Competition and choice in the UK audit market

Prepared for
Department of Trade and Industry
and Financial Reporting Council

April 2006
Executive summary

Key findings of this report

– The Big Four audit firms—Deloitte & Touche, Ernst & Young, KPMG and PricewaterhouseCoopers (PwC)—audit all but one of the FTSE 100 companies, and represent 99% of audit fees in the FTSE 350. The high degree of concentration in the market became more marked after the Price Waterhouse/Coopers & Lybrand merger in 1998 (six-to-five) and the dissolution of Arthur Andersen in 2002 (five-to-four). In addition, switching rates are low (around 4% on average for all listed companies, 2% on average for FTSE 100 companies), and competitive tendering does not occur frequently.

– Reputation is an important driver of choice, favouring the Big Four, whether this is based on real or perceived differences with the mid-tier firms. In the perception of most FTSE 350 companies, the Big Four are better placed to offer two key components of the audit product: value-added services on top of the audit itself, and insurance against catastrophes and reputational risk. The Big Four are also perceived to have greater capacity and international coverage to deliver the third key component: the technical audit itself.

– Oxera has found evidence that higher concentration has led to higher audit fees (in line with economic theory and with several other recent empirical studies). While there is a degree of price sensitivity among companies, and some bargaining on fees takes place during the annual audit firm reappointment process, in general the focus of audit committee chairs is more on quality (and reputation) than on price. Separately from the impact of concentration, audit fees seem to have risen in recent years as a result of cost increases, caused by factors such as changes in regulation.

– On the question of choice, Oxera has found that a limited number of UK-listed companies, primarily in the financial services sector of the FTSE 100, have no effective choice of auditor in the short run. This elimination of choice is driven by high market concentration, auditor independence rules, supply-side constraints, and the need for sector expertise.

– Oxera’s analysis of the economics of entry/expansion by mid-tier firms into the FTSE 100 and FTSE 250 segments indicates that the current market structure is likely to persist. Substantial entry is unlikely to be attractive, due to significant barriers, including the perception bias against mid-tier firms, high costs of entry, a long payback period for any potential investment, and significant business risks when competing against the incumbents in the market.

– The loss of another Big Four firm (four-to-three) would exacerbate problems around auditor choice, requiring regulators to make exceptions to auditor independence rules. A lack of audited accounts in the event of a Big Four firm exit would be a significant concern for investors, who also worry about the consequences for audit quality of a further increase in audit market concentration. In the event of a four-to-three scenario, Oxera’s analysis indicates that only if the existing barriers, in terms of perception/reputation and low switching rates, could be reduced might substantial market entry by mid-tier firms become feasible.
Oxera's findings are set out in more detail below.

**Context and scope of the study**

This Oxera study on competition and choice in the audit market was commissioned in September 2005 by the Department of Trade and Industry (DTI) and the Financial Reporting Council (FRC). A number of recent developments have highlighted concerns about the state of competition and choice in the audit market, in particular in relation to the highly concentrated market structure, with the Big Four audit firms dominating audits for the larger listed companies, in both the UK and globally, and the possibility of this becoming the ‘Big Three’ if one of them exits the market. The top 10 accounting firms generate UK audit fee income of over £1.5 billion annually, but the significance of the audit market is much broader than this, given that the credibility of financial statements depends critically on audit services.

Although concerns about the audit market are widespread across the investment community, companies and regulators globally, there is as yet little robust analysis of the underlying market dynamics in auditing. The aim of this Oxera study is to contribute to the understanding of the audit market by analysing in depth the factors that determine companies’ choice of auditor, and the dynamics of the market structure.

There has been a substantial amount of debate on the audit market over the last few years in the UK and abroad. There has been concern about increased concentration since at least 1989, when two mergers reduced the then Big Eight firms to the Big Six. There is also a wide range of policy issues that are being addressed by different institutions across different jurisdictions, including:

- concerns about auditor independence and quality—the dissolution of Arthur Andersen in 2002 intensified this debate, and led to new rules and practices in many jurisdictions, most notably the Sarbanes-Oxley Act 2002 in the USA;
- the new regulatory framework in the UK—in particular, establishing the FRC’s new regulatory powers in 2004;
- current reforms of company law, the Eighth Company Law Directive on statutory audit, and the debate on auditor liability at the UK and EU level.

