

**An Investigation into UK Shareholders' Views of the  
Threats to Auditors' Independence**

**By**

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*A Thesis Submitted in Fulfilment of the Requirements for the Degree of  
Doctor of Philosophy of Cardiff University*

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## ABSTRACT

The collapse of Enron sparked interest in auditor independence issues and caused much controversy over how best to prevent future accounting scandals. Through an agency theory framework, this research examines whether the primary users of UK audited financial statements have confidence in auditor independence.

Four auditor-client relationships identified in the literature as potentially independence-impairing were examined; these were economic dependence, non-audit service provision, long tenure and ex-auditor employment. These relationships were also highlighted in the Auditing Practices Board's Ethical Standards for Auditors (2004).

Postal questionnaires were employed to investigate investor perceptions of the four auditor-client relationships and perceptions of safeguards for auditor independence. The current study is the only UK study to compare institutional and private investor perceptions on these issues.

Descriptive statistics revealed that both groups of investors perceived economic dependence and the provision of non-audit services as potentially independence-impairing. However, investors appeared relatively unconcerned about ex-auditor employment and long tenure. Furthermore, the investors did not appear to be in favour of further regulations.

Parametric and non-parametric tests were employed to determine whether background variables, such as accounting education, had an effect on perceptions of auditor independence. The results showed that the private investors without accounting qualifications were generally more concerned about the independence-impairing nature of the relationships than those with accounting qualifications and those institutional investors who were themselves ex-auditors employed by their former client company were the ones least concerned that ex-auditor employment could impair auditor independence.

Whilst the current research was a response to recent accounting scandals, a review of the literature highlighted concerns for auditor independence dating back over 40 years. Academics and the accounting profession have yet to agree on how best to prevent future losses of independence. It appears that in the modern business environment, issues of auditor independence will remain a point of controversy.

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## **Chapter One: Introduction**

### **1.1 Introduction**

It is the task of the auditors to validate management statements on behalf of the owners of organisations. The independence of auditors 'lies at the heart of the auditor's role in society' (Reynolds et al., 2004:31), if owners of organisations doubt the auditor's independence, financial statements will lack credibility, 'confidence in the audit process is an essential element of confidence in capital markets' (Beattie et al., 1996:95). However, despite auditor independence being an essential quality, the accounting profession has found it difficult to produce a system of standards which eliminate conflicts of interest and protect auditors' independent mental attitude. The collapse of Enron in 2001 and other major accounting scandals have focused world attention on the role of the auditor but Chandler and Edwards (1996) note that concerns surrounding auditor independence can be traced back to the 19<sup>th</sup> century.

Agency theory, which underpins the current research, outlines how a close relationship between the auditor and the management of an organisation might lead to collusion which is not in the best interests of the owners of organisations. There are a number of factors which may contribute to a close auditor-management relationship and result in damaged auditor independence. Mautz and Sharaf (1961:231) advised that in order 'to maintain independence under the many pressures of practice, an auditor must be constantly alert to any deleterious influences on his .... independence'.

Mautz and Sharaf (1961) noted that the payment of audit fees could impair auditor independence. Under agency theory, it is assumed that the owner of an organisation hires and pays the auditor to protect owner interests. However, in the modern organisation the auditor is hired, fired and paid by the client company, resulting in a conflict of interest for the auditor. The auditor would be reluctant to lose the profitable client through qualifying financial statements (Markelevich et al., 2005) and may turn a blind eye to inappropriate accounting techniques. Beattie and Fearnley (2002) argue that the auditor should be prevented from becoming dependent upon one client for audit fees. At present accounting regulations prevent any one client making

up more than 10% of an auditor's income. However, Beattie and Fearnley (2002) state that the 10% income limit should be reduced to below 5% better to protect auditor independence. The current study is one of few studies to focus on the threat of audit fees to auditor independence. The majority of studies focus on the threat of non-audit services.

An auditor's provision of non-audit services is also related to the debate over fee dependence. If audit personnel provide non-audit services, a close relationship may develop between the audit firm and the client company. Mautz and Sharaf (1961) warned that providing non-audit services to audit clients could cause the interests of the auditor and the client to become identical, thus damaging the auditor's independence. Clikeman (1998) extends the arguments of Mautz and Sharaf (1961) noting that the auditor is expected to be an ally of management when providing non-audit services but is expected to remain detached from management when conducting the audit.

Non-audit service provision poses a number of threats to auditor independence (Beattie and Fearnley, 2002). Auditors must review their own non-audit work when conducting the audit. A study conducted by Church and Schneider (1993) suggests that auditors are less critical when reviewing their own work.

However, there are many arguments in favour of the provision of non-audit services, which have prevented a ban on joint provision in the UK. The Association of British Insurers (ABI) (2002:4) argues that 'some types of non-audit work fall naturally to the auditors'. Other authors have argued that non-audit service work has helped to recruit new people to the accounting profession and Goldman and Barlev (1974) argued that non-audit service provision actually increases auditor independence by putting the auditor in a more powerful position against the client company. Whilst the provision of non-audit services is clearly a controversial area, joint provision is not heavily restricted in the UK.

Auditing the client for a lengthy period may also cause a close relationship to form between auditor and client. Mautz and Sharaf (1961) were among the first to have concerns about the independence-impairing consequences of a long relationship

between auditor and client. The main concern associated with a long relationship between auditor and client is the over-familiarity which could occur. Ballwieser (1987) warned that familiarity between auditors and clients could result in a coalition forming against the best interests of the owner of the organisation. Wolf et al. (1999) also argue that an audit conducted by the same person for many years may become stale as the auditor becomes complacent over time.

Mandatory audit firm rotation is one method of safeguarding auditor independence against long association and has been discussed for over 60 years. The proponents of mandatory audit firm rotation argue that forcing the auditor to rotate every few years would prevent a close auditor-client relationship from forming. Audit firm rotation could also prevent the auditor becoming complacent, as each auditor's work would be checked by the new auditor, providing a 'fresh perspective' (ICAEW, 2002:3).

However, the system of mandatory audit firm rotation is not without its opponents. St Pierre and Andersen (1984) argue that audit risk is highest in the early years of the audit relationship and that the quality of audits increases as the auditor learns more about the client. Should the auditor have to start from scratch on a regular basis, more audit mistakes could occur. Furthermore, mandatory audit firm rotation would be a costly policy, as start-up costs are very high. Gates et al. (2007:12) call for further research on different stakeholders perceptions of audit firm rotation as 'one of the most important issues of our time'. The current study intends to address Gates et al's (2007) call for further research by examining both partner and audit firm rotation. Examining both methods of regulating auditors increases the worth of the study as 'little if any research examines both audit firm rotation and audit partner rotation' (Gates et al., 2007:5).

The final major factor, which could cause auditors and clients to form a close relationship, is that of client employment of a former auditor, a practice particularly beneficial to the auditor personally, as it offers better career opportunities. However, ex-auditor employment has been widely criticised. If an auditor is considering a lucrative job offer made by the client, the auditor may find it difficult to conduct an impartial audit for fear of alienating a prospective employer. Once the ex-auditor has joined the client company there are further auditor independence issues as the ex-

auditor may come into contact with former colleagues who are providing the company's audit. The auditor's former colleagues may place too much faith in the ex-auditor and not complete a thorough audit. However, ex-auditors' loyalties may be with their new employer, which may cause ex-auditors to use their audit experience to circumnavigate the audit firm's methodology (Firth, 1981). A two-year 'cooling-off' period (a waiting period between the auditor leaving the audit firm and joining the client company) is currently in place to try to prevent the independence-impairing possibilities of ex-auditor employment (APB, 2004).

Ex-auditor employment is common practice in the current business environment, yet is often over-looked in the literature. The current study provides important and much needed evidence in the debate over whether ex-auditor employment poses serious risks to auditor independence.

The four auditor-client relationships outlined above have the potential to impair auditor independence and damage a functional agency relationship. The four auditor-client relationships could also potentially damage perceptions of auditor independence, which is harmful for an auditor's reputation and for the integrity of financial statements. Much recent attention has been given to auditor-client relationships by academics and the accounting profession in an attempt to prevent an Enron-style corporate collapse happening in the UK and there is a need for further objective research in each of the four areas.

A number of other auditor-client relationships exist, for example, an auditor having a financial interest in the client company or, where a member of the audit partner's family is an employee of the client company. However, current legislation and guidelines already deal with these issues sufficiently and further research in these areas does not appear to be required.

Against a back-drop of high profile corporate collapses and accounting scandals, the current research offers a timely and relevant insight into how owners of organisations, 'principals', perceive auditor independence, whether they still have faith in the role of the auditor and whether they perceive regulations upon UK auditors as sufficient safeguards of their investments. The current research is of value to those academics

and accounting professionals currently debating the auditors' role as 'monitor' of the agents. The results of the current study will be compared to similar previous studies conducted before the high profile corporate collapses in the USA. Such a comparison will be insightful in determining whether the corporate scandals have impaired UK investor perceptions of auditor independence, or whether the principals of UK organisations still have faith in auditors.

The current study also provides a unique insight into the differences between institutional and private investors. A comparison between the two groups will determine whether different motives for investing and differences in accounting background determine how the two groups view auditor independence. The current study, with its unique focus upon the differences between investors, is the only known UK study of its kind.

## **1.2 Motives for the Research**

After a series of corporate collapses, the Cadbury Report (1992) started a revolution in corporate governance in the UK (CIMA, 1999). Many attempts have been made to improve corporate transparency and accountability, such as the Rutteman Report (1994), the Greenbury Committee (1995) and the Hampel Committee (1998). These attempts to improve corporate governance have culminated in the most recent Combined Code (2003). Concerns about auditor independence are one of the themes in the current debate on corporate governance but are by no means a product of the modern environment (Chandler and Edwards, 1996). An editorial taken from 'The Accountant' (1875:3) (cited by Chandler and Edwards, 1996:12) states that total independence should be 'insisted upon'.

Mayhew and Pike (2004) highlight how, over the past 25 years, the issue of auditor independence has repeatedly arisen all over the globe, giving examples of the Metcalf Committee (1977), the Cohen Commission (1978), the collapse of the savings and loan industry in the US (1985), the Advisory Panel on Auditor Independence (1994), the Panel on Audit Effectiveness (2000) and the collapse of Enron (2001), 'nearly every independence debate has centred on the concern that auditors may evolve into client advocates' (Mayhew and Pike, 2004:799). Since the Enron collapse, the issue

of auditors maintaining complete independence from clients has continued to be an area of concern and controversy not only to the accounting profession but also to interested third parties.

### The Collapse of Enron

The collapse of America's seventh largest company, Enron, had effects all over the world; in the UK, it re-awakened debate on auditor independence concerns.

Formed in 1985, Enron specialised in the transportation of gas by pipeline. During the 1990s, Enron started to supply both oil and gas, the company also started to expand globally. At the height of its success, Enron was engaging in buying and selling contracts for the supply of power (Gwilliam and Jackson, 2006/7). Between 1996 and 2000, Enron reported pre-tax profits of around \$1.7billion. However, it transpired that Enron was using arcane accounting techniques, at the limits of US GAAP regulations. The accounting techniques used at Enron allowed the inflation of profits and the concealment of debts. Enron's debts were kept off the balance sheet by concealing them in 'special purpose entities', which, Enron claimed it, was not controlling. As a result, Enron's share price was overvalued.

However, prices started to fall after the sudden resignation of its chief executive, Jeff Skilling, in August 2000. During this time, concerns were increasing about Enron's balance sheet and the quality of the company's earnings. It was at this point that the external auditors, Arthur Andersen, realised that Enron could not recover their (concealed) losses with falling share prices. Andersen had no choice but to change the way it accounted for the special purpose entities. The Houston office of Andersen also started to shred documents related to Enron. Against the backdrop of falling share prices, in November 2001 Enron restated its profits for the last four years and admitted that it had overstated profits by \$600m since 1997 whilst understating debt by around 116% (Gwilliam and Jackson, 2006/7). On 2<sup>nd</sup> December 2001 after a failed merger attempt with competitor, Dynegy, Enron filed for bankruptcy.

After the corporate collapse, questions began to arise about the independence of Andersen, who had signed off Enron's accounts as a true reflection of the company's

financial situation. Some commentators argue that Andersen was incompetent. However, the close relationship between Andersen and Enron might have resulted in Andersen employees advising on unwise accounting practices and deliberately overlooking irregularities in Enron's accounts.

There are a number of reasons to explain why Andersen was (wrongly) signing off Enron accounts. Andersen employees had permanent office space at Enron. The distinction between the Enron employees and Andersen employees was blurred and often Andersen employees would participate in social activities arranged by Enron. The closeness between the employees increased in the 1990s when Enron increased the number of ex-Andersen employees it hired. Andersen was also receiving a large proportion of income from providing lucrative non-audit services to Enron. Andersen would have experienced a significant reduction in profits if they lost Enron as a client causing a situation of fee dependence. The closeness between the two companies and Andersen's dependence on Enron could have resulted in Andersen employees overlooking the accounting practices used by Enron.

Whilst the UK use different accounting regulations to those used in the USA, the questions surrounding auditor independence which arose during the Enron scandal (concerning psychological factors related to economic dependence, long tenure, non-audit services provision and ex-auditor employment), could also pose a threat to UK auditors' independence. It is important that UK policy-makers consider these auditor independence issues in order to enhance the independence (and credibility) of UK auditors.

### Auditing Regulation outside the UK

In the USA, after a wave of corporate scandals and collapses and the 'sudden and stunning' demise of Enron (Reynolds et al., 2004:29), the Sarbanes-Oxley Act was introduced in order to ensure that auditors would be seen to be in a position of complete independence. Among the requirements of the Sarbanes-Oxley Act was the banning of nine types of non-audit service and the compulsory rotation of partners in the audit engagement team every five years. In addition, Chief executive officers and Chief financial officers are now required to certify personally the accuracy of

financial statements and other disclosures made by their companies. The Act heightened the USA's prescriptive approach to accounting regulations. In Japan, France, Belgium and Italy the provision of non-audit services to audit clients is also prohibited (Firth, 2002).

### Auditing Regulation in the UK

The UK has not been immune to accounting scandals and corporate collapses. Past accounting, scandals have included Maxwell, BCCI, Polly Peck, Barings Bank and Lloyd's of London. Responses to scandals have usually involved some changes to the structure and pronouncements of regulatory bodies.

The matter of ethics has been recognised since 1880, when the ICAEW was first established. More recently, the various professional accounting bodies have continued to develop guidance on ethics to their own members. In 1974 the Consultative Committee of Accountancy Bodies (CCAB) was established, with the objective of co-ordinating the guidance provided by the main accounting bodies. The CCAB provided a forum for the discussion of issues affecting the accounting profession as a whole and unified the ethical guidance that the accounting bodies provided to their members. The CCAB consists of six members: the ICAEW, ICAS, ICAI, ACCA, CIMA and CIPFA.

In line with the CCAB's advice on ethical guidelines, the ICAEW (the biggest professional accounting body) issued the 'Guide to Professional Ethics' in 1979. The Guide provided advice to auditors on ways to maintain independence. However, the Guide did not contain any prohibitions, but instead warned auditors that certain situations would be *undesirable*, for example, where one client contributed more than 15% of the auditor's gross income and where auditors performed management tasks.

