

# CHARTERED ACCOUNTANT AND PUBLIC ACCOUNTING EXPERIENCE NON-EXECUTIVE DIRECTORS ON UK BOARDS: SIGNALS OF QUALITY EARNINGS REPORTING TO INVESTORS PROMPTING PRICE-TO-EARNINGS GROWTH

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## Abstract

This research seeks to determine for the first time whether the presence of non-executive directors with chartered accountant and public accounting financial expertise on UK boards is important to investors in terms of signaling higher reporting quality. If so, investors should be willing to give higher premiums on stock prices over earnings than for companies with boards without these financial expertise characteristics. In this era not so distant from Enron and Parmalat, investors should value these characteristics to be present in evaluating the external and internal audits in financial reporting. The average price-to-earnings growth for companies with these board characteristics is 145.11 percent compared to an average decrease of 99.85 percent for those companies that do not.

**Keywords:** Accounting, Earnings, Board of Directors, Non-executive Director, Corporate Governance

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## 1. Introduction

The purpose of this research is to determine for the first time whether investors are willing to give premiums on stock where boards include non-executive directors with chartered accountant titles or public accounting experience, who would serve on audit committees. In the wake of financial scandals in the early part of the last decade involving Enron in the US and Parmalat in the EU, investors could give these premiums for companies that signal higher quality earnings through the presence of chartered accountant and public accounting financial expertise that provides at least some background knowledge or experience in the audit engagement process.

While current or former investment bankers and finance directors have some understanding of the process, chartered accountants must evidence this knowledge to pass their series of exams necessary for this title. Also, public accountants have been involved in audits. This understanding would seem necessary for audit committees successfully to review external auditors' engagements. As the financial markets are at least semi-efficient, this skill present on boards would therein seem deserving of stock premiums in terms of higher price to earnings. (Researchers sometimes use earnings to price, but price to earnings is more effective here because of its provision for numbers greater than one to provide greater emphasis on the spread investors are willing to give in price over earnings.) Indeed, investors would have greater trust in any company's reported earnings with those

individuals particularly experienced in its nuances involved in reviewing the work of the external and even internal auditors. Surprisingly, no extant research has examined this particular trait of board composition. Despite this lack of inquiry, the importance of this signal to investors still remains extremely worthy of investigation and publication.

The sample for this testing is the FTSE 100. The lowest relevant sample size for statistics usually resides in the 100 elements range. In fact, research involving the composition of the board has even been published utilizing just 75 companies as the data set (Beasley, 1996).

The relevant time range for the study is 2004 through 2009. This time period permits the immediate effects of the 2002 Sarbanes-Oxley Act and its aftershocks throughout the world to have already been felt. Also, this choice also limits the effect of the transition to International Financial Reporting Standards (IFRS) in 2004 through 2005.

The results include the presence of at least one non-executive director chartered accountant and at least one non-executive director with public accounting experience results in an average price-to-earnings growth over 2004 through 2009 of 145.11 percent compared to an average decrease of 99.85 percent for companies without this set of board characteristics. Regression supports these results.

There is no doubt that some relationship exists between signaling reporting quality to investors (price-to-earnings growth) and the presence of non-executive directors with these chartered accountant

and public accounting characteristics. However, the direction of the causation is difficult to ascertain.

Potentially, individuals with the chartered accountant or public accounting experience would commit to serving on boards of directors only of companies in which they already trust their reported numbers. They have spent many years getting this chartered accountant designation or serving the public in this external accounting role and would not otherwise want to damage their designation or overall reputation serving on boards for companies with questionable earnings management in the past or current time period. Thus, as Klein (2002) would remark based on the results of her study on audit committee independence's effect on earnings management, they are true signals of quality earnings reporting. This aspect results in the investors' willingness to give price premiums over earnings higher than for other companies.

However, the presence of these individuals could directly result in the increased quality of earnings reported, giving investors confidence in the numbers to the extent that they are willing to give more in price premiums over earnings for those companies' stocks.

This question can be debated as this research reaches the more direct application stage. However, for now, the findings stand on their own merits as worthy of publication. The following proceeds through the Literature Review, Hypothesis Development, Methodology, Results, and Implications.

## 2. Literature Review

Most of the extant research involves the US markets. Research has examined the number of directors on boards and the resulting effects on company value (Yermack, 1996). The typical inquiries before the passage of Sarbanes-Oxley, which required non-executive directors and financial expertise on audit committees, also included whether non-executive directors on the board in general or the audit committee in particular provided positive returns on stock (Klein, 2000).

