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Agenda

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Four better, four worse? Competition and choice in the audit market

Concerns over competition in auditing were exacerbated after the collapse of Andersen in 2002, reducing the 'Big Five' accounting firms to the 'Big Four'. Oxera's recent analysis for the Department of Trade and Industry and Financial Reporting Council on competition and choice shows a complex market dynamic in FTSE 100 and FTSE 250 auditing, evidence of restricted choice and higher prices, and the existence of significant entry barriers for mid-tier audit firms

A number of recent developments have raised concerns about the state of competition and choice in the audit market, particularly in relation to the highly concentrated market structure, with the Big Four audit firms—Deloitte & Touche, Ernst & Young, KPMG, and PricewaterhouseCoopers (PwC)—being by far the largest auditors in the UK and globally.

Although these concerns are widespread across the investment community, companies and regulators, there has thus far been little robust analysis of the following fundamental questions:

- what are the drivers of competition and choice in auditing?
- what would happen if the market structure were to transform into a Big Three or even Big Two of major audit firms?
- what, if anything, can be done to prevent such an increase in concentration?

Oxera's recent study for the Department of Trade and Industry (DTI) and Financial Reporting Council (FRC), the UK regulator, provides a detailed analysis of the audit market, analysing the factors that determine companies' choice of auditor, and the dynamics of the evolution of the market structure.

This analysis is based on 67 interviews with all stakeholder groups (the Big Four and mid-tier audit firms, listed and private companies, investors, regulators and other industry experts), a survey of 50 audit committee chairs, and statistical and financial modelling. This article summarises the findings of Oxera's research, which will now form the basis of the FRC's high-profile consultation on how the public interest issues in audit services might be addressed.

Key findings of Oxera's research

- **The Big Four audit firms audit all but one of the FTSE 100 companies, and represent 99% of audit fees in the FTSE 350. Switching rates are low (around 2% on average for FTSE 100 companies), and competitive tendering does not occur frequently.**
- **Reputation is an important driver of choice in auditing, favouring the Big Four, whether this is based on real or perceived differences between the Big Four and mid-tier firms.**
- **Less than 10% of FTSE 350 companies surveyed would consider using a mid-tier firm, yet a majority believe that a mid-tier firm would be technically capable of providing their audit.**
- **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.**
- **Higher concentration has led to higher audit fees. However, audit fees have also risen in recent years as a result of cost increases, caused by factors such as changes in regulation.**
- **The current market structure is likely to persist, due to high entry barriers. In the event of a four-to-three scenario, substantial market entry by mid-tier firms might become feasible only if the existing barriers, in terms of perception/ reputation and low switching rates, were reduced.**

This article is based on Oxera's report prepared for the DTI and FRC, 'Competition and Choice in the UK Audit Market', April 2006. Available at www.oxera.com.

Market concentration

There have been concerns about increasing concentration in the audit market globally since at least 1989, when two mergers reduced the then Big Eight accounting firms to the Big Six.[1] These concerns were exacerbated in 1997, when two mergers between Big Six firms were under consideration. Only one of these materialised: Price Waterhouse merged with Coopers & Lybrand to form PwC (the merger between Ernst & Young and KPMG was abandoned).

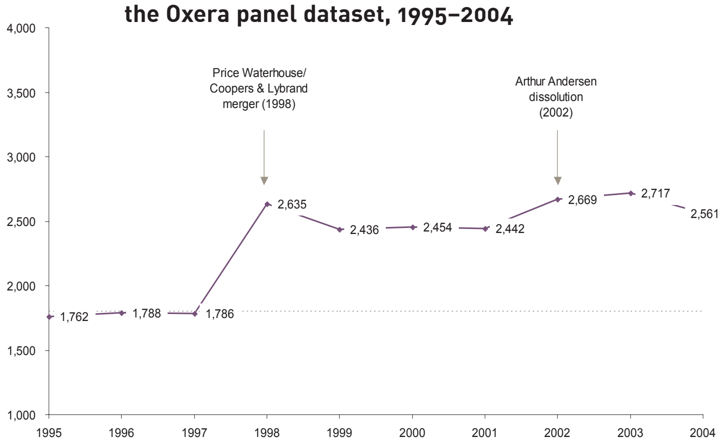
The European Commission, when reviewing the Price Waterhouse/Coopers & Lybrand merger under competition law, signalled that the existence of only four large audit firms might lead to 'oligopolistic dominance'.[2] However, in part because the Ernst & Young/KPMG merger was abandoned during the course of the investigation, leaving five audit firms in the market, the Commission cleared the Price Waterhouse/Coopers & Lybrand merger in May 1998.