More recently, in the wake of the recent US accounting scandals, an independent regulator of UK auditors, the Auditing Practices Board (APB), (which is part of the Financial Reporting Council) was established. The establishment of the Financial Reporting Council (and thus the APB) was a move to ending the self-regulation of the individual accounting bodies and to improving corporate governance. There is an

important distinction between the APB and the accounting profession. The APB is an independent regulator and its objective is to restore public confidence in auditing and ensure that external auditors behave independently, objectively and with integrity. However, the accounting profession consists of the professional accounting bodies (such as the ICAEW). These bodies are the 'service providers' and train their members to become accountants. It is the task (and the responsibility) of the professional bodies to ensure that their members adhere to the accounting regulation produced by the APB and to act ethically.

In 2004, the APB issued 'Ethical Standards for Auditors'. These standards are less permissive than the previous guidelines stating that firms *should not* act as auditors to a client who regularly contributes to more than 10% of the audit firm's gross income (or 15% for non-listed client companies). The professional bodies are now required to adhere to the APB's Ethical Standards and to educate their members accordingly. All members of professional accounting bodies who engage in auditing activities must follow the Ethical Standards. The 'Ethical Standards for Auditors' (2004) are directly relevant to the current research and address independence issues related to areas such as long tenure, non-audit service provision, client employment of a former auditor and economic dependence.

However, despite these latest Ethical Standards for Auditors, fundamental questions over auditors' ability to live up to the service ideal of professional integrity still remain and there is still much controversy over what can be done to 'minimise the possibility of an Enron or WorldCom situation occurring' (Reeves, 2002:4). Whilst it appears that 'no single solution is a panacea' (Reeves, 2002:4) for UK auditor independence problems, interested parties have yet to agree upon important issues such as whether non-audit service provision should be prohibited or whether a system of mandatory audit firm rotation should be introduced. It is clear that independence issues need consideration further to prevent future losses of auditor independence. Patricia Hewitt, former Trade and Industry Secretary, stated that, it would be foolish not to learn lessons from the corporate collapses in the US (Reeves, 2002:4).

In light of the current controversy, this study examines how one of the main user groups of audited financial statements perceives auditor independence. The motive of

the research is to build upon the previous UK perceptual studies conducted by Firth (1980, 1981) and Beattie et al. (1999) and provide timely information about perceptions of auditor independence.

### **1.3 Research Objectives**

There are two main research objectives. The first main objective of the current research is to determine investor perceptions of auditor independence. The auditor-client relationships investigated are economic dependence, non-audit service provision, long association and ex-auditor employment; these were all found to be controversial issues in the relevant literature. The second main objective of the study is to determine investor perceptions of the current and suggested safeguards for auditor independence. The study determines whether investors have faith in the current UK accounting regulations to prevent conflicts of interest for auditors or whether they would like to see further regulations introduced. In addition to these objectives there are two sub-objectives of the current research:

1. To compare institutional and private investor perceptions of auditor independence.
2. To determine whether a number of 'background' variables such as gender and accounting qualifications affect investor perceptions of auditor independence.

### **1.4 Scope of the Study**

The current research focuses primarily on the perceptions of investors. Investors were chosen for investigation as they are one of the main users of audited financial statements. Investors use financial statements in order to make informed investment decisions and their faith in the financial statements produced by the agents which they employ is crucial. The opinions of institutional investors will be contrasted with those of private investors who may not be so well informed on issues of auditor independence. It is expected that the opinions of the two groups will differ. Reckers and Stagliano (1981) also compared the perceptions of sophisticated and unsophisticated financial statements users but focused on a different sample, that of

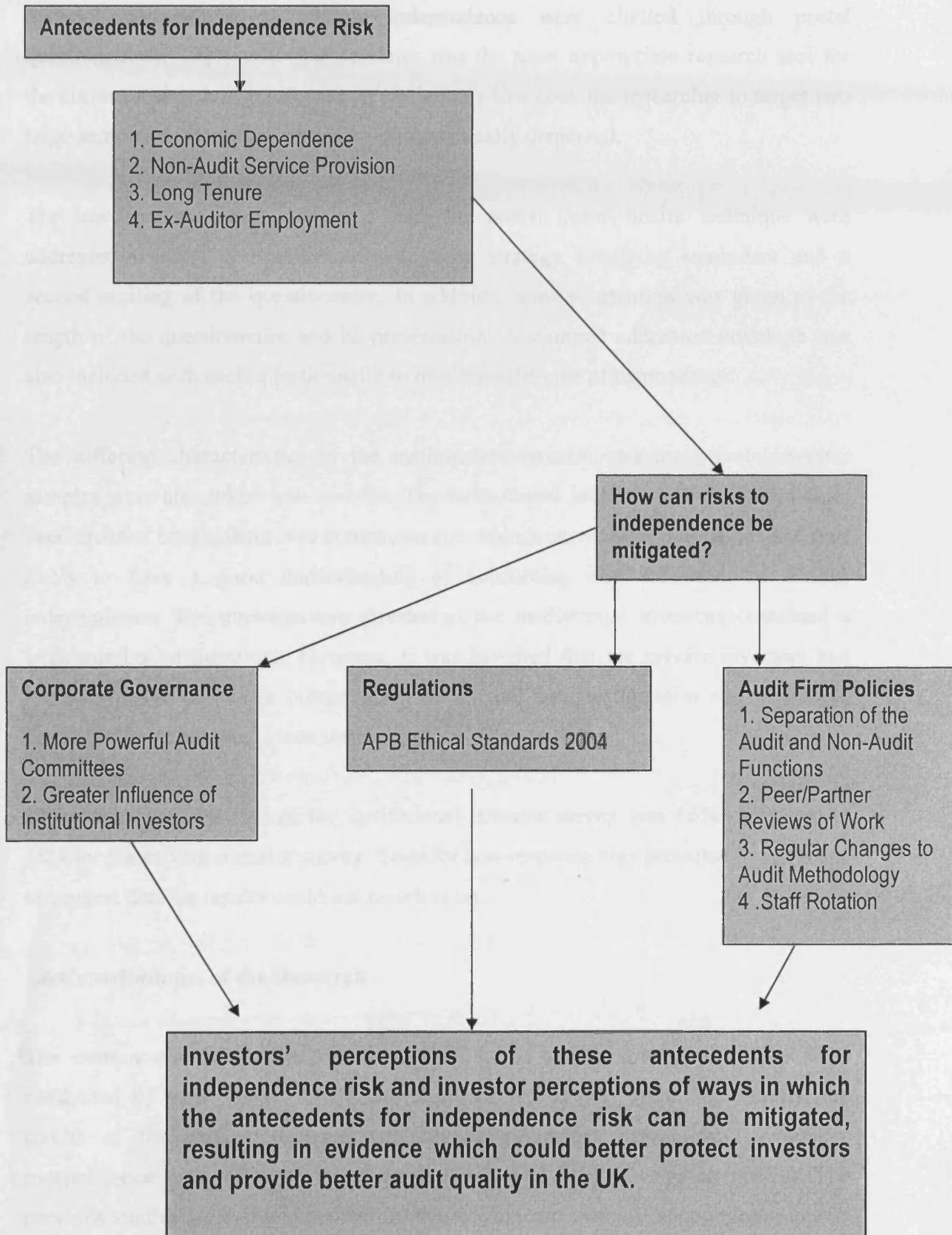
financial analysts and MBA students. Whilst similar studies have examined institutional investor or ‘fund manager’ perceptions (e.g. Titard, 1971, Firth, 1980, Canning and Gwilliam, 1999 and Alleyne and Devonish, 2006) or private investor perceptions of auditor independence (e.g. Quick and Warming-Rasmussen, 2005) separately, the current study is the only known UK study to compare the auditor independence perceptions of institutional and private investors.

The current study only focuses on the perceptions of users of financial statements and not the perceptions of preparers of financial statements. It may be difficult for auditors to be impartial about the quality of their own work and may not provide unbiased opinions. Previous studies show that auditors are normally more confident in their own ability to remain independent than third parties such as investors (Imhoff, 1978, Firth, 1980, Lindsay et al., 1987, Bartlett, 1993, Beattie et al., 1999 and Quick and Warming-Rasmussen, 2005).

Finally, it is important to note that the current study does not focus upon whether the four auditor-client relationships *actually* affect independence, but rather whether an auditor is *perceived* as independent by investors. ‘An auditing environment where the public has faith in the product (financial statements) requires both actual and perceived independence’ (Haber, 2005:12). It is very important to determine whether the main users of financial statements have faith in auditors. If investors do not perceive the auditors to be in an independent position the auditors’ reputation and the financial statements produced will be discredited, regardless of whether or not the auditor is behaving independently in reality.

Based upon the work of Johnstone et al. (2001:2), whose framework was claimed to provide ‘direction for further research to assist the auditing profession, auditing firms, and regulators as they address auditor independence issues’, the following research framework (Figure 1.1) has been devised in order to outline the current study:

Figure 1.1 Outline of the Current Research



## **1.5 Research Methodology**

Investor perceptions of auditor independence were elicited through postal questionnaires. The postal questionnaire was the most appropriate research tool for the current research as it allowed, at a relatively low cost, the researcher to target two large samples of investors who were geographically dispersed.

The low response rates associated with the postal questionnaire technique were addressed using a comprehensive follow-up strategy involving reminders and a second mailing of the questionnaire. In addition, special attention was given to the length of the questionnaire and its presentation. A stamped addressed envelope was also included with each questionnaire to minimise the cost of responding.

The differing characteristics of the institutional investor and the private investor samples were also taken into account. The institutional investors targeted were chief executives of banks, insurance companies and various investment companies and thus likely to have a good understanding of accounting and the issue of auditor independence. The questionnaire directed at the institutional investors contained a large number of questions. However, it was assumed that the private investors had less knowledge of auditor independence issues and the questionnaire was shortened, simplified and contained more instructions.

The usable response rate of the institutional investor survey was 16% compared to 28% for the private investor survey. Tests for non-response bias provided no evidence to suggest that the results could not be relied on.

## **1.6 Contributions of the Research**

The current research builds upon the findings of similar UK perceptual studies conducted by Firth (1980, 1981) and Beattie et al. (1999). Most importantly, the results of the current research will highlight whether perceptions of auditor independence have changed since the previous UK studies were conducted. The previous studies were conducted before the most recent wave of accounting scandals

took place in the USA and these scandals may have had a knock-on effect for UK investor perceptions of auditors.

Whilst examining investor perceptions of auditor-client relationships, the current study is different from most others in the field as enhancement strategies for auditor independence are also examined. Beattie et al. (1999) and Alleyne and Devonish (2006) have argued that researchers tend to overlook safeguards for auditor independence. Furthermore, the study focuses on both partner and audit firm rotation as methods to enhance auditor independence, Gates et al. (2007) argue that few studies have examined both of these enhancement strategies together.

The research is also useful to policymakers considering changes to UK accounting regulations for the prevention of future 'Enron Style' accounting scandals. The questionnaire elicits perceptions of the main users of audited financial statements on the current accounting regulations. The results of the questionnaire indicate whether the investors perceive the need for the introduction of further regulations upon companies and auditors in order better to protect auditor independence. The perceptions elicited will be directly beneficial to the APB as it reviews its Ethical Standards for Auditors.

The study also provides a unique comparison of institutional and private investor perceptions of auditor independence. The study acknowledges that different groups of investors may perceive auditor independence in different ways because of their differing demographics and motives for investing. No other known UK study has compared investor perceptions in such a way.

## **1.7 Contents of the Thesis**

The structure of the thesis is as follows:

Chapter Two provides an overview of agency theory, which forms the theoretical basis of the research. Agency theory outlines the important relationship between the investors (as owners of organisations) and auditors who are employed to monitor the managers of organisations. Agency theory highlights the importance of auditor

independence. If an auditor becomes too close to the management, the two parties may collude against the best interests of the owners.

Chapter Three presents a critical evaluation of the literature in the four main areas of study (economic dependence, non-audit service provision, long association and ex-auditor employment). From the literature, the research hypotheses are developed and outlined in Chapter Four.

Chapter Five describes the selection of appropriate methodology for the current research. The chosen method of a deductive, positivist approach in the form of a postal questionnaire is justified. The sample selection, of private and institutional investors, is also discussed. The exact format and design of the postal questionnaire is outlined in Chapter Five including a description of the differences between the institutional investor questionnaire and the private investor version. Chapter Five concludes with a discussion of how the data collected from the two questionnaires will be analysed.

Chapter Six begins with a discussion of the response rates to the individual surveys. The initial descriptive statistics are discussed. Main findings from the descriptive statistics are that for both sets of investors, economic dependence and non-audit service provision caused more concern for auditor independence than ex-auditor employment and long association (see also Firth, 1980). Chapter Six then examines the background variables with the intention of identifying how these variables affect investor perceptions of auditor independence. The results of the research and the implications of the findings are discussed in Chapter Seven.

Chapter Eight provides a summary of the thesis and sets out the conclusions of the research. The chapter begins with a reminder of the original intention of the current study and the main findings of the institutional and private investor surveys. The limitations of the current research are also outlined. The chapter ends with areas for suggested future research.

## **1.8 Chapter Summary**

In this chapter, the setting for the current study has been outlined. The importance of auditor independence was highlighted, including certain relationships between the auditor and client which could impair auditor independence. The motives, objectives, scope of the study and contributions were outlined. Finally, this chapter concludes with a summary of the thesis.

The following chapter examines the theoretical underpinnings of the current research. The current research is based upon agency theory with particular emphasis on the agency relationship. Chapter Two also examines alternative models of auditor independence.

## **Chapter Two: Theoretical Background of the Research**

### **2.1 Introduction**

Recent high profile accounting scandals in the USA have resulted in a renewed international interest for corporate governance issues. In particular, a number of corporate collapses have highlighted the problems which occur when the managers of organisations form a close relationship with the auditors. The current research is underpinned by agency theory which outlines the important relationship existing between the investors (owners of organisations), the managers who run the organisations and the auditors who monitor management activities for the investors. The main objective of the investigation is to examine certain factors which may destroy the functional operation of the agency relationship. When auditor independence is not present, the agency relationship will no longer be effective. The study focuses on factors which could destroy the agency relationship and certain strategies which can be employed to help protect effective agency relationships.

### **2.2 The Background of Agency Theory**

Agency theory dates back to the fourteenth century when it began to feature in English common law and the law of torts. However, the use of agency theory in organisational economics is a more recent phenomenon (Shankman, 1999).

At the core of agency theory is the agency relationship. An agency relationship consists of one party (the principal) delegating tasks to another party (the agent) (Eisenhardt, 1989). A contract underpins the relationship between principal and agent (Shankman, 1999). The contract is used as an incentive for agents to align their goals with those of the principal. Under ideal conditions, the agents would put aside their own interests in order to work towards the principal's own objectives (usually wealth maximisation) (Quinn and Jones, 1995). However, Quinn and Jones (1995) argue that this ideal condition is a normative view; it is a theory of how agents should behave but not something that agents necessarily follow in reality due to 'agency problems'. 'Agency problems' (Eisenhardt, 1989:58) may occur when:

1. The goals of the principal and the agent are conflicting,
2. It is difficult/expensive for the principal to verify what the agent is doing (Eisenhardt, 1989:58).