The current research trend is examining the effects of non-executive directors on voluntary disclosure, Lim *et al.* (2007), and financial expertise required on audit committees under Sarbanes-Oxley (Dhaliwal *et al.*, 2006).

All this research seems to neglect the effect on the UK markets, which can be unique in the different regulatory atmosphere. Beekes *et al.* (2004) inquire into the effect of non-executive directors on accounting quality, timeliness, and conservatism in the UK context. Dedman and Lin (2006) make similar examinations for the UK market. They find that boards with higher proportions of non-executive directors tend to report bad news more quickly than less independent boards. It also largely puts to the side whether external auditors provide the necessary

financial expertise more effectively than internal auditors (finance directors and CFOs), finance professionals (investment bankers), or supervisors (CEOs) do. The last category is considered to have financial expertise just from reviewing the activities of CFOs and signing off on the financial statements.

DeFond *et al.* (2005) consider the effect of accountants in general, not public accounting in particular, would have on financial expertise but only in the US market context. They do cumulative abnormal return examination with regard to the dates of newly elected board members to audit committees with accounting experience. DeFond *et al.* (2005) do find positive market reactions to these elections of accountants but no market reaction to the elections of non-accountants to these audit committee roles. However, they do not separate the examination into the selections of public as compared to private accounting background non-executive audit committee members. The research also does not examine whether the non-current accounting background individuals still contain the financial expertise by means of certified public accountant (chartered accountant) designations. It would seem that external accountants as non-executive directors would have some benefits to provide in audit committee review of the activities of other accountants (external and internal auditors) that private accountants would not. The reality is that review of external audits was part of the necessary course of study to pass the chartered accountant exam modules and the essence of what public accountants did in their external auditor careers.

Dhaliwal *et al.* (2006) emphasizes the US market only and encounters similar lack of specificity with regard to accounting certification and what part of accounting (external or internal auditing) financial expertise produces positive effects. This research examines the effect of accounting, finance, and supervisory expertise as qualifying for financial expertise on audit committees. The finding is that accounting expertise and accruals quality are related but only in the presence of sufficient audit committee power.

## 3. Hypothesis Development

### 3.1. Boards of Directors

The exponential increase in the scale of businesses resulting from the Industrial Revolution and other causes resulted in greater separation from ownership and day-to-day control of businesses. The development of capital markets advanced the separation. Thus, owners had to determine whether the day-to-day managers of the business entities furthered their interests. This process involved developing boards of directors to represent the many different shareholders interests as they reviewed how managers were running the day-to-day operations. At

the same time, external accountants, known as auditors or assurance providers, entered the fray to determine whether the results that the managers reported to the boards in financial statements were accurate. They could utilize their skills to certify the accuracy and therein help the boards do their jobs of reviewing the activities of management on an annual basis. Non-executive directors are also present on boards of directors to provide advice to executive directors and officers of the company in general.

Because of the increasing complexity of business as time proceeded, boards developed subcommittees to review certain parts of the managers' responsibilities. Typical subcommittees today include the nomination, compensation, audit, and other committees.

### 3.2. Audit Committees

In the wake of the Enron, audit committees' importance has accelerated dramatically. In fact, in the aftermath of these occurrences, the US enacted Sarbanes-Oxley to impose requirements on the composition of audit committees. In essence, this legislation required at least one member of the committee to be considered as having sufficient financial expertise.

Even before that time, the audit committee was to have non-executive directors meet without executive directors present. Indeed, part of the reason for the audit committee is to review the numbers reported from management and be capable of receiving internal auditors' reports of potential management improprieties that are unheeded within the internal chain of command. Having any executive directors present would largely defeat those purposes. The audit committee is there to challenge management on their financial reporting choices and, if necessary, to take action in hiring decisions to make proper reporting and internal controls part of the company.

The audit committee is there to select external auditors, ascertain the proper auditor compensation, determine the scope of the audit, review internal control procedures, and meet regularly with the external auditors, internal auditors, compliance officers, and other internal parties responsible for financial and risk items. As discussed, the members have to be ready and willing to challenge management's reporting and internal control decisions.

For the FTSE 100, Table 1 shows that the number of members on the audit committee varies from three directors to seven directors. The average is 4.11 directors. The mode is four.

