detailed discussion every year between the company and its auditor on the scope and fee for the upcoming audit. PwC stated that fee negotiation was a dynamic process and every client was different with different factors impacting the fee negotiation each year. PwC stated that fee negotiations would usually take into account the following factors:

(a) setting a competitive fee and providing value for money;

(b) changes in scope year-on-year including within the client's operating environment;

(c) a change in the level of risk in classes of transactions or balances;

(d) new accounting and/or auditing standards;

(e) inflation; and

(f) efficiency improvements.

236. PwC's pricing negotiations typically involved several layers of the client's management and ultimately the client's AC. The negotiations were led by the engagement partner, who based the negotiation on scope changes from the prior year, the factors identified in paragraph 235 above and the resulting budgeted resource expected to be required for the audit. Charge-out rates were applied to the resource requirement and expected recovery rates were calculated to assess the likely economics of the assignment and underpin the fee negotiation. The partner

[17] PwC Reply to Issues Statement, paragraph 6.4 and Figure 10.

would consider, among other factors, an analysis of the previous year's fee. Depending on the requirements of the client, a detailed breakdown of the audit fee/hours would be produced and/or benchmarking would be undertaken with comparator companies for discussion during the negotiation. Underlying charge-out rates were set on the basis of the costs of each grade of staff [✂].

237. [✂]

Attraction, retention and acceptance of clients

New clients

238. PwC operated a number of programmes focused at increasing market share:

(a) Tanks on Lawns—started in 2007 targeting a small number of 'brand defining clients' to grow the audit practice. The targets were all FTSE 100 companies who in the next three years, were likely to hold a competitive audit tender which PwC had a reasonable likelihood of winning. The initiative required the establishment of a 'shadow team' who actively developed working relationships with senior management. In 2009, this was expanded to include the FTSE 350.

(b) Mid-cap programme—to increase PwC's share of this market, staff and partners were reallocated to the London Mid Tier business unit and the sales 'pipeline' was formalized and monitored more 'vigorously'.

(c) Velocity—a firm-wide sales and relationship development skills training programme, as it was acknowledged that Deloitte's growth would lead it to overtake PwC.

(d) Net 635—initiated in Autumn 2010 to replace Tanks on Lawns to increase audit revenues by £[✂]. At the end of FY11, the programme was broadly on track.[18]

[18] PwC Reply to Issues Statement, paragraphs 4.29–4.39.

239. In addition to charitable pro bono work, PwC on occasion undertook work for free on behalf of potential client companies. One example was in performing a review of accounting policies for [✂], including comparisons to competitors, with the intention of showcasing PwC's capabilities and developing a closer relationship between the prospective audit team and the potential client staff.

240. PwC stated that it had not made unsolicited bids to FTSE 350 companies, as typically these stood very little chance of success. PwC indicated that targeting tended to be a gradual process to build relationships and establish a good track record with a company. PwC had, on occasion used 'cold bids', which it defined as being an uninvited unilateral tender issued after developing a working relationship with the target or on the identification of a 'trigger event' such as a change to the board or audit committee, the rotation of the incumbent lead audit partner or a merger or acquisition. PwC did on occasion also use unsolicited bids for non-FTSE 350 companies where it had no, or a limited, prior relationship with the company. After a relationship had been established with a target, other activities might include submitting documents on how PwC would adopt a different audit approach to the incumbent. A recent strategy had been to offer secondments (both free and charged) to target companies.

241. PwC said that it assessed all current and prospective engagements through an Acceptance and Continuation (A&C) process which assessed a variety of risk conditions. It might decline to accept a client if it concluded that: *(a)* the entity's management, directors and significant shareholders or principal owners were regarded as people who lack integrity and appropriate ethical values; *(b)* the venture appeared to be unviable and there was a real concern with being associated with its source of funds and its activities; *(c)* acceptance would be likely to expose PwC to an undue and unacceptable risk of damage to its professional reputation or financial

loss. It identified occasions where it ceased to act or declined an invitation to tender on the grounds that it saw the risk/reward ratio in acting as auditor to be unsatisfactory (ie because the risk of significant issues arising with the audit was seen as very high). This was the case, for example, with [✂].[19]

Existing clients

242. The firm had undertaken various market surveys to understand the concerns of stakeholders in relation to the firm's brand health and reputation. Other surveys focused on the purchasers of audit services to allow PwC to understand their concerns about the current reporting and audit framework and to improve its offering.

243. PwC undertook a number of different tools for monitoring its relationship with clients, such as the annual Audit Relationship Risk Diagnostic which must be completed by all audit lead partners. [✂][20]

244. PwC also collected client feedback and encouraged partners to respond actively to it, with PwC providing, by way of illustration, four examples of large companies quoted as saying that they believed PwC had taken onboard their feedback. Feedback across the firm was collated and analysed with key messages then communicated back to the partnership as a whole.

Existing and new clients

245. PwC used a variety of activities to develop its relationship with clients and targets including: [✂].

Services offered

246. [✂][21]

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[19] PwC Initial Submission and Response to Issues Statement dated 12 January 2012, paragraph 7.41.
[20] PwC Reply to Issues Statement, paragraph 4.45.

247. In FY11, PwC's FTSE 350 audit clients generated £[✂] million in audit fees plus £[✂] million of non-audit services, whilst FTSE 350 non-audit clients generated £[✂] million from non-audit services, indicating that there was little disincentive with respect of revenue not to pursue a FTSE 350 company as an audit client.[22]

248. PwC provided an analysis of the relative hours spent on audit-related services for a sample of ten FTSE 250 clients where PwC was the statutory auditor. In this sample, the proportion of hours relating to audit-related services ranged between 6 per cent and 18 per cent with a median of 12 per cent.

249. PwC provided two illustrative examples of shareholder and audit committee views on the level of non-audit fees relative to the audit fee along with that of the Hundred Group of Finance Directors, who noted 'with appropriate safeguards in place, the quality of both the external audit and other specific non-audit services could be enhanced if undertaken by the auditor without impact on independence, and at lower cost'.

People

250. [✂]

251. Partners were remunerated for their work in the UK from the UK firm's distributable profits. Each partner had a 'target' level of income (remuneration) set each year. This remuneration was comprised of three components:

(a) role—[✂] per cent;

(b) firm's profits—[✂] per cent; and

(c) individual performance—[✂] per cent.

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[21] PwC Reply to Issues Statement, paragraphs 4.50–4.52.
[22] PwC Reply to Issues Statement, Figure 9.

252. PwC believed that its ‘competitive offering to partners’ in respect of remuneration, development and support and the quality of clients and projects was the main incentive for partners to stay with the firm.

253. In the period 2005 to 2011, and in addition to internal promotions to partner, PwC recruited five partners into Assurance, three of which were from EY. In 2012, PwC recruited four partners across the firm, one from KPMG and the remainder from EY. Two of the four would work in audit.

254. In 2011, from outside PwC’s Assurance practice six partners left PWC—three to Deloitte, two to KPMG and one to EY. In the last three years PwC was not aware of any partners leaving to join Mid Tier firms.

Graduate recruitment

255. PwC’s graduate recruitment programme resulted in 12 per cent of applicants receiving an offer letter. All potential recruits must achieve a minimum of 300 UCAS points at A-level (BBB) and a 2.1. In 2011, the top five sources of PwC’s 800 graduate recruits by number were the Universities of Nottingham, Durham, Warwick, Manchester and Oxford. The cost of the graduate recruitment programme was £[✂] million in FY11, excluding line of service time, and salary costs for intern programmes. PwC had been named by *The Times* as the best Graduate Employer for eight years running.

256. PwC also sponsored 50 undergraduates each year at the University of Newcastle to study for a degree, to qualify towards their ICAEW and undergo business placements. A similar programme at the University of Reading was in development. PwC’s Professional School Leavers Programme allowed 100 students to join straight

from school and study for the ICAEW qualification in four years. The firm also sponsored around 100 university clubs, societies or employability initiatives.

257. PwC's strategy was to attract and retain the best people by providing excellent training, allowing the opportunity to work with leading companies and ensuring the highest professional standards. It sought to retain individuals who it believed had the ability to become partner, by ensuring that their careers progressed constructively they felt valued and that they were remunerated 'in line with market expectations'.

Alumni relations

258. PwC had contact details of 30,000 former employees, including former partners, though it stated that it did not hold current employment details for all individuals. Membership of the alumni network allowed access to thought leadership, publications, and news about other alumni through the PwC alumni LinkedIn group. A number of drinks receptions and dinners were held for different groups of alumni. PwC did not state what strategic value the firm placed on operation of the alumni programme.

Reputation and brand

259. PwC viewed its brand success as being measured by the overall performance of the business, but also undertook its own brand health survey every two years, focusing on purchasers of professional services in large firms including AC Chair.[23] PwC undertook a wide variety of thought leadership at all levels of the business, from global to national, sector specific pieces and that which formed ongoing programmes and themes of work. PwC saw thought leadership as being a way of developing its brand, reputation and market positioning and leading thinking on issues relevant to

[23] The work is outsourced to a research company and no reference to PwC's involvement is made.

stakeholders. The firm also saw thought leadership as a way of strengthening relationships with clients and developing the intellectual capital of the firm.

260. The firm also developed its brand through association with various 'community affairs' programmes.

Competitors

261. PwC described the competitive strategies of the other three largest audit firms. It did not cover the Mid Tier firms:

> on the basis that although certain mid-size audit firms provide competitive pressure at the lower end of the FTSE 350, […], [they] are not typically selected by large companies. This is because, according to the views of many external commentators, regulators and the large companies themselves, they lack the capabilities and attributes necessary to audit most large companies. Furthermore, despite the opportunity to do so, we see no serious investment by these firms to develop these attributes.

262. For the three largest firms, PwC considered there to be significant competitive pressure, with the other large firms maintaining contact with most of PwC's audit clients, including establishing shadow teams for some of PwC's audits. PwC noted that a client's management may inform PwC of the existence of targeting in order to exert competitive pressure on PwC regarding price and/or service. PwC provided five example companies with quotes from client staff where the other three largest firms had contact with an audit client. Other tactics and practices employed by the other

large firms included making ‘cold’ offers to undertake the audit for a lower fee.[24] PwC considered these tactics were broadly consistent with its own.

[24] PwC Response to Issues Statement, section 4D.

Evidence on auditor scepticism

Introduction

1. In this appendix we have considered market outcomes that suggest that auditors may, at times, apply inappropriate levels of professional scepticism which may lead them to favour management interests over the interests of shareholders. We:

   (a) set out background information on relevant aspects of the regulatory framework including an overview of relevant auditing standards and other material published by regulators;

   (b) consider the implementation of regulation by the firms; this subsection contains a summary of firms' submissions on their processes designed to ensure independence and scepticism and the AQRT's reports on those firms; and

   (c) consider other UK and international evidence that may indicate insufficient scepticism by auditors. This includes a review of the AQRT's annual reports on audit quality and recent cases considered by UK regulators.

Regulatory background

2. ISA 200 (UK&I) stated that 'professional skepticism is necessary to the critical assessment of audit evidence' and that in maintaining scepticism an auditor needed to question the reliability of evidence provided by management.[1] Auditors needed to maintain their scepticism to reduce audit risk but had to also use professional judgement to avoid unnecessary cost in performing the audit.[2] By extension, to be sceptical, auditors needed to have integrity, objectivity and independence.

[1] ISA 200 (UK & Ireland) *Overall objectives of the independent auditor and the conduct of an audit in accordance with International Standards on Auditing*, paragraph A20.
[2] Discussion Paper *Auditor Scepticism: Raising the Bar*, FRC, August 2010, paragraph 2.

3. The FRC noted that to prevent litigation and reputational damage arising from audit failure, audit firms had policies and procedures in place to achieve audit quality. However, the FRC went on to identify the pressures that audit staff were under:

> … audit firms place considerable importance on retaining their client base. Emphasis on client service planning and relationship management within the firms may act as a disincentive for auditor scepticism if audit teams believe that by demonstrating scepticism they risk having an 'unhappy client'.[3]

4. Further, the FRC considered that because most audit fees were agreed in advance, any subsequent increase in fee could adversely affect client relationships, and this may be an incentive to adhere strictly to the original audit plan, which might limit the ability of auditors to exercise or demonstrate their scepticism.[4]

5. The FRC identified recruitment, training and reward, and audit methodologies as two areas where firms could develop and promote scepticism.[5] It noted that it was easier to imagine auditor scepticism being applied when auditors were walking the floor rather sitting in an audit room completing electronic schedules, and that scepticism might be better fostered by methodologies that encouraged auditors to ask management open questions and follow-up on responses.[6] However, the introduction of clarity ISAs was noted as making certain procedures mandatory, which a less sceptical auditor might not have ordinarily undertaken.[7] Further, the FRC noted from the responses it received from its paper that it was difficult for a 'cold review' (see para-

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[3] Discussion Paper *Auditor Scepticism: Raising the Bar*, FRC, August 2010, paragraph 27.
[4] Discussion Paper *Auditor Scepticism: Raising the Bar*, FRC, August 2010, paragraph 29.
[5] Discussion Paper *Auditor Scepticism: Raising the Bar*, FRC, August 2010, paragraph 30. The FRC goes on to note the significant investment made by firms in their methodologies.
[6] Discussion Paper *Auditor Scepticism: Raising the Bar*, FRC, August 2010, paragraphs 39–42.
[7] Discussion Paper *Auditor Scepticism: Raising the Bar*, FRC, August 2010, paragraph 49. The FRC did not comment that procedures were not performed previously, but that the change in the ISAs would make those procedures mandatory.

graph 18 below) of an audit file to determine if an appropriate level of scepticism had been applied.[8]

6. Ethical standards were first issued by the APB in 2004 in part to attempt to reduce the threats to an auditor's independence (and thus scepticism). There were three principal standards that directly considered auditor independence. ES1 sets out the need for auditors to maintain integrity, objectivity and independence.[9] ES2 sets out requirements on financial, business, employment and personal relationships.[10] ES3 considered long associations between auditors and clients. The Ethical Standards required firms to establish policies and procedures to ensure that appropriate threats were monitored and responded to appropriately.

7. ES1 required firms to design and implement a control environment within the firm that 'places adherence to ethical principles and compliance with APB Ethical Standards above commercial considerations'.[11] This control environment should include, inter alia, systems for partners and staff to report any relationships with an entity audited by the firm, periodic monitoring of individual's and the firm's compliance with its policies and an enforcement mechanism.[12]

8. Prior to the issuance of an audit report, the AEP must conclude on any threats of objectivity and independence and whether they had been properly addressed. If the AEP was unable to conclude that the threats had been addressed, ES1 prohibited an AEP issuing an audit report.[13]

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[8] Feedback Paper to *Auditor Scepticism: Raising the Bar*, FRC, March 2011, paragraph 11.
[9] Ethical Standard 1 (Revised) 'Integrity, objectivity and independence'.
[10] Ethical Standard 2 (Revised) 'Financial, business, employment and personal relationships' sets out the nature of relationships that auditors and their immediate and close family may have with an audit client.
[11] Ethical Standard 1 (Revised) 'Integrity, objectivity and independence', paragraph 19.
[12] Ethical Standard 1 (Revised) 'Integrity, objectivity and independence', paragraph 21.
[13] Ethical Standard 1 (Revised) 'Integrity, objectivity and independence', paragraph 54.

9. Firms were required to appoint a suitably senior designated Ethics Partner, and for firms which audited listed companies the Ethics Partner should have direct access to the firm's independent non-executives or most senior governance body.[14] Ethics Partners were responsible for assessing the effectiveness of the firm's policies and procedures and should be proactive in considering the ethical implications of developments in the firm's business.[15]

10. ISA 220 required listed company audits to be subjected to an Engagement Quality Control Review (EQCR).[16] ES1 required the EQCR to consider whether the engagement has complied with APB ethical standards as well as forming an opinion on the adequacy of safeguards and whether the AEP had appropriately documented their consideration of objectivity and independence on the audit.[17]

11. ES3 required firms to monitor the length of time that partners and staff were members of each audit engagement team[18] and that a firm should assess the threat to an auditor's objectivity and independence and apply safeguards.[19]

12. The potential safeguards suggested by ES3 included rotation after a number of years, including an additional partner to review the work performed by partners and senior managers on an audit and the use of independent internal quality reviews.[20]

13. For listed clients, ES3 specified mandatory rotation requirements which limited an individual acting as AEP to five years with a five-year break before being allowed to

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[14] Ethical Standard 1 (Revised) 'Integrity, objectivity and independence', paragraph 22–24.
[15] Ethical Standard 1 (Revised) 'Integrity, objectivity and independence', paragraph 25.
[16] ISA 220 (UK & Ireland) *Quality Control for an Audit of Financial Statements*.
[17] Ethical Standard 1 (Revised) 'Integrity, objectivity and independence', paragraph 51.
[18] Ethical Standard 3 (Revised) 'Long Association with the Audit Engagement', paragraph 5.
[19] Ethical Standard 3 (Revised) 'Long Association with the Audit Engagement', paragraph 6.
[20] Ethical Standard 3 (Revised) 'Long Association with the Audit Engagement', paragraph 8.

participate on the engagement again.[21] With sufficient safeguards, AEPs may be allowed to undertake the role for an additional two years, if agreed by the firm and the company's AC[22] and on the condition that this arrangement was disclosed to shareholders.[23] A limit of seven years was imposed on other partners involved in the audit including the engagement quality control reviewer (an independent partner who reviewed the audit file before the audit report was issued).[24] Other senior members of the audit team who had been involved with the engagement for seven years were required to be subject to additional safeguards.[25]

Implementation of regulation by the firms

14. We asked firms a number of questions on how they maintained audit quality and reputation, and the potential issues around long-lasting engagements. All the firms were subject to the ethical standards discussed above, but their method of implementation may vary. We list here the aspects that helped to maintain professional scepticism directly or indirectly.