An agency theory framework is used in the current research to highlight the nature of the relationship between shareholders, managers and auditors. In a corporate governance setting, positivist writers on agency theory argue that the agency relationship refers to the shareholders as principals and owners of the company delegating the day-to-day running of their company to the management (Eisenhardt, 1989:60). Often the principals will become removed from their company causing a 'remoteness gap' to form (Lee, 1972:67). Whilst agents are required to report annual company progress to the principals, the principals look for a way to corroborate what the agents are saying. Financial reports are used to evaluate management performance (Antle, 1984) so the principals need to ensure that the agents are not trying to further their own interests by seeking to portray the company in the most favourable light possible (Bazerman et al., 1997).

Agency theory explains that organisational life is based upon 'self-interest' (Eisenhardt, 1989:64) with individuals seen to be 'morally hazardous, defined by attributes such as opportunistic and adverse selection including a propensity to lie, cheat, steal and shirk' (Shankman, 1999:329). Agents cannot be trusted to put the principals' interests above their own as agents will only uphold their agency agreements as long as these agreements are serving the agents' self-interest. The Institute of Chartered Accountants in England and Wales (ICAEW) (2005:6) argues that 'agents are likely to have different motives to principals. They may be influenced by factors such as financial rewards, labour market opportunities and relationships with other parties that are not directly relevant to principals'. It is up to the principal to put in place suitable mechanisms between the two parties (such as contracts) to ensure an alignment of goals between principal and agent.

Monitoring mechanisms can also be put in place to prevent the agent from behaving in an opportunistic manner. Without mechanisms to monitor agents' behaviour, an information 'asymmetry' exists between principals and agents, putting agents in a strong position to filter or to manipulate information (Hill and Jones, 1992:140). 'A

simple agency theory model suggests that, as a result of information asymmetries and self-interest, principals lack reasons to trust their agents and will seek to resolve these concerns by putting in place mechanisms to align the interests of agents with principals and to reduce the scope for information asymmetries and opportunistic behaviour' (ICAEW, 2005:6).

One mechanism, which principals use to prevent opportunistic behaviour, is the employment of auditors as monitors of the agents. 'An audit by someone independent of the manager reduces the incentive problems that arise when the firm manager does not own all the residual claims on the firm' (Watts and Zimmerman, 1983:613). Auditors legitimise and add credibility to agents' statements (Skerratt, 1982), thus supporting the integrity of capital markets (Beattie et al., 1998:159). 'An audit provides an independent check on the work of agents and of the information provided by an agent, which helps to maintain confidence and trust' (ICAEW, 2005:7).

Auditors are an essential part of an agent's risk management system because auditors reduce the problems created by a principal-agent relationship, 'providing information to shareholders and other stakeholders that is vital to firms' public ownership' (Bazerman et al., 1997:90). Antle (1984:2) describes an auditor's role in the agency relationship as one of 'verification'. Ballwieser (1987:334) explains that 'the purpose of the audit is to form an opinion as to whether the manager's report is in error'. Lavin (1977:237) explains that 'it is their [auditors'] freedom from allegiance to management that makes them particularly valuable to the business community'. An unqualified audit report from a reputable auditor will reduce a company's agency costs (Watts and Zimmerman, 1983) and boost its value (Firth, 1997) because third parties will perceive the report as credible. Independence is the 'raison d'etre' of the auditing profession and is essential for a functional agency relationship (Woolf, 1997:349). It is important that the monitors be *seen* by the principals to be in an independent position, because the principals will not value the financial statements if auditors appear to lack independence.

Some authors (e.g. Bazerman et al., 1997) argue that there is an inherent contradiction in the relationship between the monitor and the agents which prevents monitors being completely independent. Critics argue that it is impossible for monitors to be

independent when they are hired and paid by the people who are affected by the monitor's work. Agents have an economic power over the monitor and this power can sometimes lead to 'coalition forming' (Ballwieser, 1987:344) between agent and monitor. Faced with a controversial accounting issue, monitors may give in to the agent's wishes for fear of losing a large client. Clikeman (1998:40) has likened the relationship between agents and monitors to 'the home baseball team being allowed to hire the umpire or an author being allowed to select the book reviewer'. The ICAEW (2005:8) highlights how 'the appointment of expert auditors generates a further agency relationship which in turn impacts on trust and creates new issues relating to their independence'. Furthermore, Chow and Rice (1982) have found empirical support for the contention that companies switch their auditors after receiving a qualified audit opinion. Chow and Rice (1982) argue that management do not want to receive a qualified opinion because it can affect the market price of the company's stock and it can affect the management's compensation. There is a concern that managers use the threat of switching to a new auditor to ensure that the company gets a clean audit opinion. The threat of switching auditors can put great pressure on an auditor's objective state of mind. In short, it has been suggested that an 'audit expectations gap' (Beattie et al., 1998:160) exists. An audit expectations gap is the gap between the public's view of what an auditor should be doing and the auditor's perceived performance. Public interest in this expectations gap is high due to recent corporate failures. 'Though an auditor may be very valuable to an owner, it would be rather myopic for him not to be aware of the problems which the auditor can also create. Why should it be obvious that he should act on behalf of the owner if the interests of both parties are not identical?' (Ballwieser, 1987:329).

The Enron collapse shows how the greed and opportunistic behaviour of top executives meant that the auditors and managers failed to protect the interests of the principals, 'this occurred through ongoing misrepresentation of financial reports and inefficient monitoring strategies that were becoming progressively harmful to the principal' (Arnold and de Lange, 2004:755). Andersen, the external auditors (monitors), were hired to represent the interests of the principals and reduce agency problems by increasing the 'information symmetry between principal and agent' (Arnold and de Lange, 2004:761). However, the monitors were advising the agents

how to manipulate the information given to the principals (Culpan and Trussel, 2005:68).

Agency theory states that the monitor should be independent of the agent and free from conflicts of interest with the company and its agents but Andersen received \$52 million in fees from Enron, half of which were for consulting (Culpan and Trussel, 2005:66). 'One might question whether or not Andersen would conduct a thorough audit of a transaction that they already approved (and for which they received a fee) wearing their consulting hats' (Culpan and Trussel, 2005:66). Self-interest and the collusion of the agent and monitor caused a full-scale breakdown of the agency relationship with principals' stockholdings becoming worthless and the demise of both Enron and its monitors. The ICAEW (2005:10) states that whilst the principals of an organisation need to foster a close working relationship with the auditors in order to facilitate a thorough audit, 'this close relationship has led (and continues to lead) shareholders to question the perceived and actual independence of auditors and to demand tougher controls and standards over independence to protect them'. In light of the Enron example Arnold and de Lange (2004:764) once again question whether the separation of ownership and control in modern organisations is a 'viable institution'.

Antle's (1982, 1984) economic model is based upon agency theory and provides the basis for the current study. Antle's model is the most commonly referred to agency theory model (Kleinman et al, 1998:7). In Antle's model, the agents of the client company are described as being effort-averse, not fulfilling their responsibility of wealth maximisation to the principals. However, should the principals realise that the agents are not fulfilling their responsibilities, there is a risk that the agents will be replaced or given a lower salary. The agents have an incentive to misrepresent the company's financial statements in order to fool the principals into thinking that their wealth is being maximised. As the principals realise that the agents may not behave honestly, the principals hire auditors in order to monitor the agents. However, the agents can bribe the monitors to convince the principals that the agents are performing tasks properly. It is only the risk to the monitor's reputation which may serve to keep the monitor honest.

As with many models, Antle's (1982, 1984) model has been criticised for being over-simplified and being based upon 'limited assumptions about human behaviour' (Kleinman et al., 1998:7). Therefore, Antle's model may not provide a completely accurate reflection of human behaviour.

### *Critics of Agency Theory*

Agency theory is not without its critics. Shankman (1999:320) uses stakeholder theory to criticise agency theory, stating that the two theories are 'polar opposites'. Shankman (1999) argues that the focus of the agency relationship is too narrow. In contrast, stakeholder theory balances the needs of all the company's stakeholders. Stakeholder theory argues that only by achieving a balance between all the company's stakeholders can a company survive. In contrast to agency theory, stakeholder theory states that companies have responsibilities to all stakeholders for 'moral reasons' (Shankman, 1999:322) and that no one set of interests should be given priority over another. For example, agency theory states that managers are morally obliged to work in the interests of the owners as the owners have provided the capital and have taken a risk. However, stakeholder theory argues that other interests also need to be met in order to maximise wealth, for example, the interests of the suppliers who provide the goods and parts to sell (so have also taken a risk) and the interests of the employees who help the company to function (known as the strategic stakeholder approach) (Shankman, 1999). Stakeholder theory states that only by recognising stakeholder interests can agents 'uphold their contractual obligation to principals' (Shankman, 1999:326). In light of the criticisms of agency theory, Shankman (1999:330) argues that 'models of the firm that only recognise owner-manager or economic relationships are inconsistent with the tenets of market economics'. However, Shankman (1999:331) concedes that agency theory is the root of many management theories with stakeholder theory representing a controversial approach, 'in reality, many firms still rely on policies derived from and take action according to the tenets of agency theory'.

## **2.3 Other Theories Related to the Current Study**

Whilst much has been written and researched on the subject of auditor independence, there is a distinct lack of theory in the field. Beattie et al. (1999:71) argue that ‘no formal theory of auditor independence exists and thus, to date, analytical models concerning independence are very limited’. Beattie et al. (1999) make the important observation that most studies of auditor independence are based upon rational arguments rather than theory.

A number of authors have attempted to design models of auditor independence although it has proved fruitless to try to include the growing number of economic and regulatory factors which affect an auditor’s unbiased mental attitude. These models may become out-dated. The most important models relating to auditor independence are discussed below:

### **DeAngelo’s Economic Model:**

DeAngelo’s (1981a) Economic Model is based upon economic theory and argues that an auditor’s incentive to compromise independence will be related to the relative importance of the client. On the one hand, it could be argued that auditors will lose their independence as they receive increased income from an audit client, but on the other hand, the costs related to non-independence such as reputation loss are incentives to stay independent. The model states that auditors will choose the course of action which will result in the greatest value for them. Where the audit firm has many clients, each one will represent a smaller proportion of income than is the case for a smaller firm with fewer clients. Auditors from larger audit firms have fewer incentives to compromise independence, as losing a client will not represent a big loss of income, whilst the loss of reputation could result in a greater financial loss. However, auditors from smaller audit firms with fewer clients might have a greater incentive to compromise their independence.

### **Goldman and Barlev's Resource Dependence Model:**

Goldman and Barlev's Resource Dependence Model is a 'power' based model (Kleinman et al, 1998:8). Auditors are not providing a unique service to their clients and are dependent upon clients for their income. However, client companies are not dependent upon auditors and can easily replace them. Client companies have power over auditors and could pressurise auditors. On the other hand, auditors can gain power over clients by solving clients' unique problems through non-audit service provision, causing client companies to become dependent upon the auditors and giving the auditors greater power to resist the pressure of client companies. It is 'the relative balance between the parties' power' (Kleinman et al., 1998:8) which will decide whether the auditors maintain their independence.

### **Nichols and Price's Exchange Theory:**

The basis of Nichols and Price's 'power' model (Kleinman et al., 1998:8) is that the client has most of the control. The client hires/fires and pays the auditor and can replace the auditor much more easily than the auditor can replace the client. In addition, the fact that auditors are only hired to adhere to the law means that the auditors value their fees far more than the client company will value the auditors' work (Kleinman et al., 1998:8). However, the auditors gain their power from increased regulations, which make it much harder for the auditors to comply with unreasonable requests from the client. The regulations will determine how easy it is for the auditors to resist client pressure. The current study will examine investor perceptions of the current regulations on auditors and whether these regulations are seen successfully to prevent auditors from giving in to client pressure.

However, this theory takes no account of the extent of the non-audit services which auditors now provide. These non-audit services mean that the auditor is highly valued by the client and much harder to replace. Additionally, the theory does not take into account the value (in terms of company reputation) which companies now place on having an independent audit conducted, companies no longer require an audit just to comply with the law.

## **Role Conflict Theory:**

Role conflict theory is based upon similar assumptions to those of agency theory. Role conflict theory centres on the assumption that an auditor is expected faithfully to monitor client financial statements and truthfully report to investors (Alleyne and Devonish, 2006). Rizzo et al. (1970) developed the theory of intra-sender conflict where a number of differing roles are assigned to the same individual. In the case of auditing, intra-sender conflict exists because auditors are expected to satisfy the opposing interests of the client company as well as the public (Koo and Sim, 1999). A situation where the auditor is providing audit and non-audit services to the client could cause role conflict because the auditor would be working as a monitor and agent simultaneously. Role conflict could ultimately influence auditor independence.

## **2.4 Chapter Summary**

This chapter has focused on agency theory which outlines the important relationship between investors, managers and auditors. The theory highlights the importance of auditor independence for an effective agency relationship, but recognises that relations between managers and auditors could threaten this independence. When auditor independence is damaged, the managers and auditors may deliberately filter the information given to the owners of organisations instead of working in the owners' best interests. The current study examines how certain relationships between managers and auditors could destroy auditor independence.

However, agency theory is not without its critics. This chapter examined how stakeholder theory is often used to criticise the assumptions of agency theory. Other models of auditor independence are also examined in this chapter.

The following chapter critically evaluates the relevant literature. In this chapter, studies which have examined potentially independence-impairing relationships between managers and auditors are reviewed.

## **Chapter Three: Critical Evaluation of the Literature**

### **3.1 Introduction**

The previous chapter focused on the concept of agency theory which provides the theoretical underpinning for the current research. The agency relationship outlines the important roles of the principals, agents and monitors in the running of a company. One aspect, which is integral to an effective agency relationship, is the independence of the monitors (auditors). It is essential that the monitors are independent of the agents in order to provide an unbiased, value-free opinion of the agents' statements for the principals (investors) who are usually remote from the organisation. Certain elements of the financial statements may be filtered from the principals if the monitor and the agent form a close relationship. Agents and monitors may put their own interests above those of the principals.

This chapter provides a brief overview of the concept of auditor independence including definitions of auditor independence, why auditor independence is important and an examination of the main auditor-client relationships which have been identified by academics as potentially independence-impairing.

### **3.2 What is Auditor Independence?**

'It is often asserted that independence is the cornerstone of the auditing profession' (Farmer et al., 1987:1) and 'both auditor competence and independence are necessary ingredients for a successful audit' (Lee and Stone, 1995:1171). However, despite independence being essential for an auditor, it is an elusive quality with many definitions. 'The phrase "Auditor Independence" traditionally has had no precise meaning' (Antle, 1984:1). Antle (1984:1) argues that definitions provided by accounting associations are generally lengthy, imprecise and 'subject to constant reinterpretation'. Many authors have provided their own interpretations. Flint (1988:59) argues that auditor independence is not a concept which lends itself to universal prescription, rather it depends on 'what is necessary to satisfy the criteria of independence in the particular circumstances'.