**Table 1.** Number of the FTSE 100 with 3, 4, 5, 6, or 7 audit committee members

Audit Comm. Members	3	4	5	6	7
FTSE 100	32	39	18	10	1

### 3.3. Chartered Accountants

To reach the designation of chartered accountant, the following must be completed: 15 modules of study, 450 days worth of work experience, initial professional development, and structured development sessions in ethics.

As to the modules, the following knowledge modules are involved: accounting, assurance, business and finance, regulatory, management information, and taxation. The following application modules are involved: audit and assurance, business strategy, financial accounting, financial management, financial reporting, and taxation. The following advanced stage modules are required: technical integration for business change, technical integration for business reporting, and case study.

The 450 days worth of work experience generally occurs with contractual assurances from an employer to provide for the resources necessary to reach this designation.

The initial professional development involves ethics and professionalism, personal efficacy, technical expertise, business environment awareness, and professional judgment.

The structured development sessions in ethics review confidentiality, integrity, objectivity, and independence.

Relevant to investors here is that the assurance module gets to the process for assurance, internal controls, evidence gathering, and professional ethics. The next level on audit and assurance gets to current issues and the entire life cycle of an audit engagement involving accepting, planning, managing, and reporting. The final level involves looking at external financial and non-financial information on audit and assurance in an integrated fashion (ICAEW, 2010).

While the Institute of Chartered Accountants in England and Wales (ICAEW) mentions that more than 80 percent of boards of directors have chartered accountants as members, that figure includes executive directors (ICAEW, 2010). This research involves looking into non-executive directors with this certification.

The hypotheses involves determining whether the presence of non-executive director audit knowledge (chartered accountant) and experience (public accounting) signals higher quality earnings to investors to the extent that they are willing to give premiums on the stock over the earnings greater than

for companies without this characteristic. This inquiry is measured through the use of price-to-earnings growth.

The hypothesis is that, over the time period of 2004 through 2009, those FTSE 100 companies with at least one chartered accountant non-executive director and at least one non-executive director with public accounting experience on the board should evidence price-to-earnings growth greater than companies without this set of characteristics. The notion is that these non-executive directors would serve on the audit committee or at least play their part in reviewing reports from the audit committee to the general board meetings.

Many would relate that there is overlap between the chartered accountant status and the public accounting experience as 450 days of work experience are required to reach the chartered accountant designation. However, annual reports routinely do not discuss public accounting experience unless the individual referenced reached the level of partner (if not the chair) of the particular public accounting firm referenced. Thus, this combination does not involve so much duplication as would be expected. Also, just having public accounting experience is not pursued separately because public accounting can involve non-audit roles. Thus, the combination of the two statuses relates more toward the quality of reporting.

Current research sometimes utilizes earnings to price. However, price to earnings has been selected as the reference point for this research as it provides for numbers greater than one to provide more emphasis on the spread investors are willing to give for stock price over the reported earnings.

Chartered management accountants are not counted toward chartered accountants. The reason is that this designation is not emblematic of the external auditing experience required to provide this signal to investors in the annual reports.

The time period of 2004 through 2009 is selected because it almost completely removes but certainly limits the effect of the change to International Financial Reporting Standards (IFRS) in the 2004 through 2005 cycle. At the same time, this time period is within close enough proximity of the Enron, Parmalat, Sarbanes-Oxley, and other resulting renewed emphases on financial accounting reporting to measure the effect on investors. Also, having six years in the data set provides greater robustness to the results.

#### 4. Methodology

The annual reports of each of the FTSE 100 companies from 2004 through 2009 are reviewed to determine the composition of the board of directors and the audit committees and to gather pretax earnings figures. Compustat provides the price data and verifies the pretax earnings figures.

Pretax earnings figures are utilized because, though unlikely, the presence of those with chartered accountant or public accounting experience on boards could actually result in lower tax expense through better tax planning. Because of this fact, the use of pretax earnings as the denominator to the price-to-earnings computations seems fitting.

Because the emphasis is on the signal provided to the market from the presence of certain board characteristics, only the discussion of chartered accountant status or public accounting experience within the annual report counts toward these determinations. Whether non-executive board members actually have these characteristics or not does not matter to investors under this series of hypotheses unless the annual report discusses each characteristic. Also, only board member characteristics present during this entire time period count, which is why each of the 2004 through 2009 annual report years is consulted.