15. We also reviewed the most recent firm-specific reports issued by the AQRT and any findings with respect to scepticism are also reported on a firm-by-firm basis. We include references to matters of professional ethics which we considered to impact upon an auditor's ability to maintain professional scepticism.

BDO

16. BDO had a set of 'core values', one of which is 'honesty and integrity'. Ensuring compliance with professional ethics was a key area of focus in training and policies. Staff were able to access guidance on ethics and independence on the firm's Intranet.

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[21] Ethical Standard 3 (Revised) 'Long Association with the Audit Engagement', paragraph 12. Former AEPs of an engagement team who rotated to join a firm's technical team could offer technical advice to the new engagement team after two years if the advice did not relate to issues, transactions or events that they considered whilst acting as AEP.
[22] Ethical Standard 3 (Revised) 'Long Association with the Audit Engagement', paragraph 16.
[23] Ethical Standard 3 (Revised) 'Long Association with the Audit Engagement', paragraph 17.
[24] Ethical Standard 3 (Revised) 'Long Association with the Audit Engagement', paragraph 19.
[25] Ethical Standard 3 (Revised) 'Long Association with the Audit Engagement', paragraph 20.

17. BDO's client acceptance criteria considered whether the firm could act independently and without any conflicts of interest.

18. For its ongoing client relationships, BDO had an 'independent client listening programme' which the firm believed would aid in identifying over-familiarity or potential impartiality. BDO considered the use of hot[26] and cold reviews by independent staff to aid further in mitigating these risks. Cold reviews considered an engagement's adherence to ethical standards as well as the firm's audit manual.

19. In its 2009–11 report, the AQRT identified that BDO needed to emphasize to its audit teams the need to challenge management on key assumptions, such as on assessing impairments and valuation of assets.[27]

Deloitte

20. The Practice Protection Group, which reported to the firm's Managing Partner for Public Policy, Quality and Risk, had oversight of the firm's regulatory compliance, including ethical standards.

21. All new experienced staff hired were required to undergo ethics training within two weeks of joining the firm. All staff were required to confirm their adherence to the firm's ethical standards and the Deloitte 'Code' annually. Staff were also periodically required to undertake ethics training.

22. All new and potential clients were subject to a review using the firm's conflict check system which would consider both the UK firm and member firms of the network. All potential engagements would be subject to individual review.

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[26] Both an Engagement Quality Control Review (EQCR) by an independent partner and a review of draft financial statements by the firm's technical department.
[27] AIU, *Public Report on the 2009/11 inspection of BDO LLP*, pp4 & 6: www.frc.org.uk/Our-Work/Publications/AIU/Public-Report-on-the-2009-11-inspection-of-BDO-LLP.aspx.

23. Deloitte considered that the risk of over-familiarity was overcome by the requirement for periodic rotation.

24. The AQRT commented that Deloitte had issued a number of communications to audit teams on the importance of audit scepticism and included the topic in mandatory training.[28] The AQRT found some issues with the accuracy of the firm's rotation database.[29]

EY

25. EY framed its internal policies on the UK Ethical Standards and the firm maintained a rotation database to ensure that regulatory requirements were complied with. EY noted that there was a relative high level of churn in CEOs and FDs of FTSE 350 companies.

26. EY noted that there was continuous rotation of staff on an audit team such that there would continually be a 'freshness', increasing the level of challenge.

27. EY monitored compliance with its code of conduct.

28. The AQRT in 2011/12 found weaknesses in the challenge to management's assumptions on a number of audits and in some instances there was insufficient scepticism.[30] The AQRT noted that EY had promoted professional scepticism through mandatory training and also including it in the firm's 'Hot Topics' which listed areas of focus on that year's audits.[31]

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[28] AIU, *Public Report on the 2011/12 inspection of Deloitte LLP*, p11: www.frc.org.uk/Our-Work/Publications/AIU/Public-Report-on-the-2011-12-inspection-of-Deloitt.aspx.
[29] AIU, *Public Report on the 2011/12 inspection of Deloitte LLP*, p13.
[30] AIU, *Public Report on the 2011/12 inspection of Ernst &Young LLP*, p7: www.frc.org.uk/Our-Work/Publications/AIU/Public-Report-on-the-2011-12-inspection-of-Ernst-Y.aspx
[31] AIU, *Public Report on the 2011/12 inspection of Ernst &Young LLP*, p10.

GT

29. In addition to its policies and code of conduct, GT referred to holding 'regular training and awareness programmes' to ensure that individuals were aware of their ethical responsibilities. The firm's Ethics Partner was supported by a dedicated ethics team who offered advice to staff on a confidential basis.

30. In its 2009–11 report, the AQRT identified the exercise of professional scepticism as an area for the firm to promote.[32] The AQRT identified 12 'lower risk audits' where the AEP had acted in that role for 20 years or more and, despite the use of an independent review partner, the AQRT did not consider this to be appropriate.[33]

KPMG

31. KPMG identified that its quality control and review processes (including hot and cold review) mitigated the risk of loss of independence and overfamiliarity, as well as the requirement to rotate staff on the audit team.

32. KPMG stated that in general the ethical and regulatory frameworks that existed were 'considered to be sufficient to address the potential threat of over-familiarity. Importantly, the risk to an audit firm's reputation and the loss of reputation also provide stimuli to audit firms to ensure that objectivity and audit quality are maintained'.

33. All new engagements were subject to checks of the firm's and individuals' independence prior to acceptance. All staff were required to comply with a code of conduct which mirrored the requirements of ethical standards.

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[32] AIU, *Public Report on the 2009/11 inspection of Grant Thornton UK LLP*, p4: www.frc.org.uk/Our-Work/Publications/AIU/Public-Report-on-the-2009-11-inspection-of-Grant-T.aspx.
[33] AIU, *Public Report on the 2009/11 inspection of Grant Thornton UK LLP*, p10.

34. The AQRT in its 2011/12 report identified the need to ensure that the firm's audit teams 'sufficiently challenge management' with respect to provisioning on loans,[34] and that greater scepticism should have been applied on some audits to assumptions on growth rates when assessing impairments of goodwill[35] and in relation to revenue recognition.[36] On two audits, the AQRT found insufficient consideration of safeguards around the long involvement of senior managers.[37] AQRT noted that KPMG had developed a number of initiatives to reinforce professional scepticism, including a Professional Judgement Framework and a number of workshops and presentations.[38]

Mazars

35. Mazars appointed an independent partner, who had no connection to the client or the engagement team, to review the work of the engagement team. Mazars complied with ethical requirements to rotate members of the engagement team. All member firms of Mazars must agree to comply with its code of conduct on Objectivity and Independence. Each member firm must also ensure that appropriate safeguards were in place to prevent conflicts of interest when accepting new clients. A member firm's adherence to global policies and professional standards was considered as part of Mazars' quality control system.

36. In its 2011/12 report, the AQRT found that on one engagement, the AEP had been involved on the audit for eight years but had not been subject to an independent

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[34] AIU, *Public Report on the 2011/12 inspection of KPMG LLP and KPMG Audit Plc*, pp5,7: www.frc.org.uk/getattachment/ebec4054-4a01-46c2-9cb0-c7b2c488419a/Public-Report-on-the-2011-12-inspection-of-KPMG-LLP-and-KPMG-Audit-PLC.aspx
[35] AIU, *Public Report on the 2011/12 inspection of KPMG LLP and KPMG Audit Plc*, pp7–8.
[36] AIU, *Public Report on the 2011/12 inspection of KPMG LLP and KPMG Audit Plc*, p9.
[37] AIU, *Public Report on the 2011/12 inspection of KPMG LLP and KPMG Audit Plc*, p9. As noted above.
[38] AIU, *Public Report on the 2011/12 inspection of KPMG LLP and KPMG Audit Plc*, p11.

review as required by the firm's policies.[39] The AQRT also noted that Mazars did not keep a central register of business relationships with audited entities.[40]

PKF

37. PKF stated that rotation of key engagement team members countered the threat to independence.

38. In its 2010–12 report on PKF, the AQRT noted that it needed to 'continue to focus on promoting the exercise of appropriate professional scepticism in practice, including in assessing the impairment of goodwill and intangible assets'.

PwC

39. PwC noted the threat of over-familiarity with respect to tenure and stated that it was 'well-recognised by the auditor, the company and the regulator, all of which take steps to actively and effectively mitigate the risk'. PwC stated that the risk of being associated with a deficient audit and the loss of reputation and potential financial consequences were a powerful safeguard for both the firm and the individual.

40. There were a number of specific safeguards that PwC put in place which included rotation or removal of partners and staff from the engagement team, appropriate review procedures (including hot and cold quality reviews) and reviews by the Quality Review Partner or another partner not involved in the audit engagement, in addition to training to reinforce the need for professional scepticism.

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[39] AIU, *Public Report on the 2011/12 inspection of Mazars LLP*, p9: https://frc.org.uk/Our-Work/Publications/AIU/Public-Report-on-the-2011-12-inspection-of-Mazars.aspx.
[40] AIU, *Public Report on the 2011/12 inspection of Mazars LLP*, p10.

41. PwC aimed to manage the rotation of partners and staff on audits whilst also maintaining continuity in the team to bring a fresh pair of eyes while mitigating the loss of accumulated corporate knowledge.

42. PwC had a code of conduct that set out the ethical and professional obligations of staff and the firm monitored compliance against the code.

43. The AQRT noted that PwC had introduced a requirement for its audit teams on higher-profile clients to demonstrate how professional scepticism was applied, as well as providing training to those teams.[41]

44. PwC said that it took audit scepticism very seriously whether it was in the exercise of scepticism itself or the documentation of evidence of that scepticism in its work papers. It said, 'our belief is that professional skepticism is applied consistently and rigorously in most audits'. PwC drew to the CC's attention that in its published 2012 report on the most recent inspection of PwC the AQRT acknowledged a number of improvements the firm had made, including specifically in relation to demonstrating how professional scepticism was applied on its higher-profile audits, in response to the AQRT's comments in previous reports.

Other evidence from regulators and case examples in relation to insufficient scepticism

Evidence from regulatory bodies

45. In the AQRT's report for 2008/09 which encompassed 2007 year-end audits, the AQRT focused on work performed by auditors over significant audit judgements, including the rationale for accounting treatments and the reasonableness of assumptions used in valuations and accounting estimates. It identified issues relating to the

[41] AIU, *Public Report on the 2011/12 inspection of PricewaterhouseCoopers LLP*, p10: www.frc.org.uk/Our-Work/Publications/AIU/Public-Report-on-the-2011-12-inspection-of-Pricewa.aspx.

adequacy of audit evidence obtained or the appropriateness of significant judgements made at all audit firms.[42]

46. In June 2010, the FSA and FRC jointly published a discussion paper entitled Enhancing the auditor's contribution to prudential regulation. The report's executive summary notes:

> Both the FSA and the FRC believe auditors need to challenge management more. … the FSA has questioned whether the auditor has always been sufficiently sceptical and has paid adequate attention to indicators of management bias. … there are concerns that the auditor sometimes portrays a worrying lack of scepticism ….[43]

The report also noted that, in some cases the FSA had seen, the auditors' approach seemed to focus too much on gathering and accepting evidence to support managements' assertions.[44]

47. The joint FSA/FRC report also noted that other regulators had expressed similar concerns about whether auditors were being sufficiently sceptical, for example a recent audit inspection report from the Australian Securities & Investment Commission (ASIC) noted that in some cases 'auditors did not adequately document or challenge whether the key assumptions used by management provided a reasonable basis for measuring fair value and disclosures'.[45,46]

48. In July 2010, the AQRT published its annual report for the year 2009/10. A key message in this report was the need for audit firms to demonstrate greater professional scepticism. The report noted that some firms' audit approaches to auditing

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[42] AQRT Audit Quality Inspections—An Overview, December 2009: www.frc.org.uk/Our-Work/Publications/AIU/2008-9-Audit-Quality-Inspections-An-Overview.aspx.
[43] *Enhancing the auditor's contribution to prudential regulation,* Executive Summary, paragraph 1.6.
[44] ibid, paragraph 1.7.
[45] ASIC, *Audit inspection program public report for 2008–09—report 192*, March 2010.
[46] This relates to a non-UK jurisdiction and we note that it is not necessarily representative of the UK audit market but does indicate that concerns have been raised elsewhere.

highly judgemental balances were by seeking to 'obtain evidence that corroborates rather than challenges the judgments made by their clients'.[47]

49. In the FRC's 2010/11 Annual Report, the FRC said that the AQRT had found that the number of audits requiring significant improvement remained too high. The report found that firms were not always applying their procedures consistently on all aspects of individual audits or applying significant professional scepticism in relation to some key audit judgements.[48]

50. In the light of this report, and in the wake of the banking crisis, the FRC published a discussion paper entitled *Auditor scepticism: Raising the Bar*.[49] This paper considered the degree of scepticism that auditors needed to apply to conduct an audit to a high standard. The paper included a number of examples (which included some historic cases) which suggested that the auditor had not been 'sufficiently sceptical':

(a) Disciplinary investigations into Equitable Life, London International Group, Independence Insurance, TransTec, Wickes, ERF Holdings, which identified audit failings including instances of over-reliance on management representations, failure to investigate conflicting explanations, and failure to obtain appropriate third party confirmations—which may suggest that the auditors in these cases were not sufficiently sceptical.

(b) The AQRT finding in its 2009/10 report that audit firms were not always applying sufficient professional scepticism in relation to key audit judgements. In particular, audit firms sometimes approached the audit of highly judgemental balances by seeking to obtain evidence that corroborated, rather than challenged, the judgements made by their clients. The AQRT also reported that auditors should exercise greater professional scepticism when reviewing management judgements

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[47] AQRT 2009–10 Annual Report, p4: www.frc.org.uk/Our-Work/Publications/AIU/AIU-2009-10-Annual-Report.aspx.
[48] FRC Annual report and Accounts 2010–2011: Chief Executive's Report, Future of Audit and Audit Quality, pp10/11.
[49] FRC/APB discussion paper, August 2010.

relating to the impairment of goodwill and other intangibles, and future cash flows relevant to the consideration of a going concern.

(c) In the USA, research had shown that the failure to demonstrate an appropriate level of scepticism was a deficiency found in 60 per cent of cases where the Securities and Exchange Commission (SEC) brought fraud-related actions against auditors. This was consistent with the findings of the SEC Panel on Audit Effectiveness, and other academic research based on US cases.

51. Responses to that discussion paper[50] included:

(a) The Local Authority Pension Fund Forum (LAPFF), which cited omissions in the accounting and auditing standards framework that meant that scepticism was not directed to those places where it was most required for the benefit of the owners of companies. It said that problems occurred wherever there was a scope for overstatement of earnings which was inherently judgemental and subject to short-term management pressures to enhance reported earnings.

(b) The International Corporate Governance Network said that a lack of sufficient audit scepticism had been widespread in recent years including the period leading up to the financial crisis. It said that the culture of cost-cutting by auditors may be a contributing factor. It cited the example of PwC declaring Northern Rock a 'going concern' in the lead-up to the financial crisis as an example of insufficient auditor scepticism.

(c) The Investment Management Association (IMA) noted that the regulatory framework had been modified in an attempt to enhance auditor scepticism, including new auditing and ethical standards since Enron. However, it did not consider that these had been fully effective, and welcomed the FRC/APB looking at the area. The IMA said that auditors sometimes focused too much on gathering and accepting evidence to support management assertions and did not challenge

[50] Reported in APB feedback paper *Auditor Scepticism: Raising the Bar*, March 2011.

management enough. It said that this was evidenced by the fact that there were significant variations in the numbers reported by different financial institutions in relation to the same instruments, held for the same purpose, and valued in accordance with the same accounting policies, even when the institutions had the same auditors. The IMA said that it had been informed by the AQRT that there were situations where conflicting judgements were accepted by the same firm for different clients in the same or similar industries.

Cases brought against auditors

52. The US financial reporting scandals of 2001/02, including Enron, Global Crossing, Tyco, HealthSouth, and Worldcom, were followed by a wave of regulations on both sides of the Atlantic introducing stricter rules on the provision of non-audit services to audit clients, as well as tighter corporate governance rules, in an attempt to prevent similar cases arising in the future. The regulatory changes made are described in further detail in Appendix 8.

53. The UK has had its own examples of such cases including Equitable Life, London International Group and Independent Insurance.

54. We have not considered these cases in detail and we recognize that significant changes have been made to the regulatory regime in the intervening period. Nevertheless we considered that they are illustrative of the potential for severe consequences as a result of a lack of independence and scepticism on the part of auditors.

Examples

55. We considered whether there were more recent examples that could be illustrative of a lack of auditor scepticism, notwithstanding the additional regulatory controls that had been established post-Enron. We found that the cases ([✂]) discussed below,

were all suggestive that the auditors could have demonstrated a higher degree of scepticism than they did, whether or not the threshold was reached for a successful claim to be mounted against the firm. The FRC does not use the word 'scepticism' in its reports on individual firms. Nevertheless its reports cite examples of a lack of evidence of sufficient challenge of management assumptions. We consider that we are correct in interpreting this as a lack of scepticism. These cases were drawn from a limited sample of AQRT reports for 2009 year ends, as well as other FRC internal documents [✂]. The AQRT reports for this period were limited in scope to considering impairments and going concern and related disclosures, and thus did not cover the entirety of the audit. Hence, we did not consider these cases to be an exhaustive list of examples of this nature.