DeAngelo (1981b:116) provides a definition of auditor independence which is often referred to: 'the conditional probability that, given a breach [of accounting regulations] has been discovered, the auditor will report the breach'. Lee (1972:68) summarised auditor independence as 'an attitude of mind which does not allow the viewpoints and conclusions of its possessor to become reliant on or subordinate to the influences and pressures of conflicting interests'. Bazerman et al. (1997:90) argue that auditors must make their judgements objectively and 'free of any influence that other parties or factors might bring to bear'. The Auditing Practices Board (APB) (2004:6) states that 'independence is the freedom from situations and relationships which make it probable that a reasonable and informed third party would conclude that objectivity either is impaired or could be impaired'.

Auditor independence is a multi-faceted concept. In 1961, Mautz and Sharaf noted the important distinction between real and apparent auditor independence. Mautz and Sharaf (1961:204) stated that 'independence must be evident as well as real. Real independence is of little value if those who read an auditor's report refuse to acknowledge that independence does exist'. Beattie et al. (1999:68) also acknowledge that 'auditor independence is recognised to have two distinct dimensions'. Clikeman (1998:40) extends Mautz and Sharaf's (1961) arguments by stating that 'if the public were to believe the auditor is acting as an advocate of management or is under the influence of management, the audit would lose its value'.

Whilst independence may exist in reality, the auditor may not appear to be independent. 'An auditor who is independent in fact has the ability to make independent audit decisions even if there is a perceived lack of independence or if the auditor is placed in a potentially compromising position' (Lindberg and Beck, 2004:37). The auditor must take steps to avoid appearing to lack independence (Mautz and Sharaf, 1961). As Flint (1988) argues, the opinions of auditors are valueless if those who rely on audit reports have no faith in the integrity of the auditor.

### *Testing Auditor Independence*

There are many tests for auditor independence. Real independence (in fact) is the mental condition of an auditor and is impossible to measure directly; studies

attempting to measure 'real' independence use surrogates. Studies focusing on 'real' independence include Wines (1994), who examined whether there was a connection between audit opinions and non-audit service purchases and Sharma and Sidhu (2001) who test whether the propensity to issue going-concern qualifications was inversely connected to whether the client was a non-audit service customer. Additionally, Ferguson et al. (2004) investigated whether there was an association between the joint purchase of audit and non-audit services and earnings management activity.

In contrast, the appearance of independence concerns third party perceptions of auditor independence and commonly involves opinion-based surveys. For example, Firth (1980, 1981) and Lindsay (1987) sent users and preparers of financial statements a questionnaire outlining the different roles of auditors asking the participants to rate how independent they perceived the auditor. Krishnan et al. (2005:114) note that, in conducting research on auditor independence, inferences about perceptions of independence cannot be made from studies measuring 'real' independence since the two are 'inconsistent' with each other.

### *Conditions for Independence*

Despite independence lying 'at the heart of the auditor's role in society' (Reynolds et al., 2004:31), the accounting profession has had difficulty producing a system of standards to safeguard an auditor's independent mental attitude and eliminate conflicts of interest. Mautz and Sharaf (1961) made an early contribution to the literature by identifying the ideal conditions for auditor independence, consisting of *practitioner independence* and *professional independence*. Mautz and Sharaf (1961) argue that independence is a product of many factors including personal characteristics, organisational arrangements and environmental circumstances/constraints.

Practitioner independence refers to the individual auditor and comprises three main elements:

### **1. Programming Independence**

Programming independence states that auditors should be free from any managerial interference or pressure upon the audit work. However, auditors often find themselves with conflicting interests, as although auditors are employed to protect shareholder interests, auditors are 'hired, paid and even fired by the organisations that they audit, rather than by the people they ostensibly represent' (Bazerman et al., 1997:90). However, Hussey and Lan (2001) defend management, revealing that in their study of UK finance directors, those finance directors who admitted having a close relationship with their auditors were more likely to agree to further measures to protect auditor independence, such as audit firm rotation, in order to increase third party independence perceptions.

### **2. Investigative Independence**

Investigative independence states that auditors should have access to all the resources which they require to complete an audit, there should be no restrictions upon the auditor (Sherer and Kent, 1983) and the auditors should be free to implement their strategy (Dunn, 1996). Management should in no way try to assign or specify the activities that will be examined and auditors should be free from personal interests/relationships which would prevent a thorough audit. However, often management restrict auditors by pressurising them to finish the audit in a certain period, or by not paying a high enough fee to allow for a rigorous audit (Flint, 1988, Stevenson, 2002).

### **3. Reporting Independence**

Reporting independence states that auditors should be free to report their findings as they see fit, without being overruled by management. However, Dunn (1996) argues that auditors are often tempted to follow the line of least resistance and comply with management due to fear of dismissal.

Professional independence concerns the image of the accounting profession as a whole and the extent to which this image reassures the public of accountants' integrity and objectivity. Auditors should have a common interest in protecting their professional reputation, in order to maintain the social utility of their product (Flint, 1988). However, the Enron scandal in the USA caused the collapse of Andersen, the

auditors, and reflected very badly on the accounting profession, ‘many commentators have stated that the Enron bankruptcy has forever altered the public’s view of auditor independence, because Enron’s auditors had previously issued unqualified opinions on Enron’s financial statements’ (Lindberg and Beck, 2004:37). Auditors must now reassure the public by taking further, more visible steps to protect their independence. ‘Independence in appearance is of course not limited to the individual practitioner. In addition the auditing profession in general must be considered independent by the public, if the audit as an institution is going to be of value’ (Jeppesen, 1998:529). If public confidence in audit firms is low, it will damage audit firms’ ability to diversify into lucrative areas (Sikka and Willmott, 1995:556). Furthermore, the Association of British Insurers (2002:3) believes that, if confidence in the audit process is not maintained, then ‘there is a risk for companies and their shareholders of abrupt and arbitrary withdrawal of capital from suspect businesses’. In the modern business environment, Gendron et al. (2006) argue that auditors’ personal commitment to accounting ethics are deteriorating. Gendron et al. (2006:171) argue that auditors’ attitudes have moved from ‘taking an unbiased point of view in the performance of an audit engagement’ to focusing on commercial gain and personal reward structures. It is argued that the deterioration in commitment to accounting ethics has been the result of changes in the nature of work and in the nature of the relationship between auditor and client, and a reduced emphasis on educating new entrants about the importance of professionalism and responsibilities.

It is the intention of the current study to go some way in determining how UK institutional and private shareholders perceive professional independence in the current business environment.

### **3.3 Auditor-Client Relationships**

The current study examines how a close relationship between auditor and client could impair auditor independence and damage the fundamental principles of an effective agency relationship. As academic literature on auditor-client relationships is a vast area, the literature has been broken down into four main areas in line with Firth’s (1980:463) classifications.

Firth (1980) identified four aspects from the auditor independence literature which could cause a close relationship between the auditor and client including, 'fees', 'conflicts of interest', 'personal relationships' and 'financial involvement with, or in the affairs of, clients'. Firth's (1980) classifications are still relevant today as many of the academic studies, which examine auditor-client relationships, relate to one of the four classifications, these classifications provide a good basis upon which to organise the wealth of literature which examines auditor-client relationships. However, it is important to note that the current study does not claim to provide an exhaustive review of all the literature existing in the field of auditor independence.

In considering issues related to auditor independence, it should be remembered that the term 'auditor' can have several meanings. The term 'auditor' can refer to the individual audit partner, the local audit office and the national audit firm (such as KPMG). The current study examines the issues of fees, conflicts of interest, personal relationships and financial involvement at the audit partner level.

### **3.4 Fees: The Case of Economic Dependence**

One of the biggest conflicts of interest for an auditor is the payment of audit fees. Client management pay audit fees, which enables the management to have a degree of power over the auditor. Mautz and Sharaf (1961:211) identified how audit fee payment could impair outsiders' perceptions of independence, 'it is a fact of life in public accounting that fees come from clients, and public accountants are directly dependent on business companies for the greater part of their revenues. An intimate association with business is so obvious a characteristic of public accounting and auditing that we fail to see its influence on the minds of laymen'. Mautz and Sharaf's (1961) concerns were reiterated by Stevenson (2002) who stated that auditors' independent mental attitude would be damaged as well as perceptions of auditor independence if limits were not imposed upon levels of revenue received from individual clients. Markelevich et al. (2005:7) note that large fees paid to the auditor could result in the auditor becoming 'reluctant to make appropriate inquiries during the audit for fear of losing highly profitable fees'. Haber (2005:12) argues that 'even if no additional services were rendered by Andersen to Enron, Enron would still have failed. Even without the additional revenue from non-audit services as a reason for

Andersen to relax its professional judgement, as some have alleged, the audit fees paid to Andersen by Enron represented a substantial portion of the revenue of the servicing office'. Haber (2005:12) goes on to pose the following question: 'when so much revenue is being realised, can any business firm properly exercise the standard of professional care? This question exists even when a firm receives only audit fees'. Furthermore, Francis (2006:749) adds that 'all fees create a fee dependence on the client' and that 'a completely independent audit is, by definition, impossible due to the fee dependence inherent in audit contracting'.

It is noted that economic dependence can refer to a number of different situations. An individual audit partner may become dependent upon one client for a large proportion of the income that he or she generates. In this case, the loss of the audit client would have a substantial effect on that particular auditor's income generation and the auditor may be mindful of this situation when deciding whether or not to qualify a clients accounts (fee dependence could be further enhanced through the provision of non-audit services). However, economic dependence can also refer to the local audit office, in this case the office as a whole might be dependent upon one client for a large amount of its gross income and losing this client would reduce the profits of the local audit office. This was the case for Andersen's Houston office, which became dependent upon Enron for a large amount of audit and non-audit income. Furthermore, economic dependence could also refer to the national accounting firm; in this case, the accounting firm as a whole might become dependent upon one large client and may be afraid to qualify this client's audit report in case the audit fees (and non-audit fees) are lost. Beattie et al. (1999:71) argue that incentives to compromise independence, because of fee dependence, 'can operate at firm, office and partner levels'. The current study will examine the effects of economic dependence in relation to the individual audit partner.

In the current business climate where the extent of non-audit service provision is being regulated, Khurana and Raman (2006) argue that non-audit service fees are declining whilst audit fees are on the increase, meaning that audit fees should now be taken seriously as a threat to auditor independence. Khurana and Raman (2006) state that 'higher audit fees imply higher profit margins for audit services and suggest that the audit function may no longer be a loss leader. For these reasons it may be

inappropriate to focus exclusively on non-audit fees as a potential threat to auditor independence'. The current study addresses Khurana and Raman's (2006) concerns by examining audit fees (economic dependence) and non-audit fees separately, 'both audit and non-audit fees involve payments to the auditor, and both sources of auditor fees may be expected to contribute to the auditor-client economic bond' (Khurana and Raman, 2006:1007).

Firth (1980) examined perceptions of fee dependence. The questionnaire used in the study was mailed to 750 users and preparers of financial statements and outlined 29 different auditor-client relationships. The participants had to rate how they believed each situation affected auditor independence. The following two relationships focused on fee dependence:

- An accounting firm receives 15% of its gross fees from one client,
- One large office of a national accounting firm receives 20% of its gross fees from one client.

For both of the situations a significant amount of respondents believed that auditors would lose their independence when one client made up 15% and 20% respectively of gross fees, with the financial analysts and the loan officers (the users of financial statements) showing more concern than the CPAs. The study was extended by Firth (1981) to examine how bank loan officers would react to certain auditor-client relationships, one of which being an auditor receiving 15% of gross fees from one client. The results showed that when an auditor received 15% of fees from one client, the mean loan offered by the bank officers was significantly lower than that offered for the 'independent relationship'. Concern over levels of audit fees was also the finding of Lindsay (1987) in a Canadian study where bankers, financial analysts and auditors all perceived a situation where an audit firm received 15-16% of total income from one client as a major threat to auditor independence.

However, despite these important findings, Firth's (1980, 1981) work focused upon a large number of different auditor-client relationships and lacks in-depth analysis and explanation. Furthermore, by today's standards, Firth (1980) used particularly high

levels of audit fees. Beattie and Fearnley (2002) question whether the current 10% income limit is too high. The current study intends to use a similar research design to that of Firth (1980, 1981) and to test perceptions of the current audit fee income level.

In an extension of Firth's work (1980, 1981) Bartlett (1993) conducted a perceptual, questionnaire-based study, to examine certain factors which could affect commercial lending officers of banks and CPA's perceptions of auditor independence. The study focused on the effects of the provision of non-audit services, contingent fees, joint ventures with audit clients, budget pressure and the size of the audit fee. In this mailed questionnaire, Barlett (1993) asked the participants to rate how independent they believed an audit firm to be when the audit fee from one client represented 1% of total CPA firm revenue and when an audit fee from one client represented 40% of total CPA firm revenue. The results showed that the 1% case was rated much higher in perceived independence than the 40% case. Given the knowledge of the size of the audit fee, there was an insignificant decline in CPAs' perceptions of independence, and a significant decline in bankers' perceptions of auditor independence. Accountants were much more confident in an auditor's independence (and were perhaps far more willing to protect the image of their profession than to answer the questions truthfully) than were the bankers. Bartlett (1993:65) concludes that, 'since there are undoubtedly many cases where one client represents a substantial part of an individual's workload, this finding should be of interest to the SEC and other regulatory bodies'.

However, whilst Bartlett (1993) claims to extend the work of Firth (1980, 1981) due to the audit fee size levels chosen for investigation, the study does not make an important contribution to the debate on audit fees. There is no justification for the chosen audit fee levels. The 1% level is very low and is unlikely to cause much concern. However, the 40% level is very high (almost half of the audit firm's total income). Bartlett (1993) does not test any levels of audit fee size in between the two extremes tested. All the study has demonstrated is that fewer participants are concerned about economic dependence when audit fees are a very low proportion of the auditor's overall income and much more concerned when the audit fee is a higher proportion of the auditor's overall income.

30 years after Mautz and Sharaf (1961) first acknowledged the impact which audit fees could have on perceptions of auditor independence, Gul (1991:163) stated that audit fees were 'an important determinant of perceptions of an auditor's independence'. Gul (1991) conducted a perceptual, questionnaire-based study focusing on a sample of 49 bankers in New Zealand, to determine the effect which audit fee size, management advisory services, audit firm size and competition had on perceptions of auditor independence. The results of the multi-factor ANOVA design suggested that there was a correlation between the size of the audit fee and damaged perceptions of auditor independence, regardless of the other variables. The results showed that third parties perceived that an audit firm could become economically dependent upon a client without the provision of non-audit services. However, as the study is based upon just 49 usable responses, the generalisability of these results outside the sample is questionable.

Teoh and Lim (1996) found that large audit fees received from a single audit client affected auditor independence perceptions of Malaysian accountants. Bartlett (1997) examines perceptions of auditor independence in relation to (implied) economic dependence. A sample of CPAs and bankers were presented with a case study which outlined a client who provided a substantial part of the audit firm's fee base. The respondents were asked to rate how likely a CPA partner was to make an adjustment which would increase the client's bad debt expense in light of the CPA's economic dependence. The results indicated that over 70% of both groups believed that the auditor would perceive the adjustment to be necessary and that 'the CPA would be able to make an independent decision regarding the required adjustment in spite of the overall size of the audit fee to the individual partner' (Bartlett, 1997:253). Finally, those who believed that the auditor would resist client pressure gave as their main reasons: the CPA's professional ethics, the threat of lawsuits and the damage to audit firm reputation.

