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Audit market structure, fees and choice in a period of structural change: Evidence from the UK – 1998–2003

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ABSTRACT

This paper presents evidence on audit market concentration and auditor fee levels in the UK market in the crucial period of structural change following the PricewaterhouseCoopers' (PwC) merger and encompassing Andersen's demise (1998–2003). Given the current interest in auditor choice, analysis is also undertaken at the individual audit firm level and by industry sector. There is evidence of significant upward pressure on audit fees since 2001 but only for smaller auditees. Audit fee income for top tier auditors (Big 5/4) did not change significantly while the number of auditees fell significantly, consistent with a move towards larger, less risky, clients. A decomposition analysis of the aggregate Big 5/4 concentration ratio changes over the period identifies the impact of four distinct consumer-based reasons for change: leavers; net joiners; non-par auditor switches; and (only for the audit fees measure) audit fee changes. Andersen's demise markedly *reduced* the level of inequality among the top tier firms but PwC retained its position as a 'dominant firm'. On switching to the new auditor, former Andersen clients experienced an initial audit fee rise broadly in line with inflation, with no evidence of fee premia or discounting. They also reported significantly lower NAS fees, consistent with audit firms and auditees responding to public concerns about perceptions of auditor independence. There is no general evidence of knowledge spillover effects or cross-subsidisation of the audit fee by NAS. The combined findings provide no evidence to indicate that recent structural changes have resulted in anticompetitive pricing; the key concerns remain the lack of audit firm choice and issues concerning the governance and accountability of audit firms.

1. Introduction

Rising audit market concentration has attracted the interest of regulators, market participants and academics for many years, especially since the audit firm mega-mergers of the 1980s and 1990s which reduced the global Big 8 to the Big 5. During that period, there was a general concern (based on the predictions of classical micro-economic theory) that excessive concentration would reduce competition, leading to an increase in the price of the services provided by the auditor (Financial Times, 1997). Paradoxically, there was also concern, based on observed market behaviour, regarding excessive competition and low-balling (e.g. CAJEC, 1992). From an industrial economics viewpoint, high seller concentration can both harm consumers and also benefit them through, for example, economies of scale and scope. Although concerns about the so-called

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'mega-mergers' on competition were raised, in general the regulatory conclusion was that the mergers would be unlikely to substantially lessen competition (Goddard, 1998; Thavapalan, Moroney & Simnett, 2002).

A further major shock to the system of financial reporting and auditing arose when the US energy giant, Enron, failed in 2001. This event, along with other financial scandals in the US, led to the passage of the Sarbanes-Oxley Act in 2002, which instituted reforms designed to restore confidence in corporate governance. Given the global nature of capital markets and further scandals in Europe (e.g. Parmalat), there have been moves to adopt Sarbanes-Oxley style reforms throughout Europe and elsewhere (Oxley, 2007; Quick, Turley & Willekens, 2007). In June 2002, Andersen, one of the top five audit firms in the world, was convicted of obstruction of justice for shredding documents related to Enron.[1] As a result, the firm lost its auditing license in the US.[2] In August 2002, the firm ceased business and, in the UK, was acquired by Deloitte & Touche, reducing the number of big accounting firms from five to four. In the US, the Andersen business was dissolved and former Andersen clients switched to other, mainly Big 4, audit firms. This event sparked further intense debate, which is ongoing, about competition and audit quality in the audit market (e.g., EC, 2002, 2008; OFT, 2002; GAO, 2003; Oxera, 2006, 2007; FRC, 2006a, 2006b, 2006c, 2007a, 2007b, 2009; US Treasury, 2008) and provides motivation for the present study.