It is therefore important to explain in detail the scope of the Oxera study and how it relates to the other initiatives. Specifically, Oxera’s report:

- contains an objective market analysis, and does not intend to make policy recommendations;
- focuses on the UK, while fully recognising the important links with auditing at the global level;
- deals primarily with market structure and choice in auditing, and not (or to a much lesser extent) with issues such as the impact of regulation, quality, conflicts of interest, or anti-competitive conduct in the market;
- explores the impact of market structure and choice mainly on the larger UK-listed companies, as it is for these companies that the broader policy concerns for a well-functioning audit market are potentially most acute.

**Methodology and data sources**

During the course of the study, Oxera has undertaken four main analytical workstreams.

- A total of 67 in-depth interviews with stakeholders, including the Big Four audit firms, the ‘mid-tier’ audit firms, regulators, industry bodies, chairs of audit committees of UK-listed companies, chief executive officers/finance directors of UK-listed and private companies, institutional investors and their advisers, and other experts.
– A telephone survey of 50 chairs of audit committees of UK-listed companies. The survey was designed and analysed by Oxera and carried out by market research agency, MORI.

– Statistical/econometric analysis of a representative dataset of more than 700 UK-listed companies from across the spectrum of market segments and industries, covering the period from 1995 to 2004 (referred to in the report as the Oxera panel dataset). This database has been compiled by Oxera specifically for this study using data obtained from FAME.

– Development of a strategic entry model, to explore the financial barriers to mid-tier audit firms expanding into the provision of audit services to FTSE 350 companies. Oxera received input from a number of Big Four and mid-tier firms on key parameters for the model.

In all, Oxera is confident that a sufficiently wide range of views from across the financial markets has been gathered, and a large pool of expertise and experience on the audit market has been tapped into. Oxera spoke to each of the Big Four and larger mid-tier firms. The interview programme and survey together covered a total of 69 UK-listed companies, of which 19 are in the FTSE 100, as well as many other stakeholders.

Oxera’s report is structured on four themes:

– the dynamics of auditor selection;
– market concentration;
– market outcomes; and
– market dynamics going forward.

Key findings on each of these themes are summarised below.

The dynamics of auditor selection

Auditor selection
The audit market contains several features that distinguish it from other product markets. In particular, although the formal audit product output is fairly standardised, what the direct clients (ie, companies) demand and receive is a more varied and more complex product, broadly comprising three parts: the technical audit, value-added services on top of the audit itself, and insurance against catastrophes and reputational risk (this insurance component in part reflects an ‘IBM effect’). Oxera’s interviews and survey reveal that the Big Four firms are currently perceived to be better placed than the mid-tier firms to offer the last two components, and are also perceived to have greater capacity and international coverage to deliver the technical audit itself.

In line with current regulations and best practice, audit committees play the most important role in the process of auditor selection, although the research highlights that, in practice, company management (in particular, finance directors) also continue to be highly influential. The views of other stakeholders are given less weight, and there seems to be only very limited direct communication between companies and investors regarding auditor selection.

For most companies, the most important determinants of choice are reputation, sector-specific skills, international coverage, and quality of staff. In addition, the need to ensure that the company receives a high-quality audit generally reduces the sensitivity of demand to price changes, as there is a perceived trade-off between price and quality.
With respect to each of the choice factors, there are significant differences between the Big Four and the mid-tier firms, whether these are perceived or real. Less than 10% of FTSE 350 companies surveyed would consider using a mid-tier firm. It is of note that many audit committee chairs actually say they do not know the mid-tier firms that well, which again highlights the importance of perceptions and reputation in this market.

**Tendering and switching**

Auditors are subject to reappointment every year, and some bargaining on price and other conditions tends to take place during the reappointment process. During this bargaining, the company can, to some degree, threaten to switch auditor if satisfactory terms cannot be agreed upon.