However, Bartlett (1997) acknowledges that due to the sensitive nature of some of the questions (especially for the CPAs who had to judge the honesty of other people in their profession), the participants may not have answered truthfully.

Beattie et al. (1999:71) argue that, depending on the importance of the client to the auditor, audit fees may cause auditors to lower their independence and 'cheat' in order to retain the audit client. If the client contributes to a large amount of the auditor's overall income, the auditor may become economically dependent upon that client. If the auditor were to lose the client, it could result in considerable financial loss for the auditor. In Beattie et al.'s (1999) study finance directors and audit partners expressed the most concern for auditor independence when an individual audit partner's income depended on retaining a certain client, rather than at the office or firm level. In a similar study based in Barbados, Alleyne and Devonish (2006) also found that users and preparers of financial statements ranked economic dependence as a significant risk to auditor independence.

Beattie et al.'s (1999) arguments echo the sentiments of DeAngelo's (1981a) economic model, which states that incentives for an auditor to compromise independence will be a balance between the importance of the client and the litigation and reputation costs which could result from breached auditor independence. DeAngelo (1981a) argues that smaller accounting firms may have bigger incentives to compromise independence than larger accounting firms as smaller firms have fewer clients and so each client represents a larger proportion of income to the auditor. DeAngelo's (1981a) arguments over accounting firm size were proved to be correct by Alleyne and Devonish (2006) who found that small audit firm size affected perceived auditor independence in Barbados.

In contrast to DeAngelo (1981a), Reynolds and Francis (2001) examine the size of the client rather than the size of the audit firm arguing that larger clients could create greater economic fee dependence than smaller ones, leading to 'preferential treatment and favourable reporting by auditors' (Reynolds and Francis, 2001:379). Losing a large client may have extreme effects on the local audit office, resulting in a big reduction in revenue and lower partner compensation. Reynolds and Francis (2001) examine the accruals of 6,747 US companies that had Big Five auditors in 1996. However, the results of the examination showed that 'neither the office-level analysis nor national-level analysis find evidence that economic dependence causes auditors to be lenient and report more favourably for larger clients' (Reynolds and Francis, 2001:397). In fact, the evidence provides support for the accounting profession's

argument that ‘reputation protection’ (Reynolds and Francis, 2001:396) is enough of an incentive to keep the auditor honest. Reynolds and Francis (2001) argue that larger clients are often high profile and so if a questionable or negligent audit were to be performed it could damage an auditor’s reputation, making it harder for the auditor to gain new clients in the future, ‘thus there is evidence that reputation protection leads to auditor reporting conservatism’ (Reynolds and Francis, 2001:377). Auditors are unlikely to treat a large client with more respect, in fact the auditors may be more conservative due to legal liability. However, only the Big Five auditors were the focus of the research. An interesting avenue for further research would be to examine smaller local audit firms who, with lower levels of income, may become dependent upon a large client.

Similar to the work of Reynolds and Francis (2001), Craswell et al. (2002) examine real auditor independence in relation to fee dependence. They measure an auditor’s propensity to issue unqualified audit opinions in relation to audit fees, using publicly available Australian information from 1989 onwards. Craswell et al. (2002) find no evidence of fee dependence either at a national or a local market level.

In comparison to the findings of Reynolds and Francis (2001), Craswell et al. (2002) argue that fee dependence does not cause auditors to be dishonest because unlike non-audit services, audit fees are easily replaced and are not worth jeopardising independence and reputation over. Furthermore, audit firms employ schemes such as partner and peer reviews in order to protect individual auditors’ independence. However, it is worth noting that audit fees may not be easy to replace in all types of market.

Finally, Bakar et al. (2005) found that Malaysian loan officers were divided over the effects of audit fees on auditor independence, with half the sample indicating that size of audit fees does not affect auditor independence and half the sample indicating that audit fees has some influence on auditor independence. In contrast, Higgs and Skantz (2006) argue that companies who pay very high audit fees are actually signalling audit quality to investors, giving investors greater faith in the company’s audited financial statements. However, Khurana and Raman’s (2006) findings contradict those of Higgs and Skantz (2006). Using cost of equity capital as a proxy for investor perceptions of

the credibility of financial reports, Khurana and Raman (2006) find (through regression analysis) that investors perceive client dependence negatively. A positive association between auditor fees and cost of equity capital was also found which suggests that higher fees damage investor perceptions of auditor independence.

### **3.5 Economic Dependence: Summary**

Few studies exist which examine the effects of audit fee dependence. However, Gul (1991) and Beattie and Fearnley (2002) indicate that limits need to be put upon the amount of revenue received from one client in order for third parties to have confidence in auditor independence. Beattie and Fearnley (2002) argue that the 10% income level is too high and needs to be below 5%.

An interesting point emerges from the examination of the literature. The research, which focused on 'real' independence, tended to suggest that economic dependence does not affect an auditor's unbiased mental attitude. However, the perceptual studies seem to suggest that third parties believe that audit fee dependence will damage auditor independence. Even if economic dependence does not affect auditor independence in reality, third parties need further reassurance that auditor independence exists.

The accounting profession has also acknowledged the threat to auditor independence which economic dependence creates. The ICAEW states that a member should not accept an appointment worth more than 10-15% of gross audit firm income. Most recently, the independent standard setter, the APB (2004), acknowledged the threat of economic dependence in its Ethical Standards for Auditors (2004), stating that auditors must be willing and able to disagree with the client management, regardless of how this could affect their position. However, the APB acknowledges that 'where auditors are, to some extent, economically dependent on the audit client, this may inhibit their willingness or constrain their ability to express a qualified opinion' (APB, 2004:9).

The combination of audit and non-audit work could cause a conflict of interest for auditors (Firth, 1980:463). Audit fees and non-audit service fees combined could

cause a level of economic dependence, which would have an effect (consciously or unconsciously) on an auditor's unbiased mental attitude. An examination of the non-audit service literature will follow in the next section.

### **3.6 Conflicts of Interest: The Case of Non-Audit Service Provision**

After a number of high profile accounting scandals, the provision of non-audit services to audit clients has become an extremely controversial area. There is a division in the literature over whether UK auditors should continue to provide such services or whether non-audit service provision should be further regulated, as in the USA. The current APB (2004) standards do not heavily regulate the provision of non-audit services but the matter is far from resolved. Krishnan et al. (2005:114) argue that there is a need for more research and different measures of investors' perceptions of non-audit service provision.

#### *Overview of the Non-Audit Service Debate*

Mautz and Sharaf (1961) identified the provision of non-audit services as a concern 40 years before the Enron scandal. Mautz and Sharaf (1961) argued that the provision of non-audit services caused the interests of the accountant and the client to become identical. 'There comes a time in any arrangement for management services when the mutuality of interest of the consultant and the client becomes so significant that the accountant ceases to be independent in the sense that we feel he should be for auditing purposes' (Mautz and Sharaf, 1961:222). More recently, Clikeman (1998:41) has argued that accountants need 'different mindsets', a consultant is required to be an ally of management, whilst an auditor is required to maintain a professional detachment from management.

Mautz and Sharaf (1961) advise that the only way for auditors to maintain an appearance of independence is to engage in auditing alone. 'Accountants who serve as auditors should perform no other functions for their clients, and those who perform other functions should not engage in opinion audits' (Mautz and Sharaf, 1961:228). Mautz and Sharaf (1961) argued that a separation of audit and non-audit services was necessary. An early perceptual study conducted by Schulte (1965) in the US showed

that, even though non-audit services were provided at a much lower level than they are today, 33% of a sample of users of financial statements believed that acting as a management consultant and as an auditor resulted in a conflict of interest.

In a similar questionnaire-based study, Briloff (1966) revealed that 53% of the sample of users of financial statements were concerned that the provision of non-audit services detracted from auditor independence, arguing that the duality of services should be 'discouraged and restricted' (Briloff, 1966:491). In contrast, in the same study only 22% of the sample of accountants indicated that non-audit service provision detracted from auditor independence. Briloff (1966) argues that whilst the accountants may not perceive non-audit service provision as independence-impairing, the perceptions of reasonable observers were damaged through joint provision. A similar study conducted by Hartley and Ross (1972) also indicated that a large proportion of users and preparers of financial statements were concerned about the joint provision of audit and non-audit services. However, 51% of the sample were confident that an auditor's professional integrity would prevent losses of independence. Finally, a study by Lavin (1976) further highlighted the early concern for non-audit service provision, with 50% of the sample of users of financial statements indicating that the provision of non-audit services did concern them and would effect their investment decisions.

Despite the early warning from Mautz and Sharaf (1961) and studies carried out by Schulte (1965), Briloff (1966), Harley and Ross (1972) and Lavin (1976), most audit firms currently offer additional services to clients which could compromise apparent (and real) independence. If an auditor is making a large amount of money through lucrative non-audit services, the auditor will not want to lose that client and 'an auditor's own economic considerations influence and may even take precedence over, independence considerations' (Barnes and Huan, 1993:226). Citron (2003) estimates that in large accounting firms approximately 50% of total revenue now comes from consulting services with Nixon (2004) estimating that non-audit service fees are around one and a third times that of statutory audit work. In many cases, the audit itself has become a 'loss leader' (Iyer et al., 2003:131) in order to sell more lucrative non-audit service contracts to clients. For example, in 2003 BP paid its auditor, £9.9m for statutory audit work, but £20.9m for non-audit work (Nixon, 2004). Antle

(1999:7) describes the provision of audit services today as ‘a second class citizen’ in comparison to non-audit service provision. Saturation in the market for audit services has caused the increase in the provision of non-audit services by accounting firms. Joint provision (audit firms providing non-audit and audit services to the same client) has provided a ‘growth opportunity’ (Hillison and Kennelley, 1988:33) for audit firms who increasingly find that compliance auditing is becoming less important to their overall profitability (Bazerman et al., 1997:93). However, in a recent survey of 62 FTSE companies, figures suggested that non-audit fees as a percentage of audit fees are falling, (from 83% in 2005 to 69% in 2006), (Sukhraj, 2007).

### *The Arguments against the Provision of Non-Audit Services*

A large number of academic researchers have argued that non-audit service provision damages auditor independence. Beattie and Fearnley, (2002:20) argue that non-audit service provision is a ‘wide ranging threat to independence’. Non-audit service provision could affect an auditor’s independent mental attitude for a number of reasons. The following section examines the main ways that non-audit service provision could damage auditor independence.

### *The Economic Bond*

DeBerg et al. (1991) argue that the provision of non-audit services in addition to audit services may strengthen the economic bond which exists between auditor and client. Largay (2002:154) argues that as the economic bond between auditors and clients grows in significance, auditors may become more willing to protect clients at the cost of their reputation. Those auditors who have a strong economic bond with the client company may have too much to lose by qualifying client financial statements. Firth (2002) tested these assumptions arguing that an auditor who lacks independence (perhaps due to non-audit service provision) may be more willing to issue a clean audit report, in order to avoid dismissal by the client’s management. In a sample of 1,112 non-financial companies listed on the international stock exchange, Firth (2002:687) found that ‘high non-audit service fees are associated with clean audit reports’. However, Firth (2002) acknowledges that the evidence is not conclusive and that other factors could have caused the result. For example, extra non-audit services

may have been employed by a struggling company in order to help clear up problems which that company was facing, thus the resolution of the problems by the auditor could enable a clean audit report to be given in good faith. If this were the case then the non-audit services would have been 'beneficial to the audit process' (Firth, 2002:687). Lennox (1999:250) argues that 'it seems likely that non-audit services increase the probability of problem discovery *and* reduce auditor independence'.

In the case of Enron, over half the fees Andersen received were from non-audit service contracts, giving Andersen a large interest in Enron which could have motivated the auditors to leniency (Sridharan et al., 2002).

Parkash and Venable (1993) examined the issue of economic bonding between the auditor and the client, using an agency theory framework. Parkash and Venable (1993) state that recurring non-audit contracts could result in a significant perceived impairment of auditor independence because recurring non-audit contracts cause the auditor to have a future economic interest in the client. However, agency costs associated with the purchase of non-recurring services will be small since the fee paid to the auditor will be much smaller than in a recurring situation and the monitor and agent will have less time to form a relationship. Levels of agency costs are hypothesised to significantly influence a client company's decision to purchase a recurring non-audit service, as recurring non-audit services are associated with a greater damage to auditor independence. Thus, companies with higher agency costs (measured by management ownership, outside investment concentration and debt), who place a higher importance on the need for an independent audit, will purchase fewer recurring non-audit services from the auditor than those with lower agency costs. Data from Fortune 500 companies for the fiscal years 1978-1980, the three years when ASR No.250 was in place in the USA were analysed (ASR no.250 required all companies registered with the SEC to disclose the total amount of non-audit services which they purchased from their external auditor). The results supported the initial hypothesis and showed that expected agency costs explain the differences in demand for recurring non-audit services. These results show that recurring non-audit services purchased from auditors do have the potential to damage perceptions of auditor independence, and so companies will 'manage' the amount of

non-audit services they purchase from the auditor depending on the associated agency costs (Parkash and Venable, 1993:131).

However, the researchers did not make the distinction between recurring and non-recurring non-audit services clear, this distinction is the fundamental basis of the research and the lack of clear definitions leads to concerns over the accuracy of the measure used to link non-audit service provision and agency costs. Parkash and Venable, (1993:131) note that their distinction needs 'finer partitioning' if further research were to be undertaken, as some non-audit services have both recurring and non-recurring elements.

Addressing these limitations, Firth (1997) conducted a similar study based in the UK. A sample of financial statements from British industrial companies for the year ending in 1993 was analysed. Firth (1997) argues that the classification of the non-audit service types into recurring and non-recurring was not possible, as companies are not required to make this distinction in the UK. Furthermore, Firth (1997) argues that this type of grouping is subjective, as 'continuing non-recurring consultancy fees would probably impair independence to the same extent as those classified as recurring' (Firth, 1997:19). Firth (1997) constructs a regression model relating consulting levels to the various proxies for agency costs.

Similar to Parkash and Venable (1993), companies with high agency costs (measured by director shareholdings, large shareholdings and financial distress) were found to purchase fewer non-audit services from the incumbent auditor than those companies with lower agency costs. Firth (1997) believes that purchasing large amounts of non-audit services from the auditor signals to shareholders that the two entities are economically bonded, which could raise questions about auditor independence, 'one possible signal of independence problems is the degree to which the accounting firm is economically bonded to a client' (Firth, 1997:19). If a company's auditors are not perceived to be independent, then share prices are likely to fall and access to capital will be restricted. Firth, (1997:19) concludes that 'companies that face potentially higher agency costs are likely to be extra cautious about jeopardizing the appearance of auditor independence' (Firth, 1997:19).