The sample size of 100 is usually the minimum required to develop any data set for research purposes. However, because of the difficulty of hand collecting data, many published research inquiries in this area involve only 75 companies or less (Beasley, 1996). Thus, 100 should be sufficiently robust for the testing purposes employed here, especially with six years of data. Other researchers of board composition could utilize more companies in their data set. However, because they spend so much time gathering data on extra companies, these researchers generally utilize fewer years of data than are presented here (Lim *et al.*, 2007). Thus, after this specific trade of more companies for fewer years, they ultimately examine nearly an identical number of company years of data as this immediate research does.

To begin, descriptive statistics are utilized to review these two hypotheses. Also, regression involving the following formula is employed:

$$(1) \text{PEG}_t = \alpha + \beta_1 \text{DIRECTORS} + \beta_2 \text{COMM} + \beta_3 \text{NON-EX} + \beta_4 \text{CHARTERED} + \beta_5 \text{PUBLIC} + \beta_6 \text{PRIVATE} + \beta_7 \text{COMBINATION} + \epsilon$$

PEG represents the price-to-earnings growth. *t* stands for the time period under which the price-to-earnings growth is examined. DIRECTORS represents the total number of directors on the board. This variable controls similarly to market capitalization. COMM stands for the number of directors on the audit committee. This variable controls to ensure that the presence of more members providing more potential for review is not driving these results. NON-EX represents whether the audit committee has more than the standard for representation. CHARTERED stands for the number of non-executive director chartered accountants on the board. PUBLIC represents the number of non-executive directors with public accounting experience are on the board. PRIVATE represents the number of

non-executive director accountants on the board who do not have chartered accountant status or public accounting experience but currently are or previously were finance directors or CFOs. This variable permits for testing whether the variables of interest, chartered accountant status and public accounting experience, are more powerful than just private accounting experience. COMBINATION stands for companies with at least one non-executive director chartered accountant and at least one non-executive director with public accounting experience.

### 5. Results

The descriptive statistics include extraordinary results. From 2004 through 2009 for the FTSE 100 then, the presence of at least one non-executive director chartered accountant and at least one non-executive director with public accounting experience results in average price-to-earnings growth of 145.11 percent. The lack of this set of characteristics results in an average price-to-earnings decrease of 99.85 percent.

These results are stark. Some would question the sample size as being too small to develop extensive determinations. Others would discuss the possibility of certain industries having greater proportions of these accountant populations, moving these results if these industries were successful over this span of time. Still others would question whether any particular year moved the results for the entire time period. However, through an important series of untabulated results, the industry and the year have no significance to this price-to-earnings growth or decrease.

Table 2 supports these descriptive statistics results at least in many years. The regression finds statistical significance at the .05 level in the relationship between the companies with at least one chartered accountant non-executive director and at least one executive director with public accounting experience and price to earnings growth for the following time periods: 2004 through 2007 [1.478 (4.390)\*]; 2005 through 2007 [1.362 (2.744)\*]; 2004 through 2008 [1.296 (3.823)\*]; and 2005 through 2008 [1.436 (3.016)\*].

**Table 2.** Regression of price-to-earnings growth on board characteristics of the FTSE 100, emphasizing years where combinations of at least one chartered accountant non-executive director and at least one non-executive director with public accounting are statistically significant

PEGt	2004-08	2005-08
DIRECTORS	.344 (.979)	.649 (1.253)
COMMITTEE	.951 (1.582)	1.761 (1.974)
NON-EX	-.89 (-1.507)	-1.810 (-2.051)
CHARTERED	-.789 (-1.415)	-1.043 (-1.242)
PUBLIC	-.452 (-1.898)	.035 (.100)
PRIVATE	1.621 (2.068)	2.281 (1.920)
COMBINATION	1.296* (3.823)	1.436* (3.016)
INTERCEPT		
	(-1.740)	(-2.010)

\*Statistically significant at the .05 level

\*\*Statistically significant at the .01 level

The combination of the powerful descriptive statistics finding with some years of price-to-earnings growth statistical significance shows that there is at least some relevance to having non-executive directors with chartered accountant status and public accounting experience on the boards of companies in the UK. The combination of those two variables is necessary to signal the positive price-to-earnings growth as the computations show that, individually, non-executive directors who are chartered accountants without any other public accounting experience on the board provide inverse relationships to price-to-earnings growth. Interestingly enough, public accounting experience without the chartered accountant designation also tends toward an inverse relationship or no measurable relationship at all. More

investigation would further support these findings once access to these characteristics is more efficiently accessible.