56. In all cases, the audit firms involved dispute that there was a lack of professional scepticism.

Example 1: [✂]

57. The AQRT conducted a review of the audit of [✂] financial statements for the year ended 31 December 2008. The AQRT formally communicated its findings to Deloitte UK on 22 February 2010. The audit was graded as 'In need of improvements which are individually or collectively significant', which was the lowest grade issued by the AQRT. [✂]

58. As part of the AQRT's review of Deloitte's testing of the impairment of goodwill,[51] it identified an error in [✂] management's calculations which led to an error of US$1 billion on an estimate of US$3 billion in headroom on goodwill. Materiality on

[51] Goodwill is the difference between the net book value of assets acquired and the price paid, and was held on the balance sheet or statement of financial position as an asset. IAS 36 requires companies to perform an annual assessment as to whether an asset may be impaired (ie that its value is less than it is recognized on the balance sheet at).

the audit was US$13.5 million.[52] The AQRT did not conclude that the financial statements were incorrect, but noted that: 'If this error had been identified by the audit team and more realistic assumptions adopted for the purposes of the sensitivity analysis, in our view, further work would have been needed to establish whether an impairment charge was required.'

59. In conclusion, the AQRT found that there was 'insufficient evidence on the audit file to support the appropriateness of the rate of revenue growth, the level of operating costs and the discount rate used in the calculations'.

60. In its review of the audit file, the AQRT noted that:

> we identified an error in the client's goodwill impairment testing model which had the effect of overstating the available headroom by a significant amount. In our view, if this error had been identified by the audit team and more appropriate assumptions been adopted for the purposes of the sensitivity analysis, further work would have been needed to establish whether an impairment charge was required.[53]

61. Further, the AQRT stated: 'it was not clear how the audit team satisfied itself that the headroom in the entity's financing facilities was correctly calculated'.[54]

62. [✂][55]

63. [✂][56,57,58,59,60]

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[52] We believe this headroom to refer to the amount that projected discounted revenues exceeded the value of goodwill.
[53] AIU, Public Report on the 2009–10 inspection of Deloitte LLP, p6.
[54] AIU, Public Report on the 2009–10 inspection of Deloitte LLP, p7.
[55] [✂]
[56] [✂]
[57] [✂]

64. [✂][61]

65. Deloitte said that the AQRT did not conclude that Deloitte had displayed any lack of professional scepticism and that it was factually inaccurate for the CC to suggest to the contrary. Deloitte set out the following points: [✂].

66. [✂]

Example 2: [✂]

67. The AQRT reviewed the Deloitte audit file for the year ended 2 May 2009 for [✂], and graded the file as 'In need of improvements which are individually or collectively significant'. The AQRT raised concerns that there was not sufficient evidence that the audit team had considered the reasonableness of the assumptions adopted by management. It said that:

> In our view, the audit file did not evidence the basis on which the audit team considered the assumptions to be appropriate for the period beyond the initial 18 months. … There was no explanation on the audit file of the reasons why it was considered appropriate for management to apply the stated growth rate beyond the five year period to turnover rather than to cash flows. Further the audit file did not demonstrate that the audit team had considered the reasonableness of the assumptions adopted by management for the CGU's gross margin and cash flows in years five and six of their impairment testing model. If these matters had been considered by the audit team, in our view, further work would have been needed to establish whether an impairment charge was required and the disclosures were appropriate

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[58] [✂]
[59] [✂]
[60] [✂]
[61] [✂]

68. The AQRT review of the audit file found that:

> the basis for management's impairment testing was a detailed 18 month forecast that was extended for a further three and a half years. The audit file did not evidence the basis on which the audit team considered the extension for the period beyond the initial 18 months to be appropriate. In addition, the audit file did not demonstrate that the audit team had given sufficient consideration to the application of the sensitivities in management's impairment testing.[62]

Example 3: JP Morgan

69. PwC was from FY2002 to 2008 the statutory auditor of JP Morgan Securities Ltd (JPMSL). As part of this engagement, PwC provided audit-related services to JPMSL, reporting privately to the FSA on JPMSL's compliance on client asset rules.[63,64] Following the merger of JP Morgan & Co and The Chase Manhattan Corporation, certain changes were made to two particular processes in the merged group's systems. PwC stated that these changes had an unintended consequence which was that, unknown to the JPMSL staff responsible for the segregation of client money, client monies held by JPMSL at JP Morgan Chase Bank (JPMCB) were automatically swept overnight from a segregated account to a desegregated interest-bearing account. The breach was ultimately identified by JPMSL. PwC did not detect and therefore did not report the failure to segregate to the FSA.

70. PwC accepted that it had failed to obtain sufficient appropriate evidence.[65] PwC's reporting was not part of its statutory audit of JPMSL's financial statements, and the

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[62] AIU, Public Report on the 2009–10 inspection of Deloitte LLP, pp6–7.
[63] PwC and the AADB produced an Agreed Statement of Facts: www.frc.org.uk/FRC-Documents/AADB/Agreed-Statement-of-Facts.aspx.
[64] AADB Decision on PricewaterhouseCoopers LLP Re: JP Morgan Securities Limited Client Money, paragraph 1.
[65] AADB, Agreed Statement of Facts, paragraph 9.

audit opinion was not questioned.[66,67] PwC accepted that it did not detect the breach because of a flaw in the relevant test it performed in the context of the client money audit (as opposed to any step in the statutory audit).[68] The findings of the AADB and the duration of the failure to detect the breach suggest that PwC failed adequately to challenge JPMSL's consideration of the design of its systems for client monies. PwC does not accept that this inference is correct.

71. PwC said that this example did not reflect an absence of professional scepticism and the AADB did not conclude there had been any lack of professional scepticism.

Example 4: [✂]

72. Concerned an investigation conducted by the AADB into a Big 4 firm. There were no adverse findings and the AADB made no comment on professional scepticism.

73. [✂][69,70]

74. [✂][71,72,73]

75. [✂][74]

76. [✂][75]

77. [✂]

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[66] AADB Decision on PricewaterhouseCoopers LLP Re: JP Morgan Securities Limited Client Money, paragraph 13.
[67] AADB Decision on PricewaterhouseCoopers LLP Re: JP Morgan Securities Limited Client Money, paragraphs 15–18.
[68] Agreed Statement of Facts, paragraphs 44 & 45.
[69] [✂]
[70] [✂]
[71] [✂]
[72] [✂]
[73] [✂]
[74] [✂]
[75] [✂]

78. [✂][76,77,78]

79. [✂][79,80,81]

80. [✂][82,83]

81. [✂]

82. [✂]

83. [✂]

84. [✂]

Example 5: [✂]

85. The AQRT reviewed the PwC audit file for the year ended 31 December 2008 for [✂], and graded the file as 'In need of improvements which are individually or collectively significant'. The AQRT identified a number of issues with respect to the audit team documenting appropriate evidence to support their judgements on the impairment of goodwill. The AQRT also noted that in its view PwC failed to communicate in sufficient detail to the AC its views on the key assumptions. It was not evident to what extent these findings demonstrated a lack of scepticism, or a failure to document evidence appropriately.

86. The AQRT found that:

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[76] [✂]
[77] [✂]
[78] [✂]
[79] [✂]
[80] [✂]
[81] [✂]
[82] [✂]
[83] [✂]

> significant audit judgments were not always supported by sufficient evidence or an adequate record of the work performed. This included judgments relating to goodwill impairment, property valuations and investments with no active market. Without an adequate record of the work performed it is not possible to understand the depth of review or the extent of challenge of judgmental areas by the audit team.[84]

87. PwC did not accept that having regard to practice at the time that there was a lack of scepticism in audit procedures on impairments of goodwill. Rather, PwC stated that the audit evidence should have been more comprehensively documented. PwC considered that there had been sufficient discussion with the AC of the key impairment assumptions at the AC's December 2008 meeting and that it had chosen not to repeat in its paper to the AC matters which had been dealt with adequately in management's paper on the subject.

Example 6: [✂]

88. [✂] was appointed as the auditor of [✂] for the year ended 30 September 2008. The company had been created through the merger of [✂] (previously audited by [✂]) and the [✂] division of [✂] (which had been audited by a second firm). During its tenure as auditor of the [✂] businesses, the second firm had identified an issue with the reconciliation of the two [✂] systems used but concluded that the error was not material. For FY2008 and FY 2009, [✂] took assurance from management and the second firm's assessment of the system. In FY 2010, [✂] found that the error was larger than previously believed and requested the prior year accounts to be restated.[85]

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[84] AQRT, Public Report on the 2009–10 inspection of PricewaterhouseCoopers LLP, p5.
[85] [✂]

Firm-specific examples of innovation

1. This appendix contains our review of parties' responses to our market and financial questionnaire (MFQ) questions relating to innovation as part of a competitive strategy, the impact of regulation on innovation and responses to any other questions which referenced innovation. It also considers other relevant submissions made by parties.

BDO

Views on innovation

2. BDO stated that in general there was a lack of innovation in the accountancy market and that innovation had been primarily driven by the desire to increase efficiency and that audit had not changed substantially. Specifically, BDO stated with respect of the product offered: 'Statutory audit has remained largely unchanged for a long period, while companies' communications have changed considerably.'[1]

IT and methodology

3. The BDO network had spent €[✂] million on a new audit software system. The new system increased the level of automation in the administration of an audit. Other IT-based examples included the increasing use of Computer Aided Audit Techniques (CAATs) for testing controls, standardized tests for different sectors and the use of software for reviewing the integrity and consistency of spreadsheets that support the financial statements.

4. BDO had also introduced [✂].

[1] BDO response to the issues statement, paragraph 4.1.2.

Outputs

5. BDO had created templates for standard communications for clients in different industries.

Management of the firm

6. BDO had introduced new software for allocating staff more efficiently at a cost of £[✂].

Deloitte

Views on innovation

7. Deloitte stated that there had been significant change in the regulatory environment for audit over the past ten years. Changes in reporting requirements and time frames had required Deloitte to 'modify and develop its audit approach to remain competitive'. Deloitte believed that the main beneficiaries of such innovation were companies and investors:

> Deloitte stated that neither IFRS nor ISAs impeded innovation in audit: Auditing standards and professional guidance provide the framework and principles for auditing but do not mandate the way in which they are achieved. It is the tailored application of these standards, rooted in an understanding of the company's business and operations, that enables us to provide a risk focused audit, ensure we meet the objectives of an audit and deliver deep and insightful findings.

8. Deloitte placed some focus on innovation in its audit product in its competitive strategy: 'in terms of audit and audit-related services specifically, [Deloitte's competitive strategy was to] grow business and be the market leader in quality, innovation and efficiency of the core audit product.'

9. Deloitte considered innovation to be important in a firm's ability to win new clients:

> Without innovation, Deloitte would not expect to be successful in any tender process. FTSE 350 companies have changed markedly in the past ten years, and Deloitte has had to reflect (and anticipate) those changes by developing its audit service. Its competitors have done the same.[2]

10. Further, Deloitte believed that companies would 'universally expect to see how a tendering firm will innovate' in performing the audit and that audit tenders were won and lost on the basis of innovation.[3] Over the length of an audit engagement Deloitte responded to client expectations through innovating the audit approach.[4]

IT and methodology

11. Deloitte stated that innovation in audit was based on being flexible and tailoring the audit approach. To this end, the Deloitte network had spent $[✂] million on its new audit software platform 'Deloitte Audit'. Prior to the roll-out of the new software, Deloitte had tailored audit approaches for 15 industries and this would increase to 22 with the new software.

12. As a result of investment in software and changes to its methodology, [✂].

Outputs

13. Deloitte identified the increased role of non-executive directors and the AC as having led to some of the changes in the reporting it produced. Examples of innovation in the outputs provided by Deloitte included producing detailed reports on:

    [✂]

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[2] Deloitte response to 'Nature and strength of competition' working paper, paragraph 7.25.
[3] Deloitte response to 'Nature and strength of competition' working paper, paragraph 7.26.
[4] Deloitte response to 'Nature and strength of competition' working paper, paragraph 7.27.

14. Examples of innovation in standard outputs included charts showing where [✂].

Management of the firm

15. Deloitte gave some specific examples of innovations in its operating model:

    (a) shorter decision chains;

    (b) increased partner leverage and 'innovate client service model' where client and competitive pressures made this necessary; and

    (c) use of offshore centres for performing some audit procedures.

16. The firm actively encouraged innovation through the promotion of a suite of programmes and tools:

    [✂]

EY

Views on innovation

17. EY stated that regulations and the audit regulatory regime might restrict innovation, as any change in approach had to be certain of being accepted by a regulator. One example that EY gave of where regulation might limit innovation was the requirement that registered auditors were required to 'undertake or oversee certain aspects of the audit process' which other specialists who were not auditors would be more suited to undertake.

18. However, EY also stated that competitive pressure in the market required the firm to innovate and seek ways to differentiate itself from its competitors.[5] EY noted that:

    (a) there was limited scope for innovation in the audit product, but that firms had innovated where possible;

[5] EY response to CC 'Nature and strength of competition in the supply of FTSE 350 audits' working paper, paragraph 3.4.

(b) innovation was not necessarily explicitly referred to when presenting to existing or potential clients, but that the results of innovation were, such as the development of analytics tools; and

(c) the EY network had demonstrated innovation by 'globalizing' its network, its methodology and developing software to use clients' data systems to achieve a more efficient or insightful audit.[6]

19. EY did state that it tried to 'improve the form of the deliverable we provide to audit committee[s]'.

IT and methodology

20. The 'Ernst & Young Global Audit Methodology' was updated regularly based on new standards and quality assurance findings.

21. [✂]

22. [✂]

Outputs

23. EY considered there to be little ground for innovation in audit outputs because of requirements of ISAs, but as noted above EY 'continuously try to improve the form of the deliverables we provide to the audit committee via best practice sharing among audit teams'.

24. EY stated that it had introduced greater detail in its communication of its audit approach to the AC.

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[6] EY response to CC 'Nature and strength of competition in the supply of FTSE 350 audits' working paper, paragraph 4.7.

Management of the firm

25. The firm was operated as part of EY's European network and as part of its 'globalized network'. EY's network structure had been adopted as 'consistency and responsiveness across the network had become an important service issue'.

26. The network had introduced offshoring centres for audit processes, which EY UK used.[7]

GT

IT and methodology

27. GT stated that it had increased its use of data interrogation tools. It had 'enhanced' IDEA, an off-the-shelf package, to focus on 'specific applications'.

28. The firm had run workshops to encourage audit teams to re-engineer their audits to focus on significant risks and to improve client relationships.

Management of the firm

29. The firm used 'Centra' to deliver training updates to individuals through their laptops.

KPMG

Views on innovation

30. KPMG did not believe that the regulatory environment had generally limited innovation though it noted two examples (see paragraph 31) where this had been the case. The firm stated, however, that innovation in the audit process was driven by changes in clients' businesses and client requirements, though changes in the regulatory environment might expand the scope of audits—for example, in their

[7] See Appendix 25

communications with those charged with governance and in their approach to other information issued with or derived from audited financial statements.

31. The two examples of regulation inhibiting innovation were:

(a) the introduction of its 'extended audit' for Rentokil Initial (see below) which was temporarily prohibited until the APB had the opportunity to consider the independence issues raised by that specific service; and

(b) the inability to offer a greater variety of audit reports including short-format reports because this is an area effectively restricted by regulation leading to the user of boilerplate language.

32. KPMG stated that it innovated by making 'substantial ongoing investments to ensure we meet client demands for quality and efficiency and can compete effectively with our rivals'. However, KPMG stated that explicit reference to innovation was not necessarily made in its tender documents, rather 'providing [an] innovative and bespoke solution' was evidence of competition on the grounds of innovation.[8]

33. KPMG noted that it often referred to conducting 'efficient' audits in tendering for audit work.[9]

IT and methodology

34. KPMG identified the increased use of CAATs as a clear example of innovation. CAATs benefited the audit approach by reducing 'much of the mechanical routine of audit work' and could be used to automate a variety of audit testing including

[8] KPMG response to 'Nature and strength of competition' working paper, paragraph 3.2.
[9] KPMG response to 'Nature and strength of competition' working paper, Annex 2, paragraph 4.1.10.

controls, tests of detail and re-performance of calculations performed by a client's financial systems.[10]

35. KPMG updated its audit methodology and audit software to include industry standard practices and background information. When new approaches were introduced they were generally seen as a 'variation on a theme'. However, over the years this competitive strategy had resulted in considerable changes in the way audit findings were articulated to clients both with regard to issues which needed to be decided by those charged with governance and on the weaknesses in systems identified during the course of an audit. The development of the audit methodology also provided the ability to improve audit quality, efficiency and the level of insight and comment that could be provided by the audit team.

36. KPMG had introduced software (eAudIT) in order, inter alia, to assist with managing audits and it had integrated the firm's methodology and technical manuals to assist teams to plan and execute audits. Data mining tools including 'real-time' analysis had also been developed as well as the use of off-the-shelf CAATs software.

37. KPMG stated that some changes had been made to its methodology when International Standards on auditing were revised to ensure compliance.

Outputs

38. The firm was one of the first to offer 'extended audit', where it undertook greater levels of testing as part of its audit to allow it to provide more detailed reporting on its clients' reporting and processes. It was required to wait for a year for the Audit Practices Board (APB) to consider the regulations in this area when it proposed providing this to Rentokil Initial. The APB's independence standards ultimately

[10] KPMG response to 'Nature and strength of competition' working paper, Annex 2, paragraph 4.1.6.

permitted such services for audit clients, if approved by those charged with governance.

39. The firm provided a number of additional reports such as:

(a) benchmarking and reviews of other performance indicators including improvement over time; and

(b) benchmarking of the clarity and content of financial statements.