Immediately following Andersen's demise, in the US the General Accounting Office (GAO) studied the effect of consolidation but found no evidence of impaired competition (GAO, 2003). Prior to Andersen's acquisition, the EC also examined the possible impact of the acquisition, concluding that there was no danger of the creation of a single dominant firm since Andersen and Deloitte were the smallest of the Big 5 firms (EC, 2002). More recently, the GAO has updated its report on audit market concentration, concluding that, in 2006, the Big 4 continue to dominate the large company market segment while concentration has eased in the small and mid company market segments (GAO, 2008). Additionally, the US Treasury received a final report from the Advisory Committee on the Auditing Profession (2008), a body set up by the US Treasury in 2007. One of the principal topics considered by the committee is audit market competition and concentration (the others being human capital and firm structures and finances). The report makes six recommendations in relation to this topic, including the reduction of barriers to entry for small auditing firms.[3]

In the UK, a report on competition and choice in the UK audit market was commissioned by the UK Department of Trade and Industry/Financial Reporting Council (Oxera, 2006).[4] This was followed by discussion papers on choice in the UK audit market and promoting audit quality (FRC, 2006a, 2006b, 2007c) and by reports on choice (FRC, 2007a, b, 2009). Stakeholders expressed a strong preference for market-led solutions to the problem of restricted choice in the market for audit services to public interest entities in the UK and proposed a package of 15 recommendations designed to lessen concentration over the medium term. These recommendations require action by all market participants including audit firms, investors, companies, regulators and legislators.[5]

Academics have also investigated the impact of Andersen's dissolution on concentration, with Beattie et al. (2003) predicting that the acquisition would increase the Big 4's UK listed clientele to 72.8% of all audit clients (96.3% in terms of audit fees). In terms of individual firm market share, it was projected that Deloitte would become the third largest audit firm in the UK, accounting for 19.2% of the total market (based on audit fees).

However, as the EC and Beattie et al. (2003) studies were based on pro-forma figures, there is no published study that documents the *actual* impact of Andersen's dissolution in the UK. Further, since these studies cover only a very short period of time, the extent of change in concentration in the UK listed company audit market in recent years is not yet fully documented. This is especially true for the period following the Price Waterhouse and Coopers & Lybrand merger in 1998. To our knowledge, the only UK study that offers a detailed investigation of audit market concentration among the entire population of listed companies during the 2000s is Beattie et al. (2003). Previously, studies undertaken by Briston and Kedslie (1985), Moizer and Turley (1987, 1989), Beattie and Fearnley (1994), Peel (1997),[6] and Pong (1999) jointly cover the period from 1972 to 1995.[7] The study by Pong and Burnett (2006) examines the years 1997 and 2001. Figures reported in recent studies commissioned or produced by regulators (Oxera, 2006; POB, 2006, 2007, 2008; FRC, 2007b) offer limited insights into the structure of the market, due to restricted samples or the use of measures based on only number of audits. Recent academic

[1] On 31 May 2005, the US Supreme Court announced its unanimous decision to reverse this conviction.

[2] The firm also audited Worldcom, another company involved in accounting scandal. This added another blow to Andersen and contributed to its dissolution.

[3] The six recommendations relating to concentration and competition are: reduce barriers to the growth of smaller auditing firms consistent with an overall policy goal of promoting audit quality; monitor potential sources of catastrophic risk faced by public company auditing firms and create a mechanism for the preservation and rehabilitation of troubled larger public company auditing firms; the PCAOB, in consultation with others, to determine the feasibility of developing key indicators of audit quality and effectiveness and requiring auditing firms to publicly disclose these indicators; promote the understanding of and compliance with auditor independence requirements among auditors, investors, public companies, audit committees, and boards of directors, in order to enhance investor confidence in the quality of audit processes and audits; annual shareholder ratification of public company auditors by all public companies be adopted; enhance regulatory collaboration and coordination between the PCAOB and its foreign counterparts.

[4] The Financial Reporting Council (FRC) is the UK's independent regulator responsible for promoting confidence in corporate reporting and governance.

[5] They are intended to: "increase the feasibility of investment in the supply of audit services to public interest entities by existing non-Big 4 firms or new firms; reduce the perceived risks to directors of selecting a non-Big 4 firm; improve the accountability of boards for their auditor selection decisions; improve choice from within the Big 4; reduce the risk of firms leaving the market without good reason; and reduce uncertainty and disruption costs in the event of a firm leaving the market."

[6] Peel (1997) includes quoted and unquoted public limited companies and private companies.

[7] Another study investigates the frequency of individual changes during the 1990s but not the overall level of concentration (Moizer and Porter, 2004).