Furthermore, based upon a sample of 538 US companies filing proxies with the SEC between February and June 2001, Abbott et al. (2003) found that those audit committees who meet regularly and who comprise independent directors have a lower non-audit service fee to audit fee ratio than those who do not. The findings imply that conscientious audit committees recognise that purchasing audit and non-audit services from the same firm could damage the appearance of independence and confidence in the company's financial statements. Conscientious audit committees try to minimise damaged perceptions of independence by purchasing lower amounts of non-audit services than those audit committees who do not meet regularly. Abbott et al. (2003:217) conclude that 'this evidence is consistent with audit committee members perceiving a high level of non-audit service fees in a negative light'.

The studies examined above are consistent with expectations that companies with effective audit committees and higher agency costs purchase a lower amount of non-audit services from the incumbent auditor than companies with lower agency costs and less effective audit committees.

However, Beattie and Fearnley (2002:33) criticise the models which the above authors have used in their investigations, stating that 'the overall explanatory power of these models is, however, low'. Beattie and Fearnley (2002) argue that other factors which would relate to the purchase of non-audit services other than the existence of agency costs and audit committees have been omitted from the studies, (which could have affected the results), thus possibly making the findings of these studies inaccurate.

Sharma and Sidhu (2001) and Beeler and Hunton (2002) also examine the issue of economic bonding between the client company and the auditor by determining relationships between future economic interest for the auditor (from non-audit service provision) and the auditor's propensity to issue going-concern qualifications. Sharma and Sidhu (2001) argue that auditors may not issue a going concern qualification to those clients who historically generate large non-audit service incomes. Focusing on a sample of 49 bankrupt companies, de-listed from the Australian stock exchange between 1989 and 1996, Sharma and Sidhu (2001:612) found that 'the likelihood of a going-concern qualification is significantly related to the proportion of non-audit

service fees to total fees'. Consistent with Wines (1994), Sharma and Sidhu's (2001) results suggest that auditors may be willing to compromise independence for those companies who provide them with high non-audit service revenue. Sharma and Sidhu (2001) argue that Australian regulators should consider revising AUP 32, (no one client should make up more than 15% of total auditors revenue) because a client generating much less than 15% of total revenue could influence auditors' decisions.

However, whilst non-audit services might impair an auditor's independence, other explanations need to be considered. For example, as with Firth's (2002) study, the auditors may have believed that the management of the failing company could turn the situation around with the help of certain non-audit services.

Finally, there are some limitations of the study. Firstly, information about the nature of the non-audit services is not publicly available and not considered in the study and secondly, the propensity to issue going-concern qualifications is just a proxy for auditor independence, 'the extent to which it is an appropriate and accurate proxy presents a limitation' (Sharma and Sidhu, 2001:621). Furthermore, only 49 companies were included in this study, a very small sample confidently to conclude that non-audit service provision is associated with going-concern qualifications. The external validity of these results is questioned.

Beeler and Hunton (2002) also examine the subconscious effects, which the expectation of future income (from non-audit service revenue and lowballing) could have on an auditor's judgment. Beeler and Hunton (2002) test whether a strong economic bond between auditor and client could positively influence going-concern judgements and negatively affect budget hour revisions without the auditor consciously realising it. Beeler and Hunton (2002) presented 73 audit partners from big accounting firms with a case study based on a real company's insolvency. In some of the cases, low-balling and non-audit services were present, in other cases they were not. The respondents had to give a going-concern opinion and had the opportunity to revise budget hours.

The results showed that client commitment was highest when both low-balling and non-audit services were present. As with Sharma and Sidhu (2001), in the presence of

future economic interest there was a positive association with going-concern assessments. There was also a negative association with budget hour revisions, showing that when auditors were very committed to clients they saw the client's financial condition in a more positive light. The results show that even when auditors believe that they can retain their independence 'in fact' in the presence of non-audit service revenues, the auditor may subconsciously be seeing the audit client in a more favourable light.

Rather than using going-concern qualifications to determine whether non-audit service provision causes economic bonding, Ferguson et al. (2004) examine whether non-audit service provision is associated with earnings management activity in a sample of UK firms 1996-1998. Ferguson et al. (2004) argue that the greater the level of non-audit services provided, the greater the economic bonding between the client and the auditor making it 'virtually impossible for auditors to remain objective despite their intentions' (Ferguson et al., 2004:817).

Data from 610 firms across 34 industries between 1996 and 1998 were quantitatively analysed. The results showed that over the period examined, mean audit fees grew by 6.96% compared to a growth in mean non-audit fees of 42.95%, it is argued that because the growth of non-audit fees was greater than that of audit fees, audit firms would be increasingly relying on the revenue received from non-audit service activities. The results of the Pearson correlation coefficients showed that the measures of earnings management were positively correlated with the measures of non-audit service purchase, 'consistent with concerns over the potential impact of non-audit service purchase on financial reporting quality' (Ferguson et al., 2003:830). It was also found that client company size was related to opportunistic accounting, showing that it is harder for auditors to challenge management when the client is large due to the level of income which the auditor receives from that client. Moreover, companies who are not performing well and companies with new auditors are more likely to be associated with earnings management (this finding is associated with the mandatory audit firm rotation debate).

Ferguson et al. (2004) argue that because audit litigation costs are lower in the UK than in the US, Big Five (now Four) auditors do not have great incentives to challenge

management practices, therefore the results may not be generalisable to other countries. However, the study was conducted during a period of relatively stable growth but since the phase of US accounting failures, concern over opportunistic accounting may be greater in the UK.

Felix et al. (2005) examine economic bonding from a slightly different perspective to that of previous studies. In the study, Felix et al. (2005) examine how non-audit service fees and client pressure can influence evidence-gathering decisions and choices. The focus is different to the majority of studies which examine the effects of non-audit service provision on financial reporting outcomes. Felix et al. (2005) echo the previous sentiments over economic bonding, arguing that as the amount of non-audit service provision has increased in recent years, so has the risk that client management could leverage its position over the auditor, who has an increased self-interest not to upset or lose profitable clients. As clients become more profitable, it is proposed that, clients may try to pressure auditors into relying heavily on the internal audit, gathering less evidence of their own. If the auditors do not gather sufficient evidence of their own it could lead to damaged audit quality as errors and irregularities may go undetected. Felix et al. (2005) test the hypothesis, by conducting a matched survey for the calendar year of 1996. Members of the Institute of Internal Auditors and a selection of the Fortune 1000 firms were sent the survey, it was requested that the internal audit directors complete one questionnaire and that they forward the second one to their external auditor. A cross-sectional regression model analysed the results. The results indicated a positive coefficient for the non-audit/client pressure variable, meaning that auditors' reactions to client pressure were associated with a greater reliance on the internal audit when non-audit services were provided. 'These results indicate that auditors significantly increase their actual use of internal audit due to client pressure when the client has the leverage of being a non-audit service client of the external audit firm' (Felix et al., 2005:44).

However, these results only *suggest* that non-audit service provision means that auditors are more susceptible to client pressure. Felix et al. (2005) suggest that auditors may rely on the internal audit, when pressured, for less critical tasks which would not compromise the quality of the audit. Moreover, the client management may honestly believe that the internal audit function can make an important contribution to

the external audit process. Furthermore, external auditors may have relied upon the internal audit due to the large amount of independent directors or the company's good corporate governance structure. Therefore, a number of outside factors, besides the level of non-audit service provision, could have affected these results. Finally, as the sample size was small (caused by the matched survey design) it could be subject to small sample size bias which would affect the generalisability of the results.

Frankel et al. (2002) examine how investors react to information over non-audit service purchases. Frankel et al. (2002) attempt to examine the effect of non-audit services on 'real' auditor independence by using SEC-mandated disclosures to examine the effect which higher than expected non-audit fees has on a company's share price. It is argued that if investors believe that non-audit service provision impairs an auditor's objectivity, then the investors will bid down the share values of companies disclosing higher than expected levels of non-audit service purchases. The results of the examination of 3,074 proxy statements revealed a negative association between share prices and higher than expected non-audit service purchases. However, the research was based upon the figures from the first year of disclosed non-audit fees, which means that it is possible that the disclosure would have had a greater impact on the share price because investors would not have known what to expect or what was a normal/average level of non-audit fees. To check for the 'first year' effect, the results would need to be compared to future disclosures. Furthermore, Beattie and Fearnley (2002:44) argue that 'the statistical significance of this finding is sensitive to the specification of the non-audit fees model'. Ashbaugh et al. (2003), who in a replica study find no association between share values and non-audit service provision, add weight to Beattie and Fearnley's (2002) arguments. Larcker and Richardson (2004) who address the limitations of the prior research and find that auditors were less likely to allow abnormal accrual choices to those companies which the auditor had the greatest dependence upon also proved this. A similar study conducted by Higgs and Skantz (2006:2) could only find limited support for the contention that 'the market views abnormally profitable non-audit engagements as creating an economic bond that threatens auditor independence'.

Furthermore, in an Australian study of companies listed on the Australian Stock Exchange 1993-2000, Ruddock et al. (2006) found no link between higher than

expected levels of non-audit service purchases and reduced earnings conservatism/reduced auditor independence. Whilst, Ruddock et al. (2006) argue that a lack of power of the tests used cannot be ruled out as the reason for finding no relationship, Francis (2006) use Ruddock et al's (2006) study as a basis for the argument that there is no direct evidence to link the provision of non-audit services with audit failures. Moreover, Francis (2006) questions the legitimacy of regulators wishing to further restrict the scope of non-audit services which auditors can supply to their clients.

However, Francis (2006:757) does acknowledge the problem which non-audit service provision poses for the perception of auditor independence and states that whether the negative perceptions of non-audit service provision are justified or not, 'there are real economic consequences associated with NAS in terms of lower stock prices for companies that pay their auditors high levels of fees for NAS'. Similar to Ruddock et al. (2006) and Francis (2006), a study conducted in New Zealand by Hay et al. (2006) on the Top 200 companies found no link between audit opinions and levels of non-audit fees, but Hay et al. (2006:732) acknowledge that 'the high levels of non-audit fees provide some evidence that the perceived auditor independence is impaired when auditors provide non-audit services'.

A number of perceptual studies also examine the issue of economic bonding between the auditor and client as created by the provision of non-audit services. These studies generally focus on perceptions of users and preparers of financial statements of the economic bond which non-audit service provision can create.

### *Early Perceptual Studies*

In a UK perceptual study, Firth (1980) found that users of financial statements perceived non-audit services to impair independence and 'in general non-independence was perceived to impair investment and lending decisions' (Firth, 1980:462). However, the chartered accountants surveyed ranked the provision of non-audit services as a small threat to auditor independence. This is understandable, as the accountants would want to protect the image of their profession. Firth (1981) asked bank loan officers to make a loan decision based on a company's financial statements.

The results showed that where non-audit services were provided, lower loan offers were made than if non-audit services had not been provided. Bank loan officers had less faith in the company accounts which had been audited by auditors who were also providing that company with non-audit services. Dykxhoorn and Sinning (1982) extended Firth's (1980, 1981) studies by examining a sample of German users of financial statements. Similar to the results of Firth's (1980, 1981) surveys it was found that the provision of non-audit services had an effect on investment and loan decisions, providing further evidence that 'financial statement users' financial decisions are affected by their perceptions of the auditors' independence' (Dykxhoorn and Sinning, 1982:345).

Shockley (1981) examined the perceptions of Big Eight partners, partners from local and regional firms, commercial loan officers and financial analysts in relation to non-audit service provision. It was found that auditors who provided non-audit services to their audit clients were seen to be more likely to lose independence than those who did not. Shockley (1981:788) noted that 'the empirical evidence against management advisory services appears more convincing than the evidence for it' and that the separation of audit and non-audit services would not improve the perception of independence significantly. Shockley (1981:797) concludes by saying that non-audit service provision must be evaluated from the 'perspective of appearance, as well as fact'.

Gul and Hai Yap (1984) acknowledge that in providing non-audit services to audit clients accounting firms are open 'to the risk that the independence of auditors could be seriously impaired' (Gul and Hai Yap, 1984:96). This study is based in Malaysia. Gul and Hai Yap (1984) argue that because the accounting profession is not so well developed in Malaysia than in more advanced countries, the public will have a lower understanding of an auditor's role and responsibilities. It is hypothesised that the lower understanding of auditing will be reflected in attitudes towards auditor independence and the provision of non-audit services.

The questionnaire was sent to a sample of 110 practising accountants, bankers, managers and shareholders. The results showed that in some ways the hypothesis was correct. The majority of accountants, bankers and managers indicated that such

provisions of non-audit services affected their confidence in auditor independence. However, 41% of shareholders indicated that the provision of non-audit services either did not affect their confidence or actually increased their confidence in auditor independence. In most UK and US studies, the accountants and managers are most confident in an auditor's ability to remain independent whilst providing non-audit services. In contrast, most often the shareholders (the users of this financial information) are concerned with auditors' provision of non-audit services.

Gul and Hai Yap (1984) argue that in developing countries where the shareholders are less sophisticated, auditors are held in high esteem, so 'participation in the affairs of a company through management consulting and other non-audit services is perceived by many shareholders as potentially beneficial to improving a company's business prospects' (Gul and Hai Yap, 1984:101). However, the majority of all respondents (65%) believed that a separate disclosure of audit fees and non-audit fees would give users of financial statements a better understanding of the nature of the relationship between the auditor and the client. However, this study received few responses and further research is needed in order to draw conclusions that are more reliable.

In a study of 92 members of the US corporate boards of directors' by Pany and Reckers (1983), it was discovered that the directors themselves became concerned about external parties perceptions of auditor independence and self-review threats when non-audit service fees grew beyond 40% of total audit fees. In a further study, Pany and Reckers (1984:89) report the 'continuing problem' of non-audit services and the perception of auditor independence. The results of the mail questionnaire of analysts and shareholders indicate that the provision of any type of non-audit service decreases perceptions of auditor independence. In particular, the results showed that even those with high audit role awareness were concerned about a lack of auditor independence, though it was contended that it would be those with a low audit role awareness who would be most concerned (as they do not understand the audit process). However, in contrast to Shockley's (1981) arguments, concern over independence decreased when a separate division of the firm conducted the non-audit services.

A similar study to Pany and Reckers (1984) was Bartlett's (1993) scale of perceived independence study. Bartlett (1993) presented a sample of 300 commercial lending officers of banks and 300 CPAs, with a questionnaire outlining ten different situations. The participants had to respond by indicating how independent they perceived the auditor to be in each situation. Four of these situations dealt with the provision of non-audit services. The results showed that in each of the four cases which dealt with non-audit service provision, it was the bankers who perceived more significant reductions in auditor independence compared to the CPAs. Where the auditors helped with executive search and the hiring of the CEO, the bankers perceived a 50-50 chance that the auditor could lose independence. 'These results indicate that users of financial information may be uncertain about auditor independence while auditors may be overly confident about their ability to remain independent in the face of all circumstances. These results may also contribute to the creation and maintenance of the expectation gap' (Bartlett, 1993:64).

Consistent with Pany and Reckers' (1984) finding, Bartlett (1993) finds that individuals' level of accounting education has little to do with how they perceive auditor independence.