Management of the firm

40. In 2007 KPMG UK 'merged', initially with the German and Swiss member firms of the KPMG network to form KPMG Europe LLP, an entity which had subsequently incorporated member firms in other territories in Europe, to better serve international clients.[11]

41. KPMG had established an offshore processing centre for some audit procedures.

42. The firm had also introduced online training programmes for its staff.

Mazars

Views on innovation

43. Mazars considered that one element of ensuring a high-quality audit was by 'actively seeking to foster innovation both on individual audits and at a profession-wide level'.

44. The firm believed that International Standards on Auditing (ISAs) made it challenging to innovate with respect of 'audit inputs and audit methodology' and that as a result 'audit methodology was now relatively standardized and translated into a set of semi-automated processes in an IT software'.

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[11] KPMG response to 'Nature and strength of competition' working paper, Annex 2, paragraph 4.1.15.

45. Mazars stated that where innovation existed, it was quickly copied across the industry.

Outputs

46. Mazars provided the example of its 'Human Rights Audit' as being an innovation of output. [12]

PKF

Views on innovation

47. In its response to the MFQ, PKF stated that:

> The audit process has become highly prescribed, first through the adoption of the original International Standards on Auditing (UK and Ireland) in 2005 and then the adoption of the clarified suite of standards in 2010. Over this period our effort has been concentrated on improving our in-house audit software which is used by the audit teams. At this time we do not consider that this has resulted in providing a particularly 'innovative service' to our clients.

PwC

Views on innovation

48. PwC did not see regulations as impeding innovation:

> Although the current regulations and standards provide a framework within which the audit service must be provided, they do not adversely affect our scope to innovate in the provision of an audit. In particular, they do not restrict the scope for innovation: in the manner in which the audit service is provided; in efficiencies that may be generated; and in the sophistication of the actual service offered.

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[12] The Human Rights Audit assesses a company's compliance with local and international human rights law.

49. PwC believed that consideration of innovation was part of the assessment of tenders, even if not referred to explicitly, rather it was the output of innovation (such as improved methods, efficiencies and insights) that purchasers were interested in.[13]

IT and methodology

50. The PwC network had spent approximately $400 million on developing its audit software, Aura.[14]

51. Other software included [✂].

52. The firm had developed algorithms and automated valuation models to automatically generate accounting estimates to compare to those included in a client's financial statements.

53. PwC provided an example of redesigning an audit approach when its client's operations changed. In the example provided, the client, an international company, centralized its transactional processing. The revised approach required one team to test these controls to an appropriate level and share the conclusions to all components auditors, which in turn led to a reduction in audit hours.

Outputs

54. In addition to reports generated from its analysis of data mining exercises, PwC also provided benchmarking information on the nature and quality of a client's financial controls. This report benchmarked key client functions, cross-referenced these to potential client business issues and used the results of the audit to suggest a business issues agenda so as to tell a client the likely impact on the level of audit work if controls were improved.

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[13] PwC response to 'Nature and strength of competition' working paper, Annex 1, paragraph 1.
[14] See Appendix 25.

55. PwC provided examples of its outputs and the use of simple, easy-to-understand graphics.

56. PwC also provided a narrative of changes in the format of its reporting to one FTSE 350 client over the period 2004 to 2012. It noted that the minimum content of its reporting had in 2004 been dictated by SAS 610, which was replaced by ISA 260 (UK&I), which in turn was revised by Clarity ISA 260 (UK&I). PwC stated that it had innovated its reporting by moving from a simple compliance model to reporting which 'articulated the value of the audit by detailing audit insights [...] contextualised in the commercial impact on the business'. PwC stated that not only had the content of the reporting changed, but also the timing of different types of reporting over the course of the year. PwC included some examples of how it reported innovation in its approach to the AC.

57. PwC submitted to the CC an analysis of the change in the format of the audit report between 2002 and 2012. The analysis indicated that the terminology, wording and structure had changed as a result of the Companies Act 2006, revisions to ISA (UK&I) 700 and (for public limited companies) the adoption of International Financial Reporting Standards (IFRS), but that the fundamental nature of the report had not.

Management of the firm

58. PwC stated that it focused on increasing innovation generally, and had innovation as one of its growth priorities for FY12.[15]

59. Through PwC's Global Assurance Delivery Model, the firm had established offshore processing centres to undertake some administrative and common audit procedures.

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[15] PwC response to the issues statement, paragraph 4.24.

60. One of the three essential elements of PwC's Audit Transformation Programme included changing the working practices of the firm by focusing on behaviour. The firm recognized innovation in its audit function through its annual award for 'Audit team of the year' that included consideration of innovation in delivering an audit.

Views of investors and other stakeholders

Introduction

1. This appendix *(a)* describes our evidence base and then sets out the evidence we received on the views of investors in relation to understanding:

   (b) the role of audit;

   (c) whether there are barriers to switching to a Mid Tier firm resulting from investor views on auditor identity;

   (d) whether there are barriers to switching resulting from investor views on changing auditors;

   (e) influence of investors regarding companies' selection of their auditor; and

   (f) whether the audit process is satisfying investors' demand (to the extent that the process delivers outputs visible to them) or whether additional outputs could usefully be provided.

2. We also set out *(g)* additional comments made by BDO in relation to the views of investors concerning auditor choice and principal-agent issues.

Evidence base

3. We received evidence from investors[1] via an investor questionnaire and discussions with investors both as part of our case studies and as third party hearings.

4. In addition, we have received submissions on investor views from:

   (a) Oxera, acting on behalf of BDO and GT, conducted its own investor survey[2] and we have reviewed Oxera's confidential interview summaries;

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[1] And credit ratings agencies.
[2] www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/oxera_investor_survey_report.pdf.

(b) PwC's provision of information from investor surveys it was aware of, including its own 2011 survey; and

(c) PwC and Deloitte's submission of an ICAEW survey of FTSE 100 ACCs.

5. Following the publication of our 'Views of investors and other stakeholders' working paper[3] (the Investor Views working paper) we also received submissions from: BDO, Deloitte, EY, GT, Kingston Smith, KPMG and PwC.

Investor questionnaire

6. To gather the views of end-users, we sent written questionnaires to 18 major equity investors, eight major UK debt investors and three major ratings agencies.[4] The questionnaires covered views on the role of audit, the influence of the identity of an auditor on investment decisions, views on companies changing auditor and, for equity investors, investor influence on auditor selection.

7. These were selected as follows:

(a) for debt—the IMA provided a list of its fixed-income committee members;[5]

(b) for equity—we selected the largest investors in the FTSE 350 (excluding those we had spoken to in the case studies);[6] and

(c) for credit ratings agencies (CRAs)—we selected the largest three: Fitch, Moody's and Standard and Poor's.

8. Where investors appeared on both the debt and equity selection lists, we asked them to respond separately to each questionnaire (these were tailored to reflect the nature

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[3] www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/views_of_investors_and_other_stakeholders.pdf.

[4] Some investors held both equity and debt investments and responded to both sections of the questionnaire.

[5] We received responses from: AXA Investment Managers UK, Aberdeen Asset Management, AllianceBernstein, Alliance Trust Asset Management, Artemis Fund Managers, Canada Life Asset Management, Fidelity Worldwide Investments, Friends Life, M&G Securities, Newton Investment Management, Rathbone Unit Trust Management, and Standard Life Investments.

[6] We received responses from: AXA Investment Managers UK, Barings Asset Management, Aberdeen Asset Management, AllianceBernstein, Alliance Trust Asset Management, Canada Life Asset Management, Fidelity Worldwide Investments, Friends Life, Rathbone Unit Trust Management, Newton Investment Management, Standard Life Investments Schroder Investment Management, M&G Investment Management, Artemis, Threadneedle Asset Management and Invesco.

of the investment). We set out summaries of the responses by topic in the following sections.

Hearings (case study and third party)

9. Our case studies included interviews with two institutional investors: BlackRock and Legal and General Investment Management (L&G).[7] We also held hearings with 'Institutional Investors' (representatives from ABI, IMA and NAPF), and Hermes.[8] Summaries of these are published on our website.

Submissions from firms

10. Oxera conducted a survey on behalf of BDO and GT which is published on our website.[9] In addition, we have reviewed Oxera's interview summaries and we set out extracts from some of these, where relevant, here.

11. The respondents to Oxera's survey overlapped to some extent with our investor questionnaire. We note PwC's view that there was likely to be further overlap with those involved in the investor hearing and that we should take care not to place too much weight on a minority view.[10]

Evidence on price and quality

12. At the outset, we note that we have limited direct evidence from investors on the price and quality of audits. In our hearings with investors, Hermes said that audit quality was currently invisible to shareholders and that better disclosure of what the auditor had done and the issues that had been examined would make the quality

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[7] Appendix 2, BlackRock and Legal and General Investment Management.
[8] www.competition-commission.org.uk/our-work/statutory-audit-services/evidence/summaries-of-hearings-held-with-parties.
[9] www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/oxera_investor_survey_report.pdf.
[10] PwC response to CC working paper 'Views of investors and other stakeholders', paragraph A1.1.

more apparent. The representatives of the Institutional Investors also said that they had little information with respect to audit quality.

13. BDO and PwC noted in relation to the view that quality was unobservable to investors, that there were a number of visible measures of audit quality:

(a) PwC cited the following:

(i) the reports of the AQRT, the FRRP and the US PCAOB;

(ii) the detail contained in each of the audit firms' Transparency Reports, including in respect of the quality review procedures followed and the scores achieved; and

(iii) the outreach initiatives that it, and other audit firms, engaged in to provide the investor community with information about how to assess audit quality.[11]

(b) BDO noted that:

(i) it was the function of audit regulatory bodies to monitor and provide information with respect to audit quality, and

(ii) in the Oxera survey: 'several of those surveyed keep an eye on audit quality and independence by considering proxy measures, such as the ratio of non-audit fee to audit fee, or by reading the reports of the UK Audit Inspection Unit or the US Public Company Accounting Oversight Board'.

14. Further, PwC said that:

> As to the suggestion that for investors to assess quality, it is necessary for there to be better disclosure of what the auditor has done and the issues that have been examined, there is a tension between full transparency and reaching judgements as to the appropriate accounting

[11] PwC response to CC working paper 'Views of investors and other stakeholders', paragraph A1.2.

treatment of issues in a confidential environment that is conducive to an open debate.[12]

Role of audit

Questionnaires

15. The general views expressed in the questionnaire responses were that the audited financial statements were an important input to investment decisions, although were only one of a number of inputs.

16. Many investors said that they relied heavily on the financial data to evaluate historic performance and as an input into views, and models, of likely future performance. Whilst the timing of publication of audited accounts meant that the information was often cited as being obsolete or having little signalling effect, having reliable historic information was seen as key to making sensible investment decisions. The notes to the audited accounts were important to respondents as they provided more information than unaudited statements from companies.

17. Both the financial information and written commentary was important to investors. For example, Threadneedle said that the accounts were used to assess the financial performance and position of the company, particularly in assessing the underlying 'quality' of the earnings and balance sheet. The commentary in the accounts was reviewed to provide context and an insight into corporate strategy and business prospects.

18. Generally a 'clean' audit opinion, whilst not formally required, was in practice necessary and there would need to be specific, special circumstances for an investor to want to make an investment where the audit report was qualified. Certainly a quali-

[12] PwC response to CC working paper 'Views of investors and other stakeholders' , paragraph A1.3.

fied opinion was likely to require extra work to be undertaken in order to make an investment.

19. For debt investors, a clean audit opinion was noted as particularly important if making an investment in investment grade debt.

Hearings

Representatives of Institutional Investors

20. The Institutional Investors said that the audit report itself had only minimum perceived value as it was binary and few reports contained emphasis of matter paragraphs. The value perceived in an audit was in the audit process itself, in that this led to more accurate reporting by company management.

Hermes

21. The value of the audit to investors was more about the enhancement of the company's reporting over the year than the year-end sign-off.

L&G

22. The audited financial statements were very important to L&G (particularly to the active investment team). It was important to be able to trust the numbers and so it was on the audited accounts that the L&G investors focused. The auditor's opinion mattered in itself in exceptional cases when the report was qualified.

Submissions from firms

Oxera survey on behalf of BDO and GT

23. Oxera reported that: 'All investors surveyed confirmed the importance of independent audits of accounts for their investment decisions, and for their confidence in capital markets more generally'.

24. In reviewing Oxera's interview summaries, we noted the following in particular:

(a) [✂]: Investors were looking for an independent assessment of whether financial statements represented a true and fair view, by a professional expert. An audit was of fundamental importance for a shareholder seeking assurance and for investors looking to buy and sell securities.

(b) [✂]: The audit process was about assurance and providing a true and fair view: controls were working properly, proper risk management, appropriate accounting standards—not just about the numbers. The true and fair view was a gold standard that should not be tarnished.

Response to Investor Views working paper

Deloitte

25. Deloitte agreed with the view expressed in paragraph 20 that the value of an audit was derived from the underlying audit process rather than the audit report itself. However, it was not always acknowledged that these were not mutually exclusive—Deloitte was not able to deliver audit reports without a rigorous underlying process.[13]

PwC

26. PwC agreed that the audit process and resulting financial statements were highly valuable to investors, and that the process was regarded by investors as in many respects more valuable than the audit report itself—although it noted that the impact of a qualified audit opinion was highly significant.[14] PwC agreed with the investor's view that the statutory audit process and the opinion that the financial statements provided a 'true and fair' view was about 'more than the numbers'. However, PwC said it was important to appreciate that the audit process was not designed to enable the auditor to provide assurance on whether the 'controls were working properly,

[13] Deloitte response to CC working paper 'Views of investors and other stakeholders', paragraph 2.2.
[14] PwC response to CC working paper 'Views of investors and other stakeholders', paragraph 5(a)(i).

proper risk management' as to provide such assurance would be an expansion of the scope of the statutory audit.[15]

Views on auditor identity

Questionnaires

27. We received a range of views as to the importance of auditor identity on willingness to invest and view of the quality of the audit opinion.

Equity investors

28. For some investors, the identity of the auditor had little or no effect on their decision to invest unless it was felt that the chosen audit firm had insufficient resources to complete a quality audit or was not perceived to be independent.

29. Threadneedle said that it was not possible to make a properly informed choice between audit firms other than where they were perceived to have particular industry experience and/or capacity to handle very large businesses. It noted that many firms, including the Big 4, had had issues in their audits and from other commercial activities. There was, therefore a default view that the bigger firms were safer, even though this was not borne out by the evidence.

30. Some investors did say that they were more comfortable with audits by the larger firms, although whether this was the Big 4 or a wider group varied between investors. For example:

    (a) [✂] considered the Big 4 firms to provide greater confidence for companies listed in emerging markets.

    (b) Schroders considered the 'Top 4' to be the best. 'Investors are always going to prefer companies to be audited by the big 4'.

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[15] PwC response to CC working paper 'Views of investors and other stakeholders', paragraph A1.4.

(c) [✂] gave the Big 4 the highest rating and said that third-tier auditors would be a cause for concern for listed equities.

(d) M&G said that lesser-known firms gave rise to further scrutiny. It said that there was a presumption that UK-based firms could be relied upon to produce a satisfactory audit opinion.

31. Invesco said that auditor identity could affect its decisions to invest but did not state how. Standard Life Investments said that the criteria that could make a difference to its view of an auditor included the reputation of the firm, brand recognition, and the appropriateness of the firm for the entity concerned.

Debt investors

32. The responses for debt investors were broadly similar to the responses for equity investors. [✂] said that having a 'Top 4' auditor was particular important for companies domiciled in emerging markets. Alliance Bernstein said that the identity of the auditor made no difference within the 'top 6–8' firms. M&G was largely indifferent to the auditor's identity; the Big 4 firms and the next layer of credibly-sized and resourced firms were fine, but it would have concern if smaller regional firms were used.

Credit ratings agencies

33. As set out in the Cardiff Business School (CBS) report (which summarized the agencies' responses to our questionnaire):[16]

(a) Standard & Poor's stated that 'The identity of a company's auditor has no bearing on Standard & Poor's analysis'.

[16] www.competition-commission.org.uk/assets/competitioncommission/docs/2011/statutory-audit-services/cbs_auditor_clauses_report.pdf, Section 3.2.4.

(b) Fitch's response discussed a hypothetical case of a very small audit firm auditing a very large company to illustrate that, in principle, auditor size and capability did matter, though it acknowledged the difficulty of defining procedures and policies around this issue. Fitch then noted that, in practice, auditor identity would be discussed at a rating committee meeting and judgement exercised. In its rating criteria, Fitch discussed an 'asymmetry' surrounding accounting and audit integrity (as part of corporate governance issues more generally), pointing out that where they were deemed adequate or strong they had no impact, but where there were perceived deficiencies, these might result in a negative impact on ratings.

(c) Moody's said that in the vast majority of cases the identity of a company's auditor was not a concern, but in a very small number of cases, it had concerns about the abilities of the chosen auditor. In a small minority of cases, the identity of the audit firm was important, since the incumbent might not be sufficiently reliable, independent or well resourced to perform the audit role adequately. A lack of satisfaction with the auditor's level of capability and/or independence may result in withdrawal of a rating or a refusal to provide one in the first place.

34. The CBS report noted that there was no suggestion that audit firms immediately outside the Big 4 would be a cause for concern, and that in itself, a change in auditor would not have much impact upon ratings (though the factors associated with the switch might).

Hearings

Representatives of Institutional Investors

35. The Institutional Investors did not consider that there was a difference in audit quality between the Big 4 firms and the others. They could discern some strengths and weaknesses with regard to certain issues from reading AQRT and Public Company

Accounting Oversight Board reports. Within firms, there were differences between partners. Investors, however, would not have knowledge of the abilities of particular partners within firms.

BlackRock

36. BlackRock said that the identity of the auditor was unlikely to affect its decision to invest due to the concentrated pool of auditors appointed to provide auditing services to FTSE 350 companies. It considered that there would be no issues with one of the top four to six firms auditing any of the companies in the FTSE 350.