The dissolution of Arthur Andersen in 2002, which led to the current situation of the Big Four, further increased concerns about concentration. The European Commission reviewed the acquisition by the UK division of Deloitte of the UK division of Arthur Andersen.[3] In line with its previous merger inquiry into PwC, the Commission considered that collective dominance could not be excluded, but it nonetheless allowed the acquisition on the basis that the reduction from five to four global accounting firms was 'inevitable', and that no other dissolution scenario could be established in which competition would be harmed less.

Oxera's analysis confirms that the level of concentration in the audit market is high and has increased over time. The Big Four represented around 97% of audit fees paid by UK-listed companies in 2004, and over the 1995–2004 period, the audit market became significantly more concentrated. The Hirschman–Herfindahl Index (HHI), measured by audit fees, increased from 1,762 in 1995 to 2,561 in 2004.[4] As is clear from Figure 1, the levels of concentration in the market for all listed company audits increased significantly following the merger of Price Waterhouse and Coopers & Lybrand in 1998.

Two segments of the market—FTSE 100 and FTSE 250 companies—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).[5]

Figure 1 HHI of the audit market for all listed companies in the Oxera panel dataset, 1995–2004



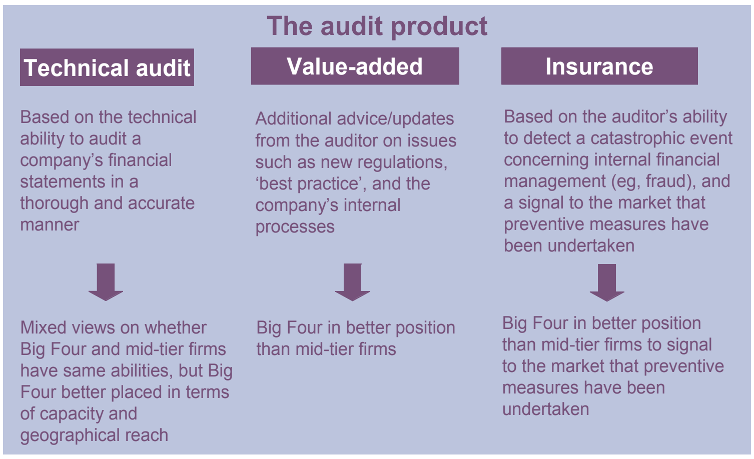
Note: Base: 50 observations for the whole sample, 32 for FTSE 350 companies and 18 for FTSE SmallCap companies.
Source: Oxera.

The nature of competition in auditing

The audit market has several features that distinguish it from other product markets in financial services. 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 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.

Oxera's interviews and survey reveal, as illustrated in Figure 2, that the Big Four firms are currently perceived to be better placed than the mid-tier firms to offer the

Figure 2 Impact on competition of audit product components



Source: Oxera.

second and third components, and are also perceived to have greater capacity and international coverage to deliver the technical audit itself. In principle, hiring a firm with a superior reputation allows the agents that choose the auditor (ie, audit committee chairs/management) to pre-empt criticism by the shareholders in the event of a problem with the audit. Hiring a Big Four firm is seen as a way of minimising this risk: many interviewees were of the view that the market is subject to the 'IBM effect', which refers to the perception that 'no one will ever get fired for buying IBM'—or, in this context, for employing a Big Four firm.

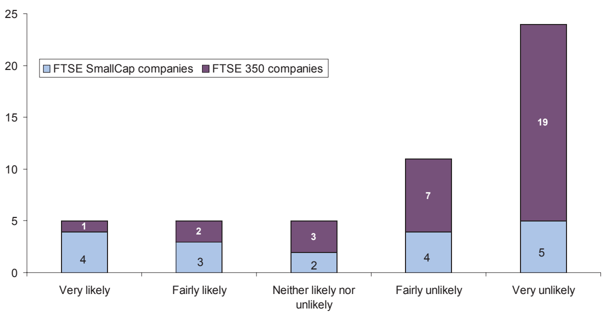
In line with current regulations and best practice, audit committees play the most important role in the process of auditor selection, albeit that company management (in particular, finance directors) also continues to be highly influential. The views of other stakeholders are given less weight, and there seems to be only very limited direct communication between companies and investors (who are the ultimate clients of the audit service) 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 (whether real or perceived) between the Big Four and the mid-tier firms. While 39 out of 45 (87%) respondents to the survey consider that a mid-tier firm would be technically capable of providing their company's audit, as Figure 3 shows, less than 10% of FTSE 350 companies surveyed would consider using a mid-tier firm.