Knapp (1985) asked senior loan officers to indicate their perceptions of auditor independence when non-audit service provision was at the 40% level and the 0% level. It was found that although non-audit service provision was not a major factor in the financial statement users' assessments of auditor independence, it was perceived that conflicts would be resolved in favour of the client, when there was a high degree of competition in the audit market and when the audit firm provided a significant amount of non-audit services to a client. However, Knapp (1985:209) warns about the damaging effects which the 'demand effect' could have had upon the study. The 'demand effect' could have occurred because the study was repeated and thus the respondents may have been able to determine the research hypotheses and consciously or unconsciously responded co-operatively. The 'demand effect' is the big disadvantage of using a repeated measures research design.

In a similar vein Lindsay (1987) examined the perceptions of Canadian auditors, financial analysts and bankers in response to an auditor who received 25%-30% of

total fees from one client for non-audit work. The results showed that significant numbers of respondents believed that the non-audit revenue would impair auditor independence with the bankers and financial analysts being more worried than the auditors (as found by most other studies which use auditors as participants). In a similar Australian study, Lindsay (1989) found that bankers and security analysts perceived auditors to be in a more vulnerable position when providing non-audit services. The respondents believed that any conflicts would be resolved in favour of the client for fear that the auditor will lose such a profitable client (particularly in small markets where clients are difficult to replace). In a further experiment conducted in Canada on a sample of bankers, Lindsay (1990:83) concluded that 'the extent to which the audit firm also provided non-audit services to the audit client also are perceived as factors which may hamper an audit firm in its attempt to take a strong independent stance'.

The above studies highlight concerns over the economic bond between auditor and client which non-audit services can create. However, these studies do not reflect the perceptions of today's users and preparers of financial statements. Non-audit service provision now makes up a much greater part of an auditor's income and people are much more aware of the dangers of joint provision. The conclusions of these studies may not still be applicable in such a constantly evolving business environment.

### *Recent Studies*

The following perceptual studies were conducted more recently than those previously outlined. The conclusions of the following studies may be more applicable in today's business environment.

Beattie et al. (1999) attempt to examine certain factors which could damage perceptions of auditor independence using a mailed questionnaire sent to a sample of UK finance directors and audit partners. The questionnaire outlined 45 economic and regulatory factors which could influence an auditor's independence. The participants indicated their perceptions of these factors. Some of the factors examined were fee dependence, non-audit service provision, lowballing, competition among audit firms, unpaid audit fees, the existence of an audit committee and the size of the audit firm.

As with the current study, the financial directors had the lower response rate of the two groups. The results were consistent with those of Firth (1980), finding that the principal risk factors as perceived by both groups were economic dependence upon one client and the provision of non-audit services. Whilst both of the groups of participants were concerned about the provision of non-audit services, the financial statement user group was more concerned than the audit partners, who are likely to be more confident in their own ability to remain independent. Questions are raised over the validity of audit partners' responses, as audit partners are unlikely to admit that certain factors may cause them to lose independence.

The study also considers enhancement strategies for auditor independence, which extends the current literature. The main enhancement strategies as perceived by the respondents were, the existence of the audit committee and the risk of the audit firm losing its registered auditor status and its reputation.

Canning and Gwilliam (1999) use a multi-method approach (of questionnaires and interviews) to determine the effect which the provision of non-audit services has on perceptions of auditor independence in the Irish commercial environment, an area which had not previously been researched. Multi-method research is particularly strong as it enables 'triangulation' to occur. Canning and Gwilliam, (1999:403) argue that there is an 'ambiguous relationship between non-audit services and auditor independence'. The population of the study were corporate lenders, investment managers and financial analysts, the main users of financial statements. In the questionnaire, the respondents were asked to rate an auditor's independence in different contexts relating to the provision of non-audit services, the information was then enhanced by the use of semi-structured interviews.

The results showed that over two-thirds of respondents agreed that auditor independence decreased when the same personnel provided both audit and non-audit services. The interviewees indicated that they were worried about the provision of non-audit services, due to fee dependency and economic bonding. However, the interviewees agreed that the separation of personnel into audit and non-audit services reduced the damage to auditor independence. The interviewees also agreed that the

small size and closeness of the Irish audit market could be a factor in diminishing auditor independence.

However, those participating in the study were not in favour of a total ban on the provision of non-audit services. They argued that the audit firm's knowledge of the client would result in better advice for the client and that the added information, which the auditor would acquire through providing non-audit services, would enable the auditor to form a better audit opinion.

Lowe and Pany (1994) examine the provision of non-audit services from a slightly different angle, an area which few previous studies have considered. Lowe and Pany (1994) argue that as demand for the provision of more specialised professional services has increased, accounting firms are now providing non-audit services, *with* rather than *for* client companies. 'Co-contracting is a common means of allowing two or more firms to pool their expertise and offer services superior to the services any single company could provide' (Clikeman, 1998:42).

The SEC is of the opinion that co-contracting could damage actual and perceived auditor independence, as auditors are effectively going into business with their clients, providing an economic interest for the auditor in the client company and strengthening the economic bond between auditor and client.

In a further study Lowe and Pany (1995) attempt to gauge the affect that co-contracting has on loan officers' perceptions of auditor independence. The loan officers were mailed a questionnaire in which they had to review a loan application for a firm who was undertaking such a consulting engagement. The results indicated that the materiality of the engagement (whether the fees from the engagement contribute to a large proportion of the CPA firms revenues or not), had a negative impact on the loan officers' perceptions of auditor independence. The loan officers perceived that the joint engagements between auditor and client could damage independence when the engagements were extremely profitable for the audit firm. However, how far the case study in the questionnaire actually reflected real life is questionable, as Lowe and Pany (1995) concede that important information may have

been omitted in order to keep the questionnaire to a reasonable length and ensure a good response rate.

As with Canning and Gwilliam (1999), Lowe and Pany (1995) also found that when separate staff conducted the audit and consulting division, confidence in the loan officers' perceptions of independence rose.

Another questionnaire-based perceptual study was conducted by Quick and Warming-Rasmussen (2005). The study focused on the Danish market place, in contrast to the majority of auditor independence literature which is based on UK and US markets. The researchers recognise the fact that 'cultural differences may actually lead to different results' (Quick and Warming-Rasmussen, 2005:145). As argued by Canning and Gwilliam (1999), the small (Danish) market place could cause auditors to act more honestly in order to maintain their reputation and to prevent losing clients. However, with a lack of clients, auditors may be forced to be more lenient. Furthermore, in a small market place, auditors are likely to be much closer to their clients. Quick and Warming-Rasmussen, (2005) argue that with the Enron collapse bringing auditor independence into the public arena once more, even if the provision of non-audit services really is not affecting auditor independence in fact, it could be damaging public perceptions of independence. However, whilst many are now calling for greater auditor independence and further safeguards, Denmark's legislation is moving in the opposite direction. Until recently only a few non-audit services were legally allowed to be provided by auditors to their clients, but a new liberalising law now means that auditors can provide all types of non-audit services, 'the direction of the change in Danish law was in contrast to international developments' (Quick and Warming-Rasmussen, 2005:142).

Quick and Warming-Rasmussen (2005) sent questionnaires to five groups of people: state authorised auditors, managing directors, bank loan officers, private shareholders and business journalists. The final response rate was 73.1%. The results showed that all of the groups except the auditors and managing directors viewed an impairment of independence when an auditor provides both audit and non-audit services to a client. It is concluded that independence in appearance is damaged by the provision of non-audit services. However, the researchers argue that because auditors do not view non-

audit service provision as impairing-independence, 'independence in mind is not affected' (Quick and Warming-Rasmussen, 2005:148). This may be an inaccurate assumption, as auditors are unlikely to admit that lucrative non-audit work affects their independence.

As with the current study, the questionnaire also tested to see whether different non-audit services were perceived differently. The results showed that all of the consulting services considered in the study (IT-systems, recruiting, legal services and accounting-related services) had a negative impact on perceptions of auditor independence. However, those non-audit services, which were perceived to be closer to auditing activities (such as accounting-related services), were perceived more favourably than those services which least resemble the auditing activity. Only the business journalists indicated that a separation of audit and non-audit service personnel would increase perceptions of auditor independence. Finally, all of the groups argued that an upper limit on consulting services would increase confidence. It is concluded that non-audit service provision does damage the appearance of auditor independence. There is a need to limit the provision of non-audit services, not liberalise it.

Solomon et al. (2005) focused on the perceptions of law students of the provision of non-audit services. These students had to evaluate the credibility of a company's financial statements and whether, in their opinion, the company would be a good investment. The students were given different case studies, some detailing that the company paid audit fees only and some where the company also received non-audit services (tax in particular as this service is yet to be banned under Sarbanes-Oxley) from their auditor. In keeping with previous findings from similar studies, the results showed that the students had more confidence in the companies who paid audit fees only and expressed a greater willingness to invest in these companies. It is concluded that non-audit service provision does damage perceptions of auditor independence and that regulators should consider adding tax services to the list of non-audit services banned under Sarbanes-Oxley.

However, it is possible that had accountancy students been used in the experiment, the accounting students would have expressed less apprehension towards the provision of

tax services as they have a greater understanding of the accounting process. However, the law students represent the opinions of the average private investor who is unlikely thoroughly to understand the accounting process.

Lindberg and Beck (2004) undertook a survey of CPAs to determine whether their perceptions of the effects of non-audit service provision were more negative after the Enron collapse than before it. A survey on auditor independence was sent to 1,500 CPAs in October 2001, before the Enron bankruptcy was declared. The same survey was sent to another 1,500 CPAs after the Enron collapse. The results showed that CPAs' perceptions of the effect which non-audit service provision has on auditor independence was more negative after the collapse than before it. Furthermore, CPAs were more conservative about whether a material transaction/event detrimentally affects auditor independence after rather than before the collapse. In general, the average concern for each issue surveyed was higher after the Enron collapse than before it. The strongest growths in concern after the scandal were for the following issues 'the materiality of non audit fees, the outsourcing of internal audit services, the potential for non audit revenue, and compensation for consulting referrals of non audit services' (Lindberg and Beck, 2004:39). However, the overarching finding from the survey was that auditors believe that the issues, perceived to effect auditor independence, are a greater threat to the public's perceptions of auditor independence than they are to actual auditor independence.

Brandon et al. (2004) focus their study on bond ratings and in particular bond analysts' perceptions of auditor independence, in relation to non-audit service provision. Bond rating analysts rely on audited financial data to provide predictions on whether companies are likely to make their required payments on time. If the provision of non-audit services affects financial statement users' perceptions of auditor independence 'they are likely to impose a cost-of-capital premium for information risk associated with their inability to rely on the audit' (Brandon et al., 2004:94), suggesting a negative association between the provision of non-audit services and bond ratings. Brandon et al. (2004) investigate this association using the Kaplan and Urwitz (1979) model of bond ratings on a sample of 333 bond issues between February 2001 and December 2002.

The results of these tests show that bond rating analysts do acknowledge the proportion of non-audit fees to total fees provided by an auditor and incorporate the information into the bond ratings as a 'significant concern' (Brandon et al., 2004:98). Brandon et al. (2004) were correct in hypothesising that companies, who purchase higher non-audit services from their auditor, generally receive a lower bond rating. As non-audit service fees seem to be an important consideration for bond analysts in deciding on a company's debt rating, it shows that non-audit services are damaging perceptions of auditor independence.

However, it is noted that the results only *suggested* that bond analysts consider the provision of non-audit services when making predictions, but that 'we cannot validate a substantive economic effect by demonstrating *systematic* changes in the actual rating assigned to a debt issue by bond rating analysts indicating no practical effect' (Brandon et al., 2004:101). Nevertheless, although the provision of non-audit services has no practical (systematic) effect on bond ratings, the fact that it appears to be the most important component for analysts when considering ratings shows that joint provision does affect perceptions of auditor independence.

Krishnan et al. (2005) acknowledge the importance of the appearance of auditor independence by examining whether there is an association between levels of non-audit service purchases and the earnings response coefficient (ERC). The ERC is a surrogate for investors' perceptions of auditor independence, in the fact that it measures perceptions of earnings quality. The study was in response to the SEC Rule S7-13-00 that occurred over the course of 2001 and required companies to disclose non-audit fees. Prior to the ruling, investors were only aware of estimates of non-audit service payments. The association between non-audit service purchases and earnings response coefficients is examined over three quarters in 2001 directly after the SEC ruling.

The results highlighted that there was investor concern over non-audit service provision as the ERC was lower for companies with high non-audit fee ratios over 2001. Investors' perceptions of unexpected fees were also examined and a negative association between non-audit services and ERC was found (but only in the second and third quarters). It is speculated that in the first quarter the investors would have

had little or no information to compare the unexpected fees with. However, over the period there was an increase in media attention devoted to non-audit services and how these services could damage auditor independence, this attention could have negatively affected investors' perceptions.

The research was limited by non-audit services being treated so broadly. Individual non-audit services may affect auditor independence perceptions differently and future research should focus on different types of non-audit service. Non-audit services are treated individually in the current study. Bakar et al. (2005) and Alleyne and Devonish (2006) also acknowledge that the provision of non-audit services is a significant threat to perceptions of auditor independence.

Finally, a study conducted by Gaynor et al. (2006) of audit committee members provides indirect evidence that auditor provided non-audit services damage investors' perceptions of auditor independence. The survey revealed that audit committee members were less likely to allow joint provision of audit and non-audit services, after the SEC ruled in 2002 that audit committees had to pre-approve and disclose all auditor provided non-audit services, even if these services actually improved audit quality. As it is the audit committees' responsibility to install investor trust, it appears that the committee members surveyed believe joint provision could damage investor trust and are reluctant to allow this provision.

### *The Self-Review Threat*

It has been acknowledged that auditors may not be able to independently review their own work in an audit which had previously been carried out as part of the non-audit service package. 'If an accountant, as advisor, introduces a form of accounting or internal control the products of which, as auditor, he subsequently audits, there is at least the possibility that his involvement as advisor may interfere with his critical stance as auditor' (Shenkir and Strawser, 1972:16). Essentially auditors would be auditing their own work (Skerratt, 1982) and people are naturally more likely to favour systems which they personally advised upon (Lee, 1972). As the quality of independence is intangible, it is very important for the auditor to be seen to be independent 'in action and in deed' (Lee, 1972:68). However, it is likely that the self-

review threat could cause the appearance of independence to be compromised, 'whether or not this multiplicity of functions actually does reduce the objectivity of the auditor is, to some extent, irrelevant; it is the possibility that it may give such an impression to others which is significant' (Sherer and Kent, 1983:27).

Corless and Parker (1987) examined the self-review threat posed by non-audit services. 181 auditors were asked to evaluate the client company's internal controls. It was hypothesised that the auditors who were told that their firm had helped to design and implement the system would rate it as stronger than the systems that had not been designed by their company. The purpose of the research was to determine whether non-audit services provided by a representative of the audit firm influenced the opinions of the auditors who later had to review the work. However, in analysing the results, contrary to the traditional view, those respondents who were told that their own firms were involved in the design of the client's internal accounting control system were slightly more critical of it than those who were told another firm had designed it. These results suggest that the provision of non-audit services can actually make auditors more objective in their outlook.