L&G

37. L&G saw no barriers from an investor's perspective to more FTSE 250 audits being conducted by Mid Tier firms, particularly for those FTSE 250 companies that were primarily operating in the UK.

Submissions from firms

Oxera survey on behalf of BDO and GT

38. Oxera reported that: 'The investors surveyed generally take note of the identity of a company's auditor, but, with the exception of either the very largest companies or those with very widespread multinational interests, would have no concerns with the larger mid-tier firms auditing companies in the FTSE 350.'

39. In reviewing Oxera's interview summaries, we noted the following in particular:

(a) [✂] said that most people would not differentiate between the quality of the audit from any of the Big 4 firms. There was a big question to ask, when a major (eg FTSE 100) company was using a non-Big-4 auditor—was there any implication that audit quality was different? [✂] had no pre-conception that non-Big-4

auditors were of lower quality, although recognized that there was a debate about capacity.

(b) [✂] said that concerns would arise if independence appeared to be conflicted. The investor referred to a few examples in the USA, describing one case where a small audit firm had become too reliant on a large client and the opinion had become impaired. The investor did not think that there was a significant gap between the Big 4 firms and others: it would use GT for due diligence and ad hoc report support—therefore it saw no technical distinction. Capacity and international reach might create a gap. It would not want the client of the audit firm to be so large that the independence of the auditor might be questioned.

(c) [✂] said that identity did not even register with the investor. It was often not important when voting over the reappointment of an auditor. If the auditors were a UK firm regulated by chartered accountants, it saw no difference in capability—a small or large firm would have the technical ability to audit any company. However, it thought that resources could be a big issue.

(d) [✂] thought that for large companies (ie multinational companies working in hundreds of offices), there was a genuine gap, eg resourcing, international reach, specialisms. For mid-250 companies, it was hard to get around the brand factor in a function that was all about reliability. It was sure that they were just as well qualified for a mid-250 company. However, it was not qualified to comment on the resources of smaller firms.

(e) [✂] said that in the listed market, a small unknown auditor would catch people's attention, but there was a good number of respected auditors. There were about 14 or 15 firms that investors would trust (and there could be more). For the FTSE 350 firms, increasingly it appeared to be only the Big 4 firms competing. Investors did try to make the point to companies not to look at just the Big 4 firms, but this had not made an impact. Companies preferred to appoint the Big 4 firms, which could offer a much more comprehensive—total service— package.

(f) [✂] said that the perception gap was wider for firms outside the Big 4 +2. It was not just BDO and GT that should be considered. Firms such as PKF, Mazars and Moore Stephens LLP outside the Big 6 should be considered.

Responses to Investor Views working paper

BDO

40. BDO said that the views of the three investors in paragraph 30 who expressed a preference for the Big 4 were likely to be in the minority, outweighed by the large number of investors who were comfortable with the idea of FTSE 350 companies looking outside the Big 4, and indeed who had raised serious concerns about the current limited choice of auditor.[17] All of the investors surveyed by Oxera that were cited by the CC supported the view that the audit services supplied by the Big 4 firms were not necessarily synonymous with superior quality. To the extent that any investors considered the Big 4 a better option, this seemed to be the result of the 'IBM effect' rather than any discernible difference in quality (for example, see paragraph 29).[18]

GT

41. GT noted that a number of investors did not draw a line between the Big 4 and others, but between the Big 4/large Mid Tier firms and others. For these investors, large Mid Tier firms were perfectly acceptable alternatives to the Big 4.[19]

Kingston Smith

42. Kingston Smith said that the fact some investors were willing to consider using not just GT and BDO, but also firms such as Mazars and Moore Stephens indicated a genuine willingness on the part of some investors for companies to consider

[17] BDO response to CC working paper 'Views of investors and other stakeholders', paragraph 4.1.
[18] BDO response to CC working paper 'Views of investors and other stakeholders', paragraphs 4.5 & 4.6.
[19] GT response to CC working paper 'Views of investors and other stakeholders', paragraph 1.4.

alternatives and indicated that such investors considered the market at present to be too concentrated.[20]

PwC

43. PwC noted that a minority of investors regarded the four largest firms as better than other audit firms, some investors consider the four largest firms to be better able to audit FTSE 100 companies but most were comfortable with a larger Mid Tier firm auditing FTSE 250 companies.[21]

44. PwC said with regard to Threadneedle's comment that the default view was that 'bigger firms were safer, but that this was not borne out by the evidence', that in fact, the evidence showed that the four largest audit firms offered a high-quality audit. PwC said its record, and that of the other largest firms, demonstrated that it offered a 'safer' audit in respect of large companies.[22]

45. It said that whilst it might be right that investors did not distinguish between the quality of each of the four largest firms, PwC strived to differentiate its audit from that of its competitors, as demonstrated for example by its Audit Transformation Programme.[23]

Views on changing auditors

Questionnaires

46. For a large number of investors a change in auditor was not seen to be an issue so long as the rationale for the change was explained by the company. For example, Threadneedle said that a change in auditor was of interest and would merit discussion but in and of itself not necessarily change investment decisions.

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[20] Kingston Smith response to CC working paper 'Views of investors and other stakeholders'.
[21] PwC response to CC working paper 'Views of investors and other stakeholders', paragraph 5(a)(ii).
[22] PwC response to CC working paper 'Views of investors and other stakeholders, paragraph A1.5.
[23] PwC response to CC working paper 'Views of investors and other stakeholders, paragraph A1.6.

47. However, Rathbone considered there to be a reputational risk to switching auditor and Invesco said that a change of auditors could be a concern depending on the circumstances. Artemis considered a switch in auditor from a Big 4 firm to a 'division 2' firm always merited attention because it could be indicative of a company seeking a more lenient interpretation of its financial affairs from that offered by the incumbent auditor or even looking to conceal a problem altogether. Artemis considered that a division 2 auditor would be relatively lightly resourced and possibly more accommodative towards a client that represented a large proportion of its business. [✂] said that a move from a Big 4 firm to one outside that group (with one or two exceptions) would raise warning flags particularly for a FTSE 350 company. Schroders said that a change in auditor was a big concern if it was a change from the Big 4 but not if it was from a small to a big firm.

48. In terms of barriers to switching, [✂] considered that large and complex companies needed large and expert auditors which it said could prevent some companies from switching outside the Big 4 firms. Standard Life Investments considered there to be perceived issues of competence when it came to firms outside the Big 4 auditing major financial services companies.

Cost of capital

49. Barings Asset Management said that changing auditor could have the effect of a possible small increase of the cost of equity based on potential (however small) for restatements arising from change in auditor. It had no specific examples of this occurring.

50. Threadneedle did not think a change in auditor had an effect on the cost of debt although it had not formally analysed this as the focus had been more on the correlation between higher levels of non-audit fees and a higher cost of debt.

51. [✂] thought that a change in auditor needed to be explained otherwise it could cause a change in the cost of capital, although it said that a change in auditor was usually the result, not the driver, of change in company's cost of capital.

52. [✂] said that a change from a Big 4 to a non-Big-4 firm would raise a flag but would not always be an issue. It considered that a change in auditor would have no effect on the cost of debt and that the market discounts for a lack of credibility in a company's accounts before, and independent of, a change in auditors was deemed suspect.

Hearings

Representatives of Institutional Investors

53. The Institutional Investors thought that a change of auditor or ACC should be a trigger for investors to ask questions and understand the reasons behind the change. However, since often they were not aware of the change until the AGM, this was difficult. Further, because of confidentiality arrangements, it was very difficult for investors to obtain any real information from the auditor about the reasons for the auditor's departure. Investors also had very little visibility regarding prospective tenders for auditors. On rare occasions, investors had voted at AGMs against the reappointment of an auditor. This had tended to be for reasons of independence and the level of non-audit fees that an auditor may be earning from a client, rather than because of any inherent judgement of the auditor's quality.

Hermes

54. Investors might have more confidence in companies that had recently switched auditor: this should be reflected in a lower cost of capital for that company, and its shares should trade at increased earnings multiples.

BlackRock

55. From the BlackRock investors' perspective, a change of auditor had no impact and largely went unnoticed. It was not therefore in itself a cause for concern except in extremis where the audit firm had resigned and put out a statement highlighting particular concerns. Likewise, a company having an auditor for a long time would not concern the Investors. They said that whether having the same auditor for a long time was best practice was an open question, but in itself it would not affect their decision to hold shares.

L&G

56. A change in auditor was not in itself a concern for the Investor. The statement from the resigning auditor was useful but often said nothing more than 'we lost the tender'. This was helpful in that it suggested that there were no issues between the auditor and management, but a statement from the relevant company explaining why the new auditor was selected and the benefits it was expected to bring would be more useful.

Submissions from firms

Oxera survey on behalf of BDO and GT

57. In reviewing Oxera's interview summaries, we noted, in particular, that [✂] said that when it saw a change in auditor firms, it became more nervous. It could suggest that the company might have been opinion shopping. To investigate, it would have a discussion with a senior independent member of the board and/or Chairman of the company, at least one of whom was normally on the AC. If, for example, the new auditor was offering a reduction in audit fees, it was reassured as it was clear that there was another reason for switching (ie not just opinion shopping).

Responses to Investor Views working paper

BDO

58. BDO said that the AQRT and PCAOB made it clear that BDO's audit quality was comparable to the Big 4 firms. BDO said that this was highlighted in the majority of investors' lack of concern over any change on auditor, provided that such investors were given adequate explanation.[24]

Deloitte

59. Deloitte said it was clear from the working paper that the views of investors did not present any barrier to switching nor to the expansion of any audit firm. There was little or no evidence that investors would be concerned by a switch to a new auditor (including a switch to a non-top-tier auditor) occasioned by a proper evaluation of quality and value in a tender process. Whilst they would be rightly concerned by a switch that was occasioned by 'opinion shopping' or seeking a less robust audit, it was clear that investors understood that a switch of auditor following a proper appraisal process was not of concern.[25]

60. There is no evidence that investors put pressure on company decision-makers not to involve non-top-tier auditors in tender processes, to not to select non-top-tier auditors. The large majority of investors indicated that they would be content for directors to select from a wider group of competent firms.[26]

Kingston Smith

61. Kingston Smith said it was extremely concerned by the views expressed by Artemis, Schroders and unnamed investors that a switch away from the Big 4 was of concern for reasons of opinion shopping. It said that the opinions expressed by some

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[24] BDO response to CC working paper 'Views of investors and other stakeholders', paragraph 4.3.
[25] Deloitte response to CC working paper 'Views of investors and other stakeholders', paragraph 3.2.
[26] Deloitte response to CC working paper 'Views of investors and other stakeholders', paragraph 3.3.

investors suggested that the Mid Tier not only lacked the technical robustness of the Big 4 but also lacked integrity. It said that Mid Tier firms did not 'bend the rules' in respect of their larger clients' compliance with relevant financial reporting standards. Kingston Smith said that in the past it had lost clients as a direct result of its refusal to compromise in its interpretation of accounting or ethical standards.[27]

62. It said that it was unsurprising that a company would elect to maintain the status quo if a significant investor believed that to switch to a Mid Tier firm would indicate 'opinion shopping' and therefore cast doubt on the company's own integrity as well as that of its potential new auditor.[28]

PwC

63. PwC agreed with the view that, provided the reasons for a change of auditor were explained in the usual course of business, switching auditor would not be a cause for concern. Of course, should a company change auditor more than once in a short period of time, this was likely to lead to queries from investors to understand the reasons for this.[29]

Influence of investors regarding companies' selection of their auditor

Questionnaires

64. The majority of investors said that they had no influence on auditor choice. Investors were able to vote at AGMs and some had voted against the board's recommendation in cases where there were concerns about conflicts (particularly in relation to non-audit services). AXA Investment Managers (in relation to its equity business) had previously voted against the reappointment of auditors because of concerns about the audited accounts. However, investors were not aware of auditors failing to be

[27] Kingston Smith response to CC working paper 'Views of investors and other stakeholders'.
[28] Kingston Smith response to CC working paper 'Views of Investors and other Stakeholders'.
[29] PwC response to CC working paper 'Views of investors and other stakeholders', paragraph 5(b).

appointed as a result (eg [✂]). Some investors noted their ability to discuss the audit when they met with the Chairman of the board to discuss governance and stewardship.

Hearings

Representatives of Institutional Investors

65. The Institutional Investors thought they had no meaningful influence on the initiation of the audit process, its operation, or output. They considered that auditors were unwilling to speak to shareholders since auditors had access to privileged information. This left the general meeting as the only forum where it would be possible to speak to the auditor. This rarely happened because the Chairman of the meeting controlled access to the auditor. On those occasions where investors had sought to put issues to the auditor, they had been blocked by the Chairman.

66. The representatives said that company management rarely discussed the choice of auditor with investors. Investors usually heard about a change in auditor only after it had taken place. ACCs equally did not discuss the issue with shareholders.

67. The Institutional Investors referred to some recent examples of engagement on audit issues. For TUI Travel, the switch of audit firms was forced by the controlling shareholder. In this case, the representatives thought that investor engagement had been fairly futile and time-consuming.

Hermes

68. Hermes considered that it was a challenge to try and influence the choice of auditor. It attempted to do this in dialogue with the ACC. It was possible for Hermes to have some contact with the ACC, and its success in influencing the auditor recommendation depended on the strength of its case. As a single shareholder (typically hold-

ing 1 per cent), it could not demand too much time with an ACC, and would only seek a meeting if it had a specific concern. It would aim to get this across in a single meeting, but occasionally it might have more than one.

69. It had more influence via this route than through the exercise of voting rights at AGMs. It was a huge logistical task to attempt to coordinate sufficient shareholders to be able to defeat a management recommendation. It was not aware of any instance where this had been successful. Most shareholders were not bothered by the choice of auditor.

BlackRock

70. The BlackRock investors could not recall an instance when they had voted against a management recommendation of an auditor at an AGM (although they noted that they had voted against management on other matters). They explained that if there was an issue in relation to corporate governance, they would seek to influence management in advance of the AGM vote. An issue in relation to the auditors would be unusual. They had not sought to try to cause a tender or switch of auditor.

Submissions from firms

Oxera survey on behalf of BDO and GT

71. Oxera reported that:

> The investors surveyed, especially the larger ones, would typically prefer more engagement and dialogue with the auditors of companies in which they invested, which would help them to derive more value from the audit process and to judge the relative strengths of different audit firms. However, in general, the interviewees do not want any radical change to investors' degree of involvement in auditor selection.

72. In reviewing Oxera's interview summaries, we noted that [✂] said that auditors did not, would not and sometimes could not talk to shareholders. There had been examples where the Chairman would block difficult questions raised by investors for the auditor.

Response to Investor Views working paper

KPMG

73. KPMG said that as a matter of fact, investors voted annually on the appointment of the auditor and had the opportunity to vote against any appointment. If enough investors held a consistent view then the resolution regarding the auditor appointment would not be passed. That this occurred rarely in practice was because insufficient numbers of investors voted against the proposed appointment.[30]

74. KPMG said it acknowledged, however, that investors had less perspective than company ACs on audit quality, primarily because they had less direct involvement in the process. Although enhanced reporting might improve their insight it would not eliminate the differential with the company's knowledge and understanding. Nor was it clear that all investors wanted an enhanced dialogue with the auditors even leaving aside the confidentiality constraints imposed on the auditors. For example, KPMG approached one institutional investor to ask whether it had any particular concerns on its audit clients that KPMG should be aware of and take into account in planning its audit. The response had not encouraged KPMG to repeat this experiment.[31]

75. Moreover, this position was no different to other matters of importance to shareholders where visibility was greater to the company's board. As a result the premise that the board was responsible for the governance of the company on behalf of its shareholders and reported to those shareholders on the stewardship of executive

[30] KPMG response to CC working paper 'Views of investors and other stakeholders'.
[31] KPMG response to CC working paper 'Views of investors and other stakeholders'.

management remained a fundamental concept of UK corporate governance. If this model did not allow boards to exercise appropriate stewardship over the external audit relationship (or shareholders could not rely on this to happen) then there would appear to be a more fundamental issue with UK (and, indeed, international) corporate governance.[32]

PwC

76. PwC recognized the general picture presented in the working paper from investors that in practice they exercised relatively little direct influence at the AGM and that to the extent they had issues they wished to raise with the company, including in respect of the auditor, there was a better chance of influencing management prior to the AGM. It said it was worth noting that investors did have certain rights that were available to them under the Companies Act and investors were able to influence companies in respect of the audit process.[33]

Additional outputs

77. In order to understand whether the audit process and report was satisfying end-user demand, we asked whether there were additional outputs from the audit process that investors would like to see.

Questionnaires

Investors

78. A wide range of ideas were raised in relation to whether there was more information that could be provided in the audit report. Some investors thought that the current format of the report was adequate (eg Alliance Trust) and others raised suggestions

[32] KPMG response to CC working paper 'Views of investors and other stakeholders'.
[33] PwC response to CC working paper 'Views of investors and other stakeholders', paragraph 5(b)(i) and (ii).

for additional information as set out below. In the main, investors who wanted more information were willing to pay more for this (as long as the price was reasonable).

79. Possible additional information:

(a) [✂]: an indication of the way in which firms' accounting policies differ from industry norms would be useful and an opinion on the level of disclosure would be helpful.

(b) [✂]: standardized and detailed disclosure of revenue and profits and assets by region and segment.

(c) [✂]: it would be helpful to know what issues, if any, the auditors had before issuing a clear opinion.

(d) Barings Asset Management: in terms of standardized required information, there was little scope for more information without further impeding timeliness of information—a working capital report would be useful.