Tendering is a more formal process initiated by a company to select an auditor from among the invited bidders. Tenders can be highly competitive (data suggests that incumbents only win in one-third of cases). However, they also occur infrequently—nearly 75% of the companies surveyed tender only once every five years or less, and more than 70% of the FTSE 100 have not held a competitive tender in the last 15 years. Organising tenders, and then changing auditors, can be costly, to both auditors and companies.

Switching rates in the market are low—around 4% per year on average for listed companies (and less than 3% for FTSE 350 companies). Few companies have an explicit policy of switching auditors at regular intervals. Oxera's econometric analysis suggests that clients of the leading audit firms are even less likely to switch than the average.

**Market concentration**

The audit market in the UK is highly, and persistently, concentrated. Concentration has increased over the last ten years mainly due to the merger of Price Waterhouse with Coopers & Lybrand (1998) and the folding of Arthur Andersen UK into Deloitte (2002).

There are material differences between the Big Four audit firms and the mid-tier firms. In particular, there is a significant gap, in terms of size, between the largest of the mid-tier firms and the smallest of the Big Four. Although, within the UK, PwC is significantly larger than the second-largest firm, worldwide the Big Four are more evenly matched.

Two segments of the market—FTSE 100 and FTSE 250—are supplied audit services almost exclusively by the Big Four, which audit all but one FTSE 100 companies, and 242 FTSE 250 companies. The other segment of the market—smaller listed companies—is supplied by both the Big Four and the mid-tier firms. Even here, the Big Four individually have significantly higher market shares than the mid-tier firms, with the exception of the Alternative Investment Market (AIM).

In addition, there is some indication that the audit of banking and insurance companies, and possibly other sectors with 'complex' audit requirements, may form separate sub-segments within the FTSE 100. Concentration among auditors in the banking and insurance sectors is particularly high, with only three audit firms possessing significant market share in either sector in the FTSE 350.

**Market outcomes**

**Concentration and audit fees**

The Oxera panel dataset confirms that during 1995–2004, audit fees on average increased 11.7% per annum in real terms (between 2000 and 2004 the growth rate was faster). However, growth in audit fees is less apparent when expressed in terms of percentage of company turnover (which may be a first approximation of the amount of work required to
The limited information on operating margins of the Big Four firms suggests that part of the fee increases in recent years is attributable to increases in costs, which might be due to various factors, including the changes in regulation and accounting rules.

The econometric analysis undertaken by Oxera on the relationship between market structure and audit fees controlled for factors specific to each company, sector and year, to isolate the effects on fees of market concentration and auditor market shares. The results, based on data for 1995–2004, show that market concentration (as measured by the HHI per sector in any given year) and the market share of a given auditor in a given sector/year both have a statistically significant and positive impact on audit fees. This result is in line with economic theory and with several other recent empirical studies (and is separate from the impact of increased costs on audit fees).

To illustrate the order of magnitude of this impact, Oxera considered the effects of the merger in 1998 between Price Waterhouse and Coopers & Lybrand, as predicted by the model. The merger has affected the HHI and the market shares of the merged entity, both of which have a separate impact on audit fees in the model. In all, with the benefit of hindsight, Oxera’s model indicates that the PwC merger led to a price increase which could have been in the order of around 12% from one year to the next—8% for the market as a whole, and another 4% for the clients of the merged entity.

Concentration and choice
A small number of UK-listed companies, primarily in the banking sector of the FTSE 100, have no effective choice of auditor in the short run. This elimination of choice is driven by high market concentration, auditor independence rules and supply-side constraints. A wider range of UK-listed companies have a choice of auditor that is circumscribed by auditor independence rules and the prevalence of the Big Four, such that they face an effective choice of only two or three audit firms. Over one-third of the FTSE 350 audit committee chairs surveyed by Oxera do not feel that their company has sufficient choice of auditor.

Oxera’s in-depth interviews revealed that companies are concerned about a combination of increased concentration and tighter auditor independence regulation, which has reduced competitive pressure in the market for auditing large listed companies.

Companies are also concerned about the difficulty for the largest multinationals in finding an accounting advisor on complex transactions (in particular, mergers and acquisitions, M&A) that is not conflicted out. This could leave a company without sufficient due diligence advice, unless it can accept a situation where the accounting firm is also acting for a rival bidder or the target company.