Private accounting experience should not be minimized despite the lack of statistical significance. The results show that there is some signaling power to this category of non-executive board member experience.

Price-to-earnings growth is not statistically significantly related to the number of board members or audit committee members. This fact shows that the research track toward numbers of members on audit committees as indicative of the effectiveness of signaling to investors of earnings quality should receive less consideration.

The results answer an important question to no small extent. Wherever any important question with regard to relationships of variables can be answered efficiently and sufficiently robustly without extensive complicated mathematical displays, this method should be preferred.

## **6. Implications**

Investors should utilize the presence of chartered accountants and public accounting experience on boards as evidence of an emphasis on higher quality financial reporting. Effective corporate governance results in higher financial disclosure quality (Karamanou and Vafeas, 2005). If officers of companies engage in questionable earnings reporting, external auditors should be able to discover it. However, combining audit knowledge represented through the chartered accountant designation and public accounting experience on the board further signals commitment to reporting quality. At the least here, this combination of knowledge and experience should result in less income-increasing abnormal accruals. If there is some collusion between the chair of the board and the chief executive officer with regard to improperly reported numbers (the chair with powerful sway in the nomination of board members), then only board candidates without sufficient auditing knowledge could be nominated. Klein (2000) discusses this aspect as she shows that having more non-executive board members reduces CEO power. The presence of auditing knowledge and experience on the board would seem to signal the unlikelihood of this collusion as this knowledge and experience on the board then would result in greater opportunity of detection.

What this research tells companies is that they should disclose to investors in their annual reports any chartered accountant designations and public accounting experience of their board members. Through providing the signal of increased emphasis on the quality of reported earnings, this increased disclosure could result in stock price premiums, which would indicate that the board is doing its job in working to increase shareholder value.

Also, this research should indicate that the Institute of Chartered Accountants in England and Wales should provide the opportunity to get some level of chartered accountant status without the 450 days work experience so that current audit committee members without public accounting experience can endeavor toward reaching the requisite knowledge fully to realize their role on that particular committee.

At the same time, this research should encourage chairs of boards without chartered accountants and public accounting experience to seek board nominees with such characteristics to fill at least two places on their audit committees. What the anecdotal evidence shows is that many chairs seek to nominate candidates to the board with chartered accountant designation

and public accounting experience who were the top-level leaders of Big Four accounting firms. The chairs seem to be intent on seeking leadership experience to boards over finding sufficient financial accounting expertise, which is why former leaders of the Big Four fill many of the ranks of chartered accountant and public accounting experience on current boards of directors. If chairs would lower the level of management experience within public accounting firms necessary for consideration for the board, they would still get sufficient financial accounting experience. Boards have many important roles to fill, but ensuring integrity in reported earnings would seem to be (if not paramount here) extremely important to the extent of being willing to select chartered accountant designations and public accounting experience to the board.

The extra benefit to including chartered accountants and public accounting experience on the board is that, to the extent it is recent experience, the US standards under Sarbanes-Oxley for having requisite financial expertise on the board would be satisfied. This item then would permit consideration of having stock traded in the US as well, which, at times, proves beneficial for companies in terms of stock prices and financing capabilities.

Private accounting experience should not be relegated from boards in favor of public accounting experience. However, public accounting experience in the auditing role involves understanding of external and internal auditing. To be able to do the external audit requires knowledge and experience of the internal audit process. Thus, purely private accounting experience should not necessarily be considered to carry with it something unreachable from the public accounting experience.

Taking these actions would not necessarily result in stock price premiums and therein price-to-earnings growth. The reason is that chartered accountants and those individuals with public accounting experience would be reluctant to join boards of companies that have questionable earnings reporting in the past or that seem currently to take extreme reporting stances. Chartered accountants must meet significant ethical standards if they want to maintain their designation. Also, public accountants learn through their experience that their reputation for integrity is the real value to the service they provide. If they leave that value at the door in serving on the board of directors, they have nothing left to offer. Thus, always subject to dispute, they would seem to have more at stake than many other nominees to boards would (Srinivasan, 2005). To reach the status necessary to get willingness from these individuals to serve on boards, companies would probably have to emphasize reporting quality even more than they already do for some time (Srinivasan, 2005).

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