(e) Alliance Bernstein: more clearly identify which numbers were fact and which were opinion.

(f) Aberdeen Asset: more information could usefully be included on audit outcomes—at present the audit report was 'boiler-plate'.

(g) Alliance Trust: the report could describe areas of discussion but a clean, ie non-qualified, audit suggests resolution.

80. Threadneedle suggested that three aspects of the audit report could be usefully enhanced to make it more useful and more open to evaluation:

(a) Enhance the scope of the Opinion to cover:

(i) the accounts being prepared on a prudent basis in addition to them, notwithstanding anything else, providing a true and fair view of the state of affairs of the business and its assets;

(ii) proper accounting records having been kept;

(iii) that, following the review of the assumptions made by the board in their assessment of the going concern, the conclusion and disclosures of related judgements and contingencies were complete and reasonable; and

(iv) distributions being properly made in accordance with the Companies Act, out of realized, distributable profits and reserves.

(b) Provide information:

(i) confirming (if applicable) that an enhanced AC report was complete and reasonable (including confirmation that it was an appropriate reflection of the key issues discussed between the AC and the external auditor);

(ii) on items that were the subject of significant accounting judgements or estimates (or confirm there were none);

(iii) on accounting judgements or estimates that were the subject of significant uncertainty or risk (or confirm there were none); and

(iv) on any areas or matters that the auditor had not obtained all the information.

(c) Emphasis of matter: the current framework (section 495(4)(b) of the Companies Act) should be strengthened to encourage more effective reporting on matters an auditor 'should reasonably' draw attention to rather than (just) those they may 'wish to' draw attention to.

(d) This should extend to the enhanced scope of the matters covered in the audit report outlined above.

Credit ratings agencies

81. For Fitch, there was nothing extra it would like to see. S&P, in addition to stating that that there was no specific information that it would expect to see within an audit report that was not currently there, also noted that whilst it did not generally comment on the structure or content of audit reports, on a case-by-case basis it might request additional information or clarification from the issuer about the report or its contents. [✂] did not have a 'house position' on this, although it pointed to two articles it had

recently published on related topics as examples of areas of relevant debate. These areas were: *(a)* going-concern warnings and *(b)* (specifically for the CIS region) financial information.

Hearings

Representatives of Institutional Investors

82. The Institutional Investors noted that there was significant debate under way within the FRC in the UK and the European Commission as to whether the audit report could be more informative. The representatives considered that the more important thing to develop at this stage was the AC report rather than the audit report itself. This was on the basis that in the first instance information should be provided by company directors rather than the auditor. The auditor's view of the AC report could also be important.

83. That said, more could be put into the auditor's report. In particular, the report could identify issues that had been scrutinized in detail by the company during the audit process. The Institutional Investors referred to the AC reports, and Global Disclosure Guidelines which set out guidelines on what could be included in an AC report, which investors would find useful and interesting.

84. In terms of additional disclosure, the Institutional Investors considered that it might be useful to understand what the five most contentious points discussed at the AC were. This would give investors an opportunity to discuss any issues with, for example, the AC if they wanted further information. Certain companies had volunteered more information regarding such key audit issues in recent annual reports (eg BAT, BP, Barclays).

85. The Institutional Investors thought that the quality of reporting would be improved if subjective issues (such as aggressive accounting treatments) were identified and investors notified. At the moment, the representatives considered that the disclosures were not useful. They noted that there were cases of significant variation in the numbers reported by financial institutions that held the same type of instruments, for the same purpose, even where those institutions had the same auditor.

86. The Institutional Investors thought that the reason for such anomalies was that the audit had become too much of a utility product. It was no longer differentiated on the basis of quality as very little judgement was required when undertaking an audit.

BlackRock

87. Further information that the BlackRock investors would have liked to see was an explanation of the differences between the cash flow and income statements. A discussion of the areas that management and the AC had debated most would also be helpful.

L&G

88. L&G suggested that the risk statements given by many companies could be more tailored: some companies listed 30 risks, which were too many, it clouded the information provided and it would be better for investors to be presented with a shorter list of key risks. The risks considered by the board included non-financial risks which depended on the company specifics such as reputational issues (eg the use of child labour, phone hacking etc). The Investor considered that the auditor was present at meetings where these risks were discussed and was likely to give a view to management on these. The auditor should therefore cover these risks in its review of the Annual Report. The Investor referred to this as 'integrated reporting' (ie

reporting on the linkages between strategy, governance and financial reporting) and wanted to see more companies adopting this approach.

Submissions from firms

Oxera survey on behalf of BDO and GT

89. In reviewing Oxera's interview summaries, we noted the following in particular:

(a) [✂]: The purpose of an audit was to provide a check on financial statements—investors would prefer to try and get a view on anything else directly from companies, rather than through the audit. Fund Managers may not feel comfortable with relying on an auditor to provide nuance and colour. It was not clear how this colour could be provided within the audit report and some investors might want certain information to remain private and not put into the financial statements.

(b) [✂]: Auditors were much too close to company management, in particular to finance staff and did not act in the best interests of shareholders. Although that was not to say that auditors did not fulfil what was required of them. The misalignment of incentives resulted in, for example:

(i) slightly more aggressive accounting practices than long-term investors would like to see, for example the banking sector, where certain accounting practices were accepted (eg recognition of profit upfront) that were not in the interests of long-term shareholders;

(ii) lack of transparency in accounting assumptions: long-term investors had a preference for simplicity and transparency, and when an auditor had become embedded to a company, there was a concern that they would include something complicated and potentially misleading; and

(iii) lack of colour: investors would appreciate more nuance, eg general commentary about how the accounts were put together and the relative

aggressiveness of accounting—but was not sure how this could be done given the cosy relationship between the auditor and management.

Other

90. As part of its submissions to the inquiry, PwC submitted information in relation to various surveys it had commissioned in 2011. Below we set out responses to questions associated with additional reporting.

YouGov survey

(a) Q5: Would you like to see increased disclosures in order to improve market confidence in corporate reporting and the audit process? Base 120:

(i) Yes: 49 per cent.

(ii) No: 51 per cent.

(b) Q6: (If YES to Q5) Which of the following increased disclosures would you support? Base 59:

(i) Enhanced disclosures by the audit committee: 53 per cent.

(ii) An expansion of the audit report: 61 per cent.

(iii) Other.

Ipsos MORI Global Executive Summary

(c) Opinion on the length of audit reports is evenly split for longer/more detailed or shorter/more succinct reports. The UK sees the greatest demand for shorter reports (59 per cent vs 33 per cent for the longer version). India, Singapore and Hong Kong tilt in the opposite direction, with opinion more evenly divided elsewhere.

(d) Very few respondents say the amount of disclosure around the existence and management of risk in corporate reports is currently too high but over half consider it to be too little. When looking at responses with regard to IFRS, there is very little difference between IFRS and non-IFRS countries. Four out of ten

respondents who would like to see more disclosure indicate that they would like it to be in the areas of financial/currency/investment/debt risk.

Audit today and tomorrow—PwC survey (interview of 22 investment professionals conducted in April/May 2011). Key messages

(e) The audit affects investment decisions, but audit reports themselves do not give meaningful information.

(f) Investors are selective about where additional transparency could be useful.

(g) Information on the 'behind closed doors' aspects of the audit would be valuable, but there would be concern if this constricted open debate.

(h) There was an appetite for more timely assurance.

(i) Assurance was sought on metrics and narrative that currently fell outside the audit's scope.

91. In terms of the additional information, investors would like to see PwC reported in its 2011 Audit Today and Tomorrow report:

> The investment professionals interviewed did not believe they currently received adequate information about the audit process; they offered suggestions of where more information would be valuable. These areas included: the auditors' debates with management; aggressiveness of accounting treatment; likely areas of material misstatement; and going concern. However, there were understandably significant concerns over the practicalities involved. In particular, they did not wish this further disclosure to limit the willingness of auditors, audit committees and management to engage in frank debates: as one investor said, 'If you don't have privacy, you don't have honesty'. They also saw no value in additional disclosure if this just resulted in more bland or formulaic reporting.

92. PwC and Deloitte both submitted copies of the ICAEW published survey of FTSE 100 ACCs (Brunswick Research):

Increasing openness is a balancing act

- Transparency is important, but its utility must be clear
  - Many ACCs feel they detail "discharge of responsibilities" already
- Additional reporting at risk of being boiler-plate
  - More data/verbiage does not necessarily equal better understanding
  - Danger of information overload (with 200 page annual reports)
- Reporting of internal discussions could reduce effectiveness
  - Confidentiality enables frank debate; issues would be taken offline
- Additional reporting needs to add real value

BUSINESS WITH CONFIDENCE icaew.com

Source: ICAEW.

Responses to 'Investor views' working paper

BDO

93. BDO said that there was ample support for its view that there had been a lack of innovation in the audit product, which operated to the detriment of investors and other stakeholders.[34]

94. BDO considered that we should note investor diversity and the consequences of that diversity in terms of different investors' perspectives on audit. Some investors were active long-term investors (eg pension funds), for whom audit was a significant issue given the importance to them of true and fair accounting. In contrast, others were

[34] BDO response to CC working paper 'Views of investors and other stakeholders', paragraph 3.2.

passive investors (eg those holding index tracker funds), to whom audit was a much less significant issue. The former category would therefore express the greatest concerns; these concerns should not be discounted or disregarded merely because different types of investors, who may have different priorities as a result of their different investment strategies, did not express similar concerns.[35]

95. BDO said investors' views showed there was:

(a) an unmet demand relating to the audit product;

(b) the evidence from investors strongly supported BDO's own view that there was an 'expectation gap' between what users of audited accounts expected to receive from (or assumed was provided by) the audit and what was actually provided by the auditors. This was due to the disconnect between the evolving nature of corporate communications and the relatively static nature of the audit product;

(c) the investors' views reflected the perceived deficiencies in the current audit product, exacerbated by a lack of innovation, which operated to the detriment of investors and other stakeholders;

(d) the lack of choice in the supply of audit services, identified as a key investor concern in the Oxera Investor Survey Report (although not addressed directly in the CC's working paper on the views of investors), was inextricably linked to the lack of innovation in the audit product, which operated to the detriment of investors and other stakeholders; and

(e) this feature of the market constituted, either by itself or in combination with other factors, an adverse effect on competition.

Deloitte

96. Deloitte said that in the past there had been a clear recognition that one of the advantages of the existing audit report format was that it was unequivocal and could

[35] BDO response to CC working paper 'Views of investors and other stakeholders', paragraph 7.

not therefore be misinterpreted. It said that in recent years there had been suggestions that more was included in the audit report. Deloitte was an active participant in discussions on this issue.[36]

97. Deloitte recognized that investors did not always agree with each other. The diversity of investor views was one reason why different stakeholders could point to investor views that were inconsistent or contradictory. In comparing the views of investors, Deloitte said it found it helpful to consider the value of funds that they managed. It said that whilst the views of investors with relatively small levels of funds under management could be just as valid as those of large investors, the size of funds under management could be more useful in considering what constituted a consensus, than relying purely on the number of investors.[37]

98. Deloitte said it was important to note that the content of the audit report—and the desire of some investors for more detail—was unrelated to the number of competitors in the market for statutory audit, or the dimensions of competition between market participants. The content and format of audit reports was determined by statute and regulators, not individual firms. It said that in the UK the format and content of the auditor's report were established by auditing standards (in particular, ISA (UK & Ireland) 700) and applicable legislation (in particular, the Companies Act 2006).[38]

99. Deloitte considered regulation to be a very important aspect of the market as it allowed auditors to understand what was required of them and it provided investors

[36] Deloitte response to CC working paper 'Views of investors and other stakeholders', paragraph 2.4.
[37] Deloitte response to CC working paper 'Views of investors and other stakeholders', paragraph 4.2.
[38] Deloitte response to CC working paper 'Views of investors and other stakeholders', paragraph 2.5.

with a framework for them to understand what the audit report was saying (and what it was not saying).[39]

100. Deloitte said that the CC should take note of the following in respect of the debate regarding audit reporting:

(a) Not all investors were calling for change and any changes needed to take account of the fact that investors were not a homogenous group.

(b) Moving away from a tightly prescribed form of audit report wording introduced the possibility that there was a lack of clarity and consistency of message between audit reports, making it harder for investors to interpret audit reports.

(c) Variability in the levels of disclosure between companies could impact capital markets through impacting share prices differently.

(d) Concerns around audit liability would most likely result in audit firms maintaining audit reporting around accepted norms.[40]

101. Deloitte said it was important to note that this issue was neither caused by a lack of competition between firms, nor did it lead to a lack of competition between audit firms.[41] It noted that audit reporting took a very similar form among groups of companies outside the reference market (eg in AIM where there was no difference in reporting with to FTSE 350 companies).

EY

102. On the issue of whether there was an 'unmet demand', EY considered that caution should be exercised by the CC in this regard. In particular:

(a) There was not a commonality of interest within any single category of stake-holder, let alone across the range of different categories of stakeholder. Although

[39] Deloitte response to CC working paper 'Views of investors and other stakeholders', paragraph 5.4.
[40] Deloitte response to CC working paper 'Views of investors and other stakeholders', paragraph 5.6.
[41] Deloitte response to CC working paper 'Views of investors and other stakeholders', paragraph 5.7.

some (but not all) institutional investors would like more to be included in the audit report, there was no consensus among institutional investors on what should be included, and therefore there was no clear consistent 'unmet demand'.

(b) Considerable regulatory attention had been focused on what, if any, additional features should be included in audit reports, with all interested parties having the opportunity to contribute their views. Significant proposals (which EY generally supported) were under consideration by appropriate regulators.[42]

103. In the absence of any clear evidence of consistent views on 'unmet demand', it would be inappropriate for the CC to draw any conclusions about the existence of 'features of the market leading to an adverse effect on competition'.[43]

104. EY said that the range of views was unlikely to be fully represented in the working paper, as the CC had limited its assessment to the views of a small number of stakeholders. In particular, although clearly important, the views and interests of institutional investors were not necessarily aligned with (for example) individual shareholders.[44] EY noted that some investors surveyed did not think that further information was necessary, whilst others expressed views as to what additional information should be included. It said that this raised the questions of whose 'demand' should be considered.

105. EY said that the audit report could be designed to address all of the issues that all of the shareholders in a particular company, and other interested stakeholders, would like it to include (to the extent that these issues could be determined), provided it met

[42] EY response to CC working paper 'Views of investors and other stakeholders', paragraph 4.
[43] EY response to CC working paper 'Views of investors and other stakeholders', paragraph 5.
[44] EY response to CC working paper 'Views of investors and other stakeholders', paragraph 7.

statutory and regulatory requirements. However, any such additional reporting would inevitably drive up the audit fee.[45]

106. EY made some preliminary observations in this regard:

(a) Whilst each shareholder or investor might be willing to pay for the additional reporting that they wished to see, they would be less willing to pay for the cost of an audit report that covered *all* of the areas and issues that *all* shareholders and stakeholders might wish to see included.

(b) The demand for any additional reporting or expanded audit scope would depend on the cost. As a result, in considering whether there was truly an 'unmet' demand, it was necessary to consider whether there would be demand for additional reporting given the likely cost of that additional reporting.

(c) The only stakeholders who paid (albeit indirectly) for audit services were shareholders, and it was for shareholders' benefit that audits were conducted and audit reports produced. Although other stakeholders (including potential investors) might find additional reporting useful, they did not pay for the audit.[46]

KPMG

107. KPMG said that while there was an important debate to be had about future reporting and the scope of audit, the current audit of historical financial statements continued to be critical for the millions of investors and those that made decisions on behalf of those investors. It was against this background that the question of whether there was an unmet demand from shareholders should be considered. In this context there were clearly divergent views as to what, if any, additional information should be provided about the audit and corporate reporting process, and if so, by whom—companies or auditors. The lack of progress on this front was not because of lack of

[45] EY response to CC working paper 'Views of investors and other stakeholders', paragraph 9.
[46] EY response to CC working paper 'Views of investors and other stakeholders', paragraph 9.

competition, but the lack of demand being presented to individual companies or their auditors particularly in the absence of any strong consensus emerging from investors. Collective action from regulators, companies and the audit profession was therefore needed to build that consensus.[47]

PwC

108. PwC said given the value placed by investors on the audit process, it did not recognize or accept the suggestion that Institutional Investors regarded the audit as a 'utility product' or that it was 'no longer differentiated on the basis of quality as very little judgement was required when undertaking an audit'. While some investors might have expressed this view, it was not consistent with PwC's own experience that investors understood that the audit of large companies was complex and involved the exercise of often significant judgement over a wide range of issues.[48]

109. PwC noted the wide range of views expressed by investors, from those that wanted no further disclosure or different outputs from the audit to those that wanted more information, for example about the areas of judgement exercised by the auditor. PwC said that it recognized there was potentially unmet demand from investors for greater insight from the audit process.

110. PwC noted that a number of items listed above were matters on which the company and not the auditors should report. Similarly, the reference to an explanation of the differences between cash flow and income statements was a matter for the company/ AC to report on rather than being appropriate for auditor reporting. Moreover, the reference to risk statements should be clarified as these were not part of the financial

[47] KPMG response to CC working paper 'Views of investors and other stakeholders'.
[48] PwC response to CC working paper 'Views of investors and other stakeholders', paragraph 5(a)(ii).

statements but disclosures included in a company's directors report/business review or in a prospectus filing.[49]

111. To the extent that there was unmet demand for investors in relation to information about the audit, PwC said that this reflected the regulatory framework and many companies' reluctance to disclose more information about the audit. However, this did not reflect any failure of competition in the audit market. PwC believed that through its initiatives with companies and those of regulators, a consensus could be achieved on improved reporting about the audit that would accord with the view of the majority of investors. It noted that the FRC had finalized and released its Effective Company Stewardship proposals and some of the things encouraged last year would now be mandated (for example, enhanced AC reports and auditor reporting thereon).[50]

Other

112. BDO made a number of comments related to other aspects of investor views.

Choice

113. BDO said in response to our working paper that we had made a material omission in not referring to the extent of investor concern at the lack of choice in the audit market.