Switching rates in the market are low—around 4% per year on average for listed companies (and around 2% for FTSE 100 companies). Few companies have an explicit policy of switching auditors at regular intervals, and competitive tendering does not occur frequently—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, is costly, to both auditors and companies.

Figure 3 Likelihood of considering a mid-tier auditor for company audit (number of companies)



Source: Oxera.

Market outcomes

Between 1995 and 2004, audit fees increased on average by 13.3% each year (between 2000 and 2004 the growth rate was faster). The limited information on the operating margins of the Big Four firms suggests that part of the fee increases in recent years is attributable to increases in costs. However, econometric analysis shows 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.[6] In other words, higher market concentration has led to higher 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 econometric analysis. 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.

Oxera's research also found that 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 do not feel that their company has sufficient choice of auditor.

The consequences of this lack of choice were explored in detail in the interviews with stakeholders in the audit market, revealing that companies are significantly concerned about the combination of increased concentration and tighter auditor independence regulation, which is seen to have reduced competitive pressure in the market for auditing large listed companies. Specifically, the perceived problems relating to competition are:

– evidence of higher prices in concentrated industry sectors;
– a view that, for companies that have significantly restricted choice, the auditor has some ability to make its price rises stick;
– a widely held view that, for certain companies and industry sectors, switching auditor is not a viable means of exerting competitive pressure on audit firms, due to a lack of alternatives.

Companies are also concerned about the difficulty for the largest multinationals in finding an accounting adviser that is not conflicted out for complex transactions (particularly for mergers and acquisitions). 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 that of 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 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

Oxera 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 gradual 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, which is sufficient to present a realistic challenge to the Big Four, is not likely to occur.

The emergence of any substantial challenge to the Big Four's market position is unlikely due to significant barriers to 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 (this is a long-term process, due to infrequent tendering and switching, and requires a 'critical mass' of large 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 to audit large, complex, international companies.

Thus, under current conditions, the highly concentrated market structure is likely to persist.

The four-to-three scenario

The major effects of the loss of a Big Four firm 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 would 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. Further analysis indicates that only if existing barriers to entry in terms of perception/reputation and low switching rates could be reduced might market entry by a mid-tier firm become feasible.

Next steps

The conclusions drawn from Oxera's study will form the basis of a consultation by the FRC into the public interest issues arising from the existing competitive environment for audit services to large listed companies in the UK, and how these issues might be addressed.

[1] In 1989 Ernst & Whinney merged with Arthur Young to form Ernst & Young, and, in the USA, Deloitte Haskins & Sells merged with Touche Ross to form Deloitte & Touche. (In the UK, this latter transaction was different, with Coopers & Lybrand merging with Deloitte, and Touche Ross later changing its name to Deloitte & Touche.) A third proposed merger in 1989, between Arthur Andersen and Price Waterhouse, was abandoned.
[2] European Commission (1998), 'Case No IV/M.1016—Price Waterhouse/Coopers & Lybrand: Commission Decision of May 20th 1998'.
[3] European Commission (2002), 'Case No COMP/M.2810-Deloitte & Touche/Andersen (UK)', July 1st.
[4] According to the US merger guidelines, an HHI above 1,800 indicates that the market is highly concentrated, and a market with an HHI between 1,000 and 1,800 is moderately concentrated. See Department of Justice and Federal Trade Commission (1992), 'Horizontal Merger Guidelines' (revised in 1997).
[5] 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 of the Big Four audit firms possessing significant market share in either sector in the FTSE 350.
[6] Oxera's analysis 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 are based on data for 1995–2004.

If you have any questions regarding the issues raised in this article, please contact the editor, Derek Holt: tel +44 (0) 1865 253 000 or email d_holt@oxera.com

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