A view expressed by some interviewees is that the capital markets are currently vulnerable, given the concern that, at some juncture, one of the Big Four may exit the market (in a situation similar to Arthur Andersen). The vulnerability is particularly acute since the largest companies, which have the most bearing on investor confidence, are also those with the fewest alternatives to their current auditor.

Nonetheless, the general perception is that audit quality in the UK has, as yet, largely been maintained at acceptable standards, and some competitive pressure remains for the audit business of those large companies that still have a choice among the Big Four firms.

Market dynamics going forward
Entry/expansion by mid-tier firms
Oxera has analysed the economics of an immediate entry by a mid-tier firm into the large company audit market, and of a similar business case analysis of a stepwise expansion by a mid-tier firm culminating in winning FTSE 100 clients. The overall results indicate that, unless
market conditions and perceptions change, substantial entry into the FTSE 100 and FTSE 250 segments to present a realistic challenge to the Big Four does not seem to be economic as a pure financial investment exercise.

The result of Oxera’s analysis is that, while operating in the FTSE 100 and FTSE 250 segments can in principle be profitable, the initial expansion in the short term (beyond a small number of clients) is problematic due to significant barriers to entry, which raise the cost of market entry. The most important barriers, in order of importance, are the need:

- to acquire a credible reputation with FTSE 100 and FTSE 250 companies and their investors, thereby overcoming the perception bias (a long-term process, which involves gaining a ‘critical mass’ of large audit clients);
- for an extensive, and integrated international network (again, likely to be a long-term process, due to coordination problems);
- for substantial resources and expertise (eg, an audit partner with FTSE 100 experience) to audit large, complex, international companies.

In the model, these entry barriers are reflected in:

- significant investment required for market entry;
- a long investment horizon;
- a long payback period to any potential investment;
- significant business risks when competing against incumbents.

An additional barrier to entry derives from the nature of the partnership structure, which renders the investment unattractive to some of the existing partners even if it is attractive to other partners. Crucially, low tendering and switching rates, as well as significant uncertainties concerning the size of the required initial investment, seem likely to result in an unattractive risk-to-reward trade-off. Building a credible reputation via acquisition of larger clients is difficult, given the low frequency of tendering.

The four-to-three scenario
The interviews suggest that any loss of a Big Four firm would most likely be precipitated by the start of a civil or criminal prosecution for professional misconduct, causing a loss of credible reputation. In the medium term, the major effects of a four-to-three scenario would be to exacerbate problems around auditor choice, requiring regulators to make exceptions to auditor independence rules, and causing potential gridlock in complex transactions.

Given the existing problem of choice for certain large companies in complex sectors (particularly financial services), the exit of one Big Four firm could only increase the number of FTSE 350 companies in this situation. A four-to-three scenario could also result in loss of investor confidence in the effective operation of the audit market.

Evidence from the interviews suggests that market entry by a mid-tier firm to become a major challenger to the remaining large audit firms in the event of the four-to-three scenario is unlikely. Further analysis based on the market entry model indicates that only if existing barriers to entry in terms of perception/reputation and low switching rates could be reduced might such market entry become feasible.

Concluding remarks

In relation to the broader policy issues in the audit market, this research has highlighted that:

- competition is not working as well as it would with a greater number of competitors in the markets for auditing FTSE 100 and FTSE 250 companies;
– in every group interviewed by Oxera, the near 100% combined market share of the Big Four in auditing large companies is not regarded as healthy for competition or choice;
– substantial entry or expansion by the mid-tier firms into the audit of FTSE 350 companies may not be economical unless current market conditions and perceptions change;
– for some companies, the lack of choice has resulted in a certain degree of power for the audit firm in the bargaining process, and an inability to change auditor;
– for these same companies, the potential for gridlock in M&A advice due to lack of choice is an additional concern.

Oxera’s findings need to be seen in the wider policy context of the audit market. This report, which focuses on UK-listed companies, has not examined in detail the role of auditor liability, nor attempted to assess the level of quality delivered in the audit market. The conclusions drawn from this study should therefore be set in the context of these wider issues, since in any market where regulation plays a significant role, the operation of competition cannot be seen to deliver market outcomes independently of the wider regulatory environment.