114. BDO referred to the Oxera survey which said:

> All except one [investor] considered that there was a problem with choice in the large-company audit market … Only one investor surveyed considered that having four firms was enough … none of the investors surveyed thought that there was a genuine gap in capability

[49] PwC response to CC working paper 'Views of investors and other stakeholders', paragraph A1.7.
[50] PwC response to CC working paper 'Views of investors and other stakeholders', paragraph 6(c).

between the Big Four and mid-tier firms for the purpose of many FTSE 350 audits.

BDO also referred to the concerns of investors as expressed to the European Commission. A wide group of investors (managing €1.66 trillion on behalf of their members/investors) had stated openly their concerns about: 'Too few large auditors providing audit services to the largest listed companies.' The broader issue, therefore, was whether audit was providing sufficient assurance to capital markets.[51]

Principal–agent

115. BDO considered that much of the evidence referred to by the CC supported the CC's principal theory of harm relating to principal-agent issues. For example, the CC specifically stated that in reviewing Oxera's interview summaries, it noted that, according to one investor, 'auditors were much too close to company management, in particular to finance staff and did not act in the best interests of shareholders'. In addition, the CC cited the fact that investors who sought to put issues to the auditor had been 'blocked' by the ACC (who controlled access to the auditor). Moreover, the institutional investors were cited as thinking 'that they had no meaningful influence on the initiation of the audit'. Such evidence supported BDO's view that those who could benefit from changes—the true customers of the audit firms—had the least power to initiate such changes.[52]

[51] BDO response to CC working paper 'Views of investors and other stakeholders', paragraph 4.2.
[52] BDO response to CC working paper 'Views of investors and other stakeholders', paragraph 6.

Bundling of audit and non-audit services

Introduction

1. This appendix considers if there is evidence of a barrier to entry caused by firms bundling or tying audit services with other audit-related services or NAS as permitted by the rules on auditor independence. Audit firms can provide a variety of services to clients in addition to the statutory audit. The nature of these NAS differs and broadly refers to any non-statutory audit professional services provided by an audit firm to its client. Specific services provided in addition to an audit, but carried out by the audit team which closely relate to the audit are referred to as 'audit-related services'. The nature of audit-related services includes the role of reporting accountant for financial transactions and regulatory returns and providing additional information to those charged with governance. Other NAS include taxation, consulting and corporate finance advice among others.

2. In our issues statement we noted that bundling could take three forms:
   (a) 'pure bundling' (ie refusing to supply any of the individual services separately);
   (b) 'mixed bundling' (audit and NAS are available separately or bundled together at a lower price than the sum of the individual prices); or
   (c) 'tying' (ie one of the services is available individually but the other is available only if bought in a bundle).

3. This appendix considers the issues around bundling in three sections. We:
   (a) refer to the applicable regulations;
   (b) set out evidence from our case studies and review of tender documents with respect to the provision of NAS by the relevant auditor and any evidence of cross-selling during an audit tender process (including whether there is any indication of pure, mixed or tied bundling); and

(c) present quantitative analysis, to examine whether there is any evidence of price differentiation within the FTSE 350 on the basis of the level of NAS provided to clients. We use engagement profitability as a proxy for relative price in this analysis, to take account of differences in audit size and complexity. This gives insight into whether there is any evidence of 'mixed bundling' with respect to the fee charged for audit engagements.

Regulatory background

4. See 'Rules on non-audit services for audited entities' section in Appendix 8 for more detail on applicable regulation.

Ethical standards

5. In the UK, audit firms have been required to comply with ethical standards issued by the APB (part of the FRC), since December 2004.[1] The suite of standards requires auditors to exercise judgement as to an appropriate level of NAS provided to audit clients but do not restrict the general supply of NAS to audit clients. Firms are required to ensure appropriate policies are in place and these policies are reviewed by the Audit Quality Review Team (AQRT) during its annual review of auditors of Public Interest Entities (PIEs).[2]

6. *Ethical Standard 4: Fees, Remuneration, and Evaluation Policies, Litigation, Gifts and Hospitality* (ES4) covers the risks associated with financial dependence on clients. The standard states that: 'The audit engagement partner shall ensure that

[1] This was a consequence of the Co-ordinating Group on Audit and Accounting Issues, which was established by the UK Government. The suite of ethical standards was updated in 2008 and 2010. ES5 Non Audit Services provided to Audited Entities was also subsequently updated in 2011.
[2] There are, however, restrictions on the level of income that a firm can generate from a given client across all services as a proportion of total firm revenue.

audit fees are not influenced or determined by the provision of non-audit services to the audited entity.'[3]

7. As a result, firms are not allowed to differentiate their pricing on the basis of NAS. ES4 does not, however, prohibit reductions in fees achieved through efficiencies in the provision of both statutory audit and NAS.[4]

Regulatory climate

8. The collapse of Arthur Andersen led to an impetus to strengthen corporate governance and to further regulate the relationships that auditors had with their clients. The Ethical Standards, discussed above, introduced into the UK were part of this global response but were predated by the USA's 'Sarbanes-Oxley' Act (2002) (SOX) which incorporated statutory requirements on corporate governance of listed companies and the nature of the relationship between auditor and client, including the types of NAS that an auditor can provide.[5]

9. SOX has had international repercussions, as foreign subsidiaries of US companies, and foreign companies listing on US stock exchanges, must also comply with the act. Oxera in its 2007 report noted the view expressed by others that SOX influenced the UK Ethical Standards and that as a result there are similarities in the restrictions in NAS that an auditor can provide. Similarly, Oxera noted that compliance with requirements of SOX has not been limited to the audits of US-listed companies and subsidiaries, as audit firms worldwide have built them into their standard methodology. [6]

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[3] APB, ES4, *Fees, Remuneration, and Evaluation Policies, Litigation, Gifts and Hospitality*, paragraph 7.
[4] ibid, paragraph 9.
[5] For a further overview of SOX, see *Ownership rules of audit firms*, Oxera, 2007, p5.
[6] *Ownership rules of audit firms*, Oxera, 2007.

10. The Literature Review that the CC commissioned from Professor Vivien Beattie noted that post-Enron prohibitions on the provision of certain types of NAS led to large reductions in the amount of NAS provided by incumbent auditors.[7] One study by Deloitte (2009) reports NAS provision to FTSE 100 audit clients dropping from a peak of over 300 per cent of audit fees in 2001 to 75 per cent in 2008.[8]

11. Beattie (2009) examined the factors that had affected NAS decisions made by UK finance directors and noted four factors that have acted to decrease NAS fees. First, the enhanced role of the AC in developing policies for purchasing NAS, following the Combined Code (2003) and Smith Report (2003), has made ACs more conscious of the importance of auditor independence and therefore reluctant to buy services from their auditor. Second, increased scrutiny from activist investors and risk of adverse publicity. Third, ES5 has restricted auditors' ability to provide many services. Fourth, the UK audit inspection regime has deterred inappropriate NAS provision by auditors.[9]

12. Our analysis below (see Annex 1 to this appendix, Table 4) shows that whilst the level of NAS performed by auditors has decreased, audit fees have not fallen to the same extent (and indeed increased slightly in the FTSE 100 in the period 2006 to 2011).

Case studies, tender information and Market Financial Questionnaire responses

Case studies

13. Our case study interviews did not indicate any evidence of price differentiation, or bundling of services at the point of tender. Several companies stated that they

[7] The CC engaged Professor Beattie of the University of Glasgow to provide a review of key academic works that considered statutory audit and to identify work which would be relevant to the CC's investigation.
[8] See *Initial Review of relevant academic literature on the Audit Market*, Professor Vivien Beattie, 2012.
[9] ibid.

wished to maintain NAS at a low level and where NAS were purchased, there were policies and procedures in place to oversee this—these policies were focused on ensuring auditor independence.

14. The ACC of Company F said that the audit should not be a loss leader in the hope of the audit firm obtaining other work. It was not in the interests of the company or the auditor for the audit to be unprofitable.[10]

15. Other interviews highlighted that some NAS work would be cheaper for the auditor to perform than another firm, for example:

(a) At Company J, the AEP said that there were some services where it would be more cost-effective to use the auditor. These services were where an understanding of the systems and controls of the business were needed, for example tax compliance, tax advice, and client money reports to the FSA:[11]

(b) The ACC at Company H said that Class 1 transaction work was given to the external auditor, and whilst it could be done by another firm there was so much overlap with the audit that it made no sense for another firm to do it—'they would have to re-audit the thing'. From his experience as an auditor the ACC had undertaken this work instead of the external auditor and thought it was extremely inefficient.[12]

(c) The Group Financial Controller at Company G said that it was important that the auditor maintained independence and so the company was careful about the nature of non-audit work provided by it. This was limited to work that was assurance in nature, and where the auditor would already be up to speed through

[10] Appendix 2, Case study F, paragraph 61.
[11] Appendix 2, Case study J, paragraph 86.
[12] Appendix 2, Case study H, paragraph 87.

its audit work (there might also be a pricing benefit to the non-audit work as the auditors were familiar with the business area).[13]

Tender information

16. Our review of tenders noted a small number of examples of audit firms offering NAS at a discount of up to [✂] per cent. However, we found this to be a discount on standard charge-out rates and therefore the discount would not be very significant when considered with respect to the average revenue recovery rates achieved by the firm in question.[14] Further, the nature of NAS means that firms do not provide standardized services, and so it is not clear what benchmark of price this discount could relate to.

Survey

17. Our first survey of purchasers of audit services found that NAS was not a significant influence in the decision to select an auditor or as a reason to switch auditor:

    (a) 12 per cent of FTSE 350 purchasers of audit considered NAS expertise as important (and 57 per cent considered NAS expertise as not important).[15]

    (b) 11 per cent of FTSE 350 purchasers of audit thought that a disagreement or problem with the provision of NAS was 'likely' to prompt serious consideration of switching auditors.

Responses to Market and Financial Questionnaire

18. Our review of responses to our MFQ found no references to discounting the audit fee if a client also bought NAS. However, there were some instances where NAS were offered at a discount if that firm was selected as auditor.[16]

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[13] Appendix 2, Case study G, paragraph 47.
[14] [✂], one of the firms offering such a discount, recovered [✂] per cent of the value of labour measured using charge-out rates for its 2011 FTSE 350 audits, which is equivalent to a [✂] per cent discount.
[15] [✂]

Quantitative analysis

19. To investigate the effect of the level of NAS provision on profitability, we analysed a data set of engagement level data supplied by the firms for all periods from 2006 to 2011. This included information on audit and NAS revenues and the revenue recovery rate achieved on the audit.

20. An additional field, the ratio of non-audit to (UK) audit revenue (herein referred to as 'non-audit ratio'), was calculated by the CC.[17,18]

Proportion of companies receiving NAS from their auditor

21. Our engagement data set was used to assess what proportion of statutory audit clients receive NAS from their auditor and the results of this are shown in Table 1.[19] In this analysis, if the non-audit ratio for a client was less than 5 per cent, a client was classified as not receiving NAS.[20] Of the FTSE 100 companies, the average proportion receiving NAS from their auditor was 87 per cent in the period 2006 to 2011, and 82 per cent of companies in the FTSE 250.

22. The proportion of the FTSE 100 companies buying some level of NAS from their auditor was consistently higher than in the FTSE 250 index for the whole period: with between 2 and 8 per cent more of the FTSE 100 companies doing so and the difference over the period being five percentage points. There had been a decrease in the proportion of both FTSE 100 and FTSE 250 companies buying NAS, with a fall of six percentage points in both the FTSE 100 index and in the FTSE 250 index.

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[16] Appendix 23, paragraph 69. We believe that the discount is on scale rates, which in practice are not achieved by the firms and that few engagements if any achieve revenue equal to its scale rate value.
[17] If no NAS are provided, this would give a figure of 0, if non-audit revenue was equal to UK firm audit revenue, the ratio would be 1, and if non-audit revenue was higher than UK firm audit revenue the figure would be greater than 1.
[18] Additional data cleansing was performed on the data set to eliminate outliers of profitability.
[19] See Appendix 6 for details of data cleaning.
[20] It is necessary to set the threshold above zero, as there may be some delay in revenue recognition between years, which in practice means that very few entries in the data set show absolutely zero NAS revenue in a given year.

23. The proportion of other companies included in the data set that have bought NAS from their auditor was similar to the proportion of FTSE 350 companies but does not exhibit any trend over the period.

TABLE 1 **Companies receiving NAS from their auditor (5 per cent NAS ratio threshold)**

							per cent
	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Period*
FTSE 100	90.3	87.9	87.3	87.4	86.9	84.5	87.4
FTSE 250	85.6	85.9	85.0	80.1	78.7	79.5	82.4
FTSE 350	87.0	86.5	85.7	82.1	81.1	80.9	83.8
Other	85.5	87.0	88.7	84.2	82.6	83.9	85.3

Source: CC analysis.

Notes:
1. A threshold of NAS accounting for 5 per cent of the audit fee was used for this analysis to allow for any NAS revenue recognized by auditors in the year after the work was performed as a number of data points included revenue with few or no hours reported.
2. The number of firms in each FTSE index is not consistent due to changes in the index composition and differences in reporting years of each audit firm and their clients, which may lead to over- and under-counting in different periods.
3. 'Other' includes other listed companies that were members of the FTSE 350 at some point during this period and includes large private companies in the 'top track 100'.

24. As shown in Annex 1 to this appendix, Table 1, the proportion of FTSE 350 companies paying any amount to their auditor for NAS also fell, with a similar trend for companies outside of the FTSE 350.

Value of NAS received from auditor compared with audit fee

25. We considered the relative value of NAS to audit fees over the period 2006 to 2011 (see Annex 1 to this appendix, Tables 2 and 3). The median ratio of NAS fees to statutory audit fees for FTSE 350 companies was less than 50 per cent (Annex 1, Table 3). NAS fees were lower than the UK audit fee for 74.4 per cent of FTSE 350 companies (Annex 1, Table 2). NAS fees for 54.2 per cent of FTSE 350 companies were less than half the UK audit fee (Annex 1, Table 2).

26. The data showed a steady upwards trend in the proportion of FTSE 350 companies where the value of NAS revenue was less than 10 per cent of the UK audit fee;

increasing from 16.5 per cent to 23.1 per cent in the period 2006 to 2011.[21] Conversely, the proportion of FTSE 350 companies buying NAS valued at more than 50 per cent of the audit fee fell by 12.9 percentage points (to 40.4 per cent), of which 8.2 percentage points of this decrease related to companies buying NAS with a value higher than the audit fee (see Annex 1, Table 2).

27. We analysed the median NAS ratio (see Annex 1, Table 3) and found that the median for FTSE 100 companies was lower than for FTSE 250 companies. The median has decreased over the period 2006 to 2011 in the FTSE 100 and the FTSE 250.

Discussion

28. The downwards trend in the proportion of companies buying NAS (see Table 1 above) and the level of NAS fees relative to audit fees (Annex 1, Tables 2 and 3 appears to be consistent with the trend identified in the literature review.[22] The continuing downwards trend is also coincident with recent corporate governance requirements including the FRC's *Guidance on Audit Committees* which was reissued in 2008 and required ACs to disclose the basis for their decision in appointing their auditor and any policies on the level of NAS.[23] In March 2009 the FRC also opened a consultation on revising the 'Combined Code' (which was subsequently replaced by the 'UK Governance Code').

29. Auditors have also been subject to more stringent ethical standards on NAS with ES5 (originally issued in 2004) having been reissued in 2008 and revised in 2010. There

[21] Note that in this analysis, only clients where zero NAS revenue is recorded are included as 'no non-audit'.
[22] Section 2.5, *Initial Review of relevant academic literature on the Audit Market*, Professor Vivien Beattie, 2012.
[23] FRC, *Guidance on Audit Committees*, October 2008, paragraphs 4.26–4.34 and which had been in consultation prior to publication. The revised guidance was in response to Market Participants Group's report on promoting choice in the audit market, published in October 2007. The guidance was again revised in December 2010 and September 2012.

has been a gradual increase in clarification over what services are appropriate for auditors to provide and how fees are charged (such as prohibiting contingent fees).

Nature of NAS provided

30. Our data set captures eight different types of NAS and Table 2 shows the value of the revenues from each of these.[24] Not all firms were able to categorize their NAS into these categories and as a result there may be some differences in classification between firms.[25]

31. Revenues from five of the eight categories have decreased over the period 2006 to 2011, including both Tax and Transactions, the two largest sources of NAS revenue. The three services that have shown positive growth in the period, IT, Restructuring and Risk Assurance are also the three smallest categories with respect of revenue (both at the beginning and end of the period), although as noted in paragraph 32 not all firms could identify these as separate service lines.

32. Due to the disparate nature of NAS and the large number of suppliers of NAS/ professional services (which may be considerably greater than existing and potential audit market participants), the proportion of the total value of NAS/professional services undertaken by companies' statutory auditors is not easily calculated. Whilst a large number of companies may use their auditors for some NAS, the value of this may be small in comparison with the total value of NAS/professional services supplied to the company.[26]

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[24] The eight are: Tax, Transactions, Corporate Finance, Restructuring (including Forensics and Business Recovery Services), Consulting, Risk Assurance Services, IT, and Other.

[25] Deloitte, GT and PwC could not identify IT separately; Deloitte, GT and [✂] could not identify risk assurance separately; BDO and [✂] could not identify consulting separately; and EY could not identify corporate finance separately. This is due to the data structure of firms' business systems which categorize specific products differently and also because of changes in the way this data is recorded over time.

[26] Financial statements of companies may report the value of professional services, but this will include a much broader range of services than those provided by the firms supplying audit.

TABLE 2 **Level of NAS provided by audit firms to their FTSE 350 audit clients**

£'000

	2006	*2007*	*2008*	*2009*	*2010*	*2011*
Values						
Tax	94,448	88,934	89,067	80,874	75,815	71,314
Transactions	83,052	84,260	78,208	74,171	73,284	54,031
Corporate Finance	11,819	7,661	14,493	6,936	3,797	5,691
IT	1,965	1,877	3,232	2,596	2,379	3,565
Restructuring (including Forensics and Business Recovery Services)	1,889	2,100	2,411	6,145	3,194	2,886
Risk Assurance Services	5,338	7,213	9,872	8,365	10,189	12,953
Consulting	12,248	9,902	9,988	10,289	8,722	9,920
Other	37,668	21,851	22,010	14,517	22,864	21,327
Total	248,426	223,799	229,281	203,893	200,245	181,689
Indexed (2006 = 100)						
Tax	100	94	94	86	80	76
Transactions	100	101	94	89	88	65
Corporate Finance	100	65	123	59	32	48
IT	100	96	164	132	121	181
Restructuring (including Forensics and Business Recovery Services)	100	111	128	325	169	153
Risk Assurance Services	100	135	185	157	191	243
Consulting	100	81	82	84	71	81
Other	100	58	58	39	61	57
Total	100	90	92	82	81	73

Source: CC analysis.

33. Table 3 shows that the relative contribution of each service line to NAS revenue has remained largely steady with a movement of at most four percentage points for any of the eight service lines over the period. Tax and transactions, the two largest service lines have together generated between 69 and 77 per cent of NAS revenue over the period.[27]

TABLE 3 **Composition of NAS provided to FTSE 350 companies by the company's audit firm (of total NAS)**

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Movement*
Tax	38	40	39	40	38	39	1
Transactions	33	38	34	36	37	30	–4
Corporate Finance	5	3	6	3	2	3	–2
IT	1	1	1	1	1	2	1
Restructuring (incl Forensics & Business Recovery Services)	1	1	1	3	2	2	1
Risk Assurance Services	2	3	4	4	5	7	5
Consulting	5	4	4	5	4	5	1
Other	15	10	10	7	11	12	–3

Source: CC analysis.

[27] When 'other' is included with tax and transactions, the range is between 81 and 87 per cent of NAS.

Assessment of effect of NAS on profitability

34. To establish whether there is any evidence of firms strategically pricing their audits to obtain NAS work, we applied average hourly staff cost rates calculated by the firms to the engagement database, which includes the number of hours of staff time by grade employed on audit engagements.

Method

35. The level of NAS was considered for each year's audit engagement and compared with the UK audit fee (net of any international costs). Each year's engagement was classified as either being under 10 per cent, 10 to 25 per cent, 25 to 50 per cent, 50 to 100 per cent and over 100 per cent. The average engagement profit was then calculated for each category and each year, and summarized.

Analysis

36. Table 4 shows this relationship for the six largest firms. The highest engagement margins from audit engagements in nearly all cases (five out of six years) were from audit engagements where no NAS were supplied. Margins then appear to decrease as the level of NAS increases. The range in average engagement profitability is at most 8.6 per cent in a given year, and 5.0 per cent on average.

37. Based on this data, there appears to be a link between increased NAS and decreased audit profitability.

TABLE 4 **Engagement profitability by level of NAS (largest 6 firms, all clients, total hours, including partners)**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Average*
No NAS	64.9	61.5	63.7	62.3	63.0	62.4	62.9
Under 10	58.6	61.0	59.0	61.1	61.8	59.0	60.2
10–25	62.7	59.4	61.5	61.7	63.0	61.1	61.5
25–50	60.1	56.8	62.6	59.5	62.4	58.0	59.9
50–100	56.2	60.4	58.1	57.3	58.4	56.5	57.8
100+	56.0	57.7	56.8	58.1	57.6	60.4	57.7
Average	58.4	58.8	59.4	59.5	60.3	59.3	59.3

Source: CC analysis.

38. Table 5 repeats the analysis above, for FTSE 350 clients, and a similar trend is observable, albeit with a less pronounced relationship between profitability and the level of NAS provided.

TABLE 5 **Engagement profitability by level of NAS (largest 6 firms, FTSE 350, total hours, including partners)**

per cent

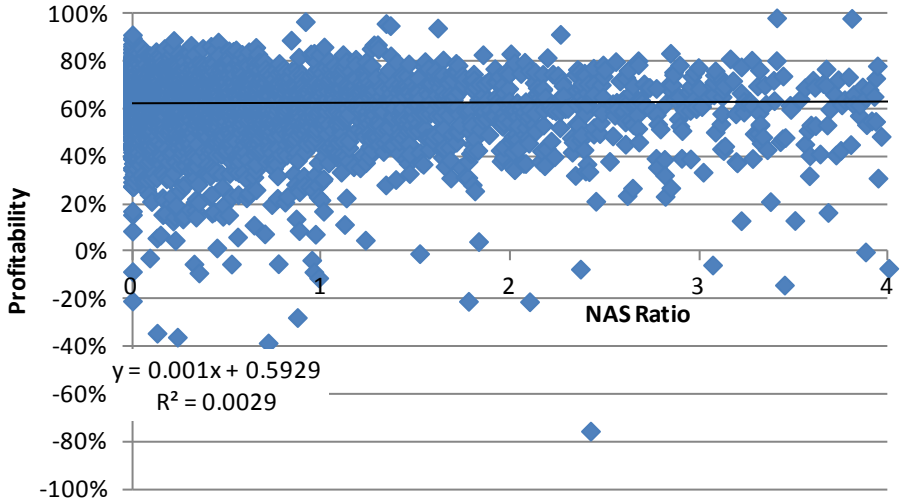
	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Average*
No NAS	65.8	63.6	65.3	65.0	65.8	61.1	64.2
Under 10	58.7	61.0	57.2	60.6	61.2	57.4	59.5
10–25	63.2	59.8	62.3	63.6	61.4	59.5	61.6
25–50	58.0	57.3	61.3	59.4	60.6	58.8	59.3
50–100	54.9	59.4	58.3	58.0	57.9	54.7	57.1
100+	57.5	56.5	57.4	57.4	55.8	59.6	57.3
Average	58.3	58.6	59.6	60.0	59.7	58.4	59.1

Source: CC analysis.

39. However, the above analysis depends on arbitrary bandings of NAS and the categorization of each data point. If there are outlying profitability figures, these will skew the relative profitability of that category. If the level of NAS is plotted against audit profitability, as shown in Figure 1, there does not appear to be any meaningful relationship between the level of NAS and engagement profitability, with an R^2 value of 0.03 per cent, indicating that there is not a clearly observable link.

FIGURE 1

Relationship between engagement profitability and NAS provision



Source: CC analysis.
Note: Scale truncated and visible chart area excludes some data points to prevent identification of profitability of companies which purchase very high levels of NAS.

40. We performed a final analysis which considered the median level of NAS (as a percentage of UK audit fee) in each year in the FTSE 350 from the six largest audit firms and compared this with the profitability achieved in audit engagements. Engagements in each year where NAS provision was above the median were labelled as 'high' and those where NAS provision was below the median we labelled 'low'.

41. Table 6 shows the result of the analysis. For the period 2006 to 2011, the average engagement profitability for engagements where provision of NAS provision was classified as 'high' was between 0.9 and 4.1 percentage points less than for 'low' NAS provision each year, with an average difference of profitability of 2.5 percentage points. This is consistent with the results shown in Table 4 which indicated a broad trend in decreasing profitability with increasing level of NAS.

TABLE 6 **Average engagement profitability for engagements with 'high' and 'low' provision of NAS (largest 6 firms, FTSE 350)**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Total*
High	56.6	58.3	58.6	58.5	57.3	57.4	57.8
Low	60.4	59.1	60.8	61.1	61.4	58.8	60.3
Difference	3.8	0.9	2.2	2.6	4.1	1.3	2.5

Source: CC analysis.

Note: High and low refer to whether the level of NAS is above or below the median level NAS ratio.

42. However, the FTSE 350 is not composed of homogenous companies, and apparent differences in profitability as observed in Table 6 may be driven by underlying differences in the nature of companies. We examined the data by industry as shown in Annex 1 to this appendix and we compared engagements with 'high' and 'low' levels of NAS for each industry (to see if any trend was evident when only considering engagements in a single industry); however, this did not show any conclusive evidence of a link. This analysis does not attempt to control for other variables which may be associated with different levels of NAS and profitability.

Views of the firms

43. In responding to our 'Bundling' working paper, BDO commented that 25 per cent of the FTSE 350 received NAS from their auditor to a greater value than the audit fee. BDO believed that this would give rise to a threat to auditor independence.

44. KPMG stated that ethical standards and corporate governance requirements, overlaid with independent inspections, limited the scope for bundling. KPMG stated that in its experience, ACs and companies discharged their duties to shareholders diligently and this included the scrutiny of the level and type of non-audit services provided by their external audit firm. Both KPMG and PwC commented that the trends in the level of NAS provided to audit clients were broadly consistent with their experience.

Discussion

Regulation

45. The regulations in ES4 surrounding NAS provision create a restriction on NAS acting as a barrier to entry, as firms are not permitted to alter the pricing of an audit on the basis of provision of NAS (see paragraph 8).

46. The regulatory climate has resulted in increased scrutiny on auditors providing NAS and so the opportunities for firms to bundle products have been reduced. A number of factors are at play to both discourage companies from buying NAS from their auditors (corporate governance requirements) and to discourage audit firms from supplying them (ethical requirements).

Case studies and tenders

47. Companies stated that they had adopted policies regarding the purchase of NAS from their auditor. These policies included limits on the level of NAS and the need for AC authorization, and the use of multiple suppliers. Some companies in the case studies stated that they actively chose not to use their auditor for NAS. However, they noted that for some types of non-audit work, such as acting as a reporting accountant, the use of the existing auditor was the most practical option. The companies' policies were focused on ensuring auditor independence—this focus may reduce the opportunities for firms to bundle audit work and NAS.

48. Some of the case study respondents considered that for certain NAS it was more efficient and less costly for the auditor to do the work (see paragraph 16).

49. In our auditor selection work we have found examples of firms offering discounts on NAS (if coupled with the audit), but not on the audit fee itself. These discounts would reduce the overall profitability of a firm's relationship with the client, but the audit fee

is not contingent on NAS being provided, so this does not appear to support our theory of harm. Furthermore, we do not believe that the level of discount offered on NAS is in practice a discount on the open market rate that a firm might charge for those services and we are not able to comment on whether such discounting excludes firms which are not the auditor from providing these services to develop a client relationship.

Quantitative analysis

50. Almost all companies in the FTSE 350 receive some level of NAS from their statutory auditor. 87 per cent of the FTSE 100 companies receive NAS to a value of more than 5 per cent of their UK audit fee and the figure for the FTSE 250 companies is 83 per cent. The median ratio of non-audit to audit services for FTSE 100 companies is 44 per cent and 53 per cent for FTSE 250 companies.

51. The proportion of companies that buy NAS from their statutory auditor is declining, and the value of those NAS is also declining. Tax and transactions generate the largest value of NAS revenue for statutory auditors and revenues from these services have declined. Restructuring, Risk Assurance and IT consulting have all increased, but generate relatively low revenues.

Additional quantitative analysis

Proportion of companies receiving NAS from their auditor

1. Table 1 shows the proportion of all companies paying any amount of fee to their auditors for NAS. Analysis of the distribution of the data points indicates a relatively large number of companies paying close to zero fees for NAS (rather than an equal distribution within the 0 to 5 per cent band).

TABLE 1 **Companies receiving any NAS from their auditor**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Period*
FTSE 100	99.0	98.9	99.0	98.0	99.0	95.1	98.2
FTSE 250	91.7	92.6	90.1	88.7	87.5	86.5	89.5
Other	90.4	91.9	93.1	90.6	91.2	90.9	91.4

Source: CC analysis.

Level of NAS purchased by companies from their auditor

2. Table 2 shows the level of NAS purchased by companies in the FTSE 350 index.

TABLE 2 **Level of NAS purchased by FTSE 350 from their auditors**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Total*
Nil	6.1	5.6	7.3	8.7	9.1	11.0	8.0
0–10	10.3	9.8	12.6	16.2	15.6	12.1	12.8
10–25	13.6	16.6	14.4	15.4	14.7	14.4	14.9
25–50	17.3	16.9	18.2	18.7	18.7	22.0	18.7
50–100	24.2	19.3	21.4	18.7	18.7	19.2	20.2
100+	28.5	31.8	26.1	22.3	23.2	21.2	25.4
Data points	330	337	341	358	353	354	2,073

Source: CC analysis.

Median non-audit ratio

3. Table 3 shows that the median non-audit ratio for the different categories of companies. In the period 2006 to 2011, the median non-audit ratio in the FTSE 100 index fell by 8.7 percentage points to 41.4 per cent, whilst the decline in the FTSE 250 index was even more marked with a 26.2 percentage point decrease. Within

these trends have been a number of significant year-on-year changes, such as in 2008, when the median non-audit ratio for the FTSE 100 increased by 14.0 percentage points before falling by some 20.4 percentage points in 2009. Also in 2008, the FTSE 250 median non-audit ratio fell by some 12.7 percentage points. This may have been triggered by certain companies moving between the FTSE 100 and 250, or another underlying reason.[1]

4. In non-FTSE companies there was less evidence of any specific trends, but more year-on-year volatility in the non-audit ratio.

TABLE 3 **Median level of NAS revenue as a proportion of UK audit fee (excluding companies not receiving NAS)**

per cent

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*Period*
FTSE 100	49.0	44.9	57.7	37.4	38.6	41.4	49.0
FTSE 250	71.4	64.1	51.1	41.3	48.4	45.2	71.4
FTSE 350	61.5	58.1	53.9	39.7	44.2	44.1	61.5
Other	75.0	89.0	71.4	61.7	70.3	80.8	75.0

Source: CC analysis.

5. Table 4 shows the relative movement in audit fees and non-audit revenue for those companies that receive NAS from their auditor. NAS revenue for both the FTSE 100 and FTSE 250 showed similar trends, and decreased by 25 and 28 per cent respectively in the period 2006 to 2011. Audit fees in both the FTSE 100 and FTSE 250 did not show such a strong pattern of decline, with the FTSE 100 increasing slightly indicating that the decrease in the NAS ratio in Table 3 is due to decreases in NAS revenue rather than significant increases in audit fees.

[1] The median should be less susceptible to individual data points than the mean.

TABLE 4 **Audit and non-audit fees in the FTSE 100 and FTSE 250 indexed (2006 = 100)**

	2006	*2007*	*2008*	*2009*	*2010*	*2011*
FTSE 100						
Audit fee	100	104	102	110	112	107
NAS fee	100	79	96	80	86	72
FTSE 250						
Audit fee	100	104	100	101	87	90
NAS fee	100	108	86	85	71	75
FTSE 350						
Audit fee	100	104	101	107	104	102
NAS fee	100	90	92	82	81	73
Other						
Audit fee	100	123	135	138	128	120
NAS fee	100	157	124	114	120	128

Source: CC analysis.

The effect of NAS on profitability

6. If the FTSE 350 for the years 2006 to 2011 is examined by industry as shown in Table 5, then it appears that the level of NAS relative to UK audit fees varies hugely by industry, with the average level of NAS in healthcare companies being 47 per cent, whilst in consumer services the figure is 248 per cent of UK audit fee.

7. Reviewing the relative number of data points for each industry (which is a function of the number of companies in that industry that were in the FTSE 350 in each year in the period 2006 to 2011), it appears that three categories of industry dominate the composition of the FTSE 350 (consumer services, industrials, and financials), accounting for some 1,472 of the data points (69.6 per cent of data points) and as such, it means that the profitability of these industries (the average engagement profitability of each industry varies from 53 to 65 per cent) will have a significant effect on average profitability for the category in which those engagement lie (eg ‘high’/‘low’, or other bandings as above). There may be other relationships driven by the structure of the FTSE 350.

TABLE 5 **Average level of NAS and engagement profitability by FTSE 350 industry**

			per cent
	NAS	*Profit*	*Data points*
Consumer services	223	58.3	417
Basic materials	213	61.9	113
Utilities	145	59.7	68
Industrials	138	52.8	442
Consumer goods	117	55.3	169
Oil and Gas	107	59.5	108
Technology	102	59.0	96
Financials	96	64.6	609
Telecommunications	67	59.1	42
Health care	47	56.9	47

Source: CC analysis.

8. Taking this analysis a step further and comparing engagements with 'high' and 'low' levels of NAS for each industry (to see if any trend is evident when only considering engagements in a single industry) shows that some industries, such as Oil and Gas exhibit a wider difference in engagement profitability between 'high' and 'low' NAS companies, whilst other such as telecommunications show almost no difference in average engagement profitability.

TABLE 6 **Profitability by level of NAS relative to median for FTSE 350 companies 2006 to 2011 by industry**

		per cent
	High	*Low*
Oil and Gas	54.2	65.3
Basic materials	63.8	60.1
Industrials	51.5	54.1
Consumer goods	53.4	58.6
Health care	56.1	57.5
Consumer services	57.2	59.6
Telecommunications	59.2	59.0
Utilities	58.5	61.0
Financials	65.1	64.3
Technology	56.9	61.3

Source: CC analysis.

Note: High and low refer to whether level of NAS is greater than or less than the median NAS ratio for all FTSE 350 companies in all years.