However, it should be noted that this study only measured the impact of one type of non-audit service, designing internal control systems, on auditor independence and only one firm in the test had non-audit service revenues exceeding the 15% level (a very low level to risk losing independence over). Furthermore, half the respondents had a case where their firm had been involved in the design of the system and half were given a case where their firm had not, perhaps both cases should have been given to the same individuals as this would give a more accurate indication of how individuals rate their own firm against others.

In contrast to the findings of Corless and Parker (1987), Church and Schneider's (1993) results give greater concern for the self-review threat. The objective of the study was to determine whether an auditor's prior involvement in the design of an audit programme impairs an auditor's objectivity when making subsequent decisions relating to that programme. It is argued that individuals involved in selecting a project become committed to it and are reluctant to find faults with it. The experiment involved splitting a sample of 45 auditors into three groups. Two of these groups

played a part in designing an audit programme, they then had to evaluate this programme and then evaluate the other group's programme. The third group just evaluated the programmes created by the other two groups. All the groups were informed that some problems and irregularities had occurred when the programmes were implemented. It was hypothesised that those auditors who had had a role in creating a particular programme would allocate less audit effort to that account than the auditors who had had no role in its creation. The allocation of audit hours to the evaluation of each programme was used to measure audit effort. The results of the experiment confirmed the hypothesis and found that the group who designed the system spent 6.7 hours searching for errors, the group who had designed the other programme allocated 9.7 hours to this search and the control group allocated 7.6 hours. 'The auditors' role in audit programme design was associated with a lower search time allocation for errors/irregularities in the account relating to that audit programme' (Church and Schneider, 1993:74).

The results of the study suggest that if auditors have had some role in the design of the audit programme or of other systems for the client company, they are going to be less likely to find fault in these systems, resulting in less effective audits and impaired auditor independence.

However, Church and Schneider (1993) do not investigate alternative explanations for the results. Audit hours allocation may be an inaccurate measure of audit effort as those auditors who created the system would be more familiar with it and would not need so long to detect errors. However, to search for errors in an unfamiliar system would take much longer.

Church and Schneider's (1993) results were similar to the study conducted previously by Plumlee (1985) who, in conducting an identical experiment, found that those auditors reviewing their own work were better able to identify the strengths of their system and more likely to attribute failures to factors external to the design of the system. However, Plumlee (1985) notes that even though it is debatable whether auditors should review their own work, it is important that whoever does audit a client's internal systems has some knowledge related to it, as 'one consequence of not

having specific experience is a diminished ability to detect weaknesses in someone else's work' (Plumlee, 1985:699).

Davidson and Emby (1996) carried out a similar experiment to that conducted by Corless and Parker (1987). Like the earlier study, the purpose of the experiment was to examine the self-review threat caused by the provision of non-audit services. The study examines whether auditors can be independent in auditing a system which their firm has designed.

Canadian accountants were presented with a case study requiring a before-and-after evaluation of an internal control system which had been re-designed during the year. Each case study contained different combinations of four variables. These were, whether the new system was developed by the chief executive or whether it was designed by the respondents own audit firm and whether the new system appeared relatively strong or relatively weak. The results of the study showed that the respondents indicated that the weaker systems would require more substantive testing than the stronger ones. However, the designer of these systems did not appear to affect the level of testing which the respondent recommended. Moreover, when the system was weaker the respondents indicated that more substantive testing would be required when the system was designed by the audit firm than when it was designed by the client. It seems that the respondents were actually *more* critical of their own firms work. In conclusion, auditors can maintain their independence when providing non-audit services (such as systems design) to their existing clients.

However, fully to address the self-review threat the study would have to get the auditor to review a system which that auditor had personally designed. Respondents may find it harder to criticise their own work rather than that of another person (Church and Schneider, 1993).

The following two studies take a different approach to examining the self-review threat. Lowe et al. (1999) and Swanger and Chewning (2001) investigate how a potential self-review threat affects perceptions of auditor independence.

Lowe et al. (1999) examine the effects on financial statement users' perceptions of auditor independence, financial statement reliability and loan decisions, of a company who outsources their internal audit function. This is an important issue because in 1997 more than 50 of the Fortune 100 firms outsourced at least a proportion of their internal audit services in an attempt to reduce costs. Some commentators have argued that outsourcing the internal audit function to the existing external auditors could actually increase auditor independence as 'the greater the external auditors' insight into the client the more likely it is that the business transactions will be understood and key audit risks identified' (Lowe et al., 1999:10). However, critics have argued that when an auditor provides both a client company's internal and external audit services this could cause a 'mutuality of interests' (Lowe et al., 1999:8) between the monitor and the agent. Outsourcing the entire internal audit to the external auditor may also cause a self-review threat. By the time the paper was published Enron already outsourced its whole internal audit function to the external auditors.

Lowe et al. (1999) asked one thousand loan officers to review a loan application and make an evaluation of the auditors' independence, assess the reliability of the historical financial statements and make a loan decision. There were five different case studies:

1. Where internal audit services were not outsourced (control group),
2. Where internal audit services were outsourced to another external auditor,
3. Where internal audit services were outsourced to the same external auditor, who undertakes management functions,
4. Where internal audit services were outsourced to the same external auditor, both functions undertaken by the same personnel,
5. Where internal audit services were outsourced to the same external auditor, both functions undertaken by different personnel.

However, Lowe et al. (1999) do not make it clear whether when stating that the internal audit was being outsourced to the external auditor, this was the entire internal audit or just parts of the internal audit. It is possible that the participants assumed that the company was only partially outsourcing its internal audit.

The results showed that there was no difference in loan officers' perceptions of the companies who did not outsource at all and those who outsourced but to a different external auditor. However, the loan officers had negative reactions to situation 3, where the external auditor undertakes management functions. This case had the lowest means regarding auditor independence perceptions and only 26% of respondents said that they would grant a loan, compared to 50% in the control group. Overall, the group where loan officers displayed the greatest levels of confidence was in the different personnel group. This group had the highest rating for auditor independence compared to the same personnel group which had a very low rating. 'These consistent results indicate that loan officers viewed the separation of personnel performing the external and the internal audit very positively' (Lowe et al., 1999:19).

It is concluded that whilst there are clearly auditor independence concerns where the same auditor provides both internal and external audit services, the results show that a separation in audit personnel will reduce independence concerns and result in perceptions that are more favourable.

In an identical study, Swanger and Chewing (2001) examine the effect which the outsourcing of a company's internal audit function has on financial analysts' perceptions of auditor independence. Each analyst had an identical case study on a hypothetical company, containing one of the following scenarios:

1. Total outsourcing of the company's internal audit function to the external auditor,
2. Total outsourcing of the company's internal audit function to a different external auditor (not the company's),
3. Total outsourcing of the company's internal audit function to the external auditor, but with a separation of staff for the internal and external audit functions,
4. Outsourcing only part of the company's internal audit function to the external auditor,
5. The company completes the internal audit.

These situations given address the weaknesses of Lowe et al's (1999) study by giving clearer definitions and stating whether there has been a partial or total outsourcing of the internal audit.

The results of these case studies showed that, the analysts perceived a significant reduction in independence when the entire internal audit function was outsourced to the company's external auditor, in comparison to a company who employs its own staff to complete the internal audit. However, the analysts indicated that they had much more confidence in auditor independence when the entire internal audit function was outsourced to a different external audit firm. The results also showed staff separation in audit firms between those personnel working on internal and those on external functions, greatly increased the financial analysts perceptions of auditor independence.

Finally, there was no difference in the perceptions of analysts between the full or partial outsourcing of the internal audit, perceptions of auditor independence will be damaged whether the whole or just a part of the internal audit function is outsourced.

Carey et al. (2006) also examined the issue of internal audit outsourcing. It was found that of those companies who outsourced their internal audit function, cost savings and increased competence of the external auditor and improved efficiency were indicated to be the benefits of such outsourcing. However, 41% of the companies who outsourced their internal audit function were worried about the implications for auditor independence and indicated that external auditors should be extra vigilant with regard to these threats to independence.

### *The Management Threat*

Sherer and Kent (1983) have contended that auditors should not be allowed to do any work involved in the direct running of the client company and should avoid managerial decision-making which could cause a management threat. The management threat can reduce auditors' objectivity because, by making decisions that should be the managements', auditors are blurring the distinction between the audit firm and the client company. 'Managerial and decision-making functions are the

responsibility of the client and not of the independent accountant' (Burton, 1980:49). Sutton (1997) argues that, at a certain point, the auditor will become so involved in the successes of the client company that the auditor will start to place private interests above those of investors. Sutton (1997) goes on to say, that even if auditors do not put the client's interests above those of the investor in reality, it is likely that the more involved the auditor becomes with the client company, the more the public will perceive the client company's needs to be coming first.

An early perceptual study conducted by Titard (1971) found that whilst financial statement users were not overly concerned about the provision of non-audit services, concern for auditor independence was at its greatest when the auditors were required to work closely alongside the managers.

#### *The Advocacy Threat*

The final main threat to auditor independence which non-audit service provision causes is an advocacy threat. The advocacy threat arises when a monitor undertakes work which involves them acting on behalf of (as an advocate of) the agent. As an advocate, the monitor adopts a position closely aligned with the agent, rather than maintaining a professional detachment. Where the monitor has supported a contention of the agent, it could be difficult for the monitor to view this contention impartially when it comes to auditing the financial statements. The advocacy threat has clear consequences for both actual and perceived auditor independence.

Hylton (1964:668) identified the advocacy threat more than 40 years ago, when he noted that 'questions have been raised as to whether one person or firm can be both independent and an advocate'. Hylton (1964:668) warns that being an advocate of management may affect the independence of the audit.

#### *The Arguments in Favour of Non-Audit Service Provision*

In contrast to the previous studies reviewed, many authors have argued that joint audit and non-audit service provision does not pose a threat to auditor independence. The arguments in favour of the provision of non-audit services have prevented a ban on

joint provision in the UK of the type which is present in the USA. Arrunada (1999:7) believes that ‘the argument that the provision by auditors of additional services will prejudice their independence does not hold water. It is not supported by empirical studies, including retrospective analyses of bad audits’. Arrunada (1999) also states that there is no causal relationship between non-audit services and impaired independence and that studies which have proved a link were based on indirect indicators. However, Arrunada (1999) does concede that where non-audit services are present, they do result in a harmed public perception, on the part of poorly informed or interested participants. Furthermore, in a study of UK finance directors, Hussey and Lan (2001) found that the majority did not want to see auditors prevented from providing other services to their clients and that auditing should remain regulated by the accounting profession, not by law.

Discussed in the following section are the reasons why non-audit service provision may not affect auditor independence.

### *The Auditor's Reputation*

The provision of non-audit services can provide a growth opportunity for audit firms, often audit services are a way to build up the audit firm's reputation before selling on more lucrative non-audit services. Antle (1999) argues that the incentive to sell on profitable non-audit services prevents auditors being dishonest. Sacrificing audit quality to enhance a consulting relationship is against the best interests of the auditors' reputation (DeFond et al., 2002). Furthermore, if audit firms damage their reputation and thus reduce the credibility of the profession as a whole, the greater the risk that the government will start to intervene taking away the profession's right to self-regulate (Hillison and Kennelly, 1988). Frankel et al. (2002:72) argue that ‘the provision of non-audit services can also increase the auditor's investment in reputational capital, which the auditor is not likely to jeopardize to satisfy the demands of any one client’.

In a sample of 500 Australian listed companies between 1986 and 1990, Barkess and Simnett (1994) found an insignificant relationship between the type of audit report and the level of non-audit services provided. Craswell (1999) replicated the study and

again found that there was no link between audit qualifications and levels of non-audit services. However, Craswell (1999) recognises a problem with the study. The design involved the comparison of companies receiving qualified opinions and companies receiving unqualified opinions, but a better test would have been to compare those companies receiving qualified opinions with companies which had received clean audit reports but which had experienced problems in the year that could have given rise to qualifications. Unfortunately, these data are not available. Despite the limitations of the studies, both Barkess and Simnett (1994) and Craswell (1999) suggest that the provision of non-audit services by the auditor does not damage auditor independence and thus there is no need for a ban on joint provision.

Similar to the work of Barkess and Simnett (1994) and Craswell (1999) but in the wake of the Enron collapse, DeFond et al. (2002) examine the association between non-audit service fees and auditors' propensity to issue going-concern audit opinions, as a surrogate for audit quality. It is argued that auditors with impaired independence (through non-audit service provision) are less likely to issue going-concern opinions. Using logistic regression and a sample of 1,158 firms which were financially distressed in 2000, DeFond et al. (2002) report that 'contrary to regulators' concerns we find no association between non-audit service fees and the auditors' propensity to issue a going-concern opinion' (DeFond et al., 2002:1271). Instead, DeFond et al. (2002) argue that market-based incentives such as the risk of reputation loss and litigation costs are enough to keep an auditor honest. They concluded that the recent SEC regulations concerning restrictions on non-audit service provision are not necessary.

Continuing DeFond et al's (2002) line of research, Geiger and Rama (2003) investigate the relationship between the audit fees and non-audit fees received by an auditor and that auditor's opinion involving going-concern issues for financially stressed companies. Again, it is argued that where the auditor provides significant amounts of non-audit services, it could adversely affect independence. In the case of financially stressed companies, auditors do not find it difficult to identify companies with going-concern issues, but often independence issues arise, in an auditor's decision as to whether to report these issues or not. Amounts of non-audit services provided could cause the auditor to 'see things the client's way' (Geiger and Rama,

2003:53). If the auditor does decide to issue a going-concern modified audit opinion, it could prove to be costly for both the auditor and the client.

A sample of companies receiving first time going-concern modified audit opinions and a sample of financially stressed companies were examined. The quantitative analysis undertaken was in the form of a matched pair design. This analysis did not find a significant association between levels of non-audit service provision and companies receiving (or not receiving) going-concern modified audit opinions. The finding reinforces the conclusions of DeFond et al. (2002), who argue that market-based incentives (auditor reputation and litigation) are enough to keep an auditor independent. However, in contrast to DeFond et al. (2002) the results do find a positive significant association between audit fees and the likelihood of receiving a modified audit opinion, which is inconsistent with Craswell et al's. (2002) argument, that audit fees are easily replaceable and not worth risking independence over.

Finally, there are some criticisms of the study. For example, DeFond et al. (2002) only tested their assumptions in the limited context of the manufacturing industry, it is unknown whether the results of the study would be robust in all industries. In addition, the companies examined only purchased small levels of non-audit services, larger amounts of non-audit services provided by the auditor may cause more potential for damaged auditor independence.

Raghunandan et al. (2003) attempt to find a link between those companies who restate their accounts and those who pay high non-audit (and audit) fees to their auditor, as a way to measure 'real' auditor independence. 'Non-audit services provided by incumbent auditors can inappropriately influence audit judgements, make auditors less likely to enforce GAAP and result in subsequent restatements' (Raghunandan et al., 2003:224).

The descriptive statistics showed that the restatement sample was generally larger in terms of audit fees, non-audit fees and total fees than the control sample. However, when examining the fee ratio (which measures the relative magnitude of non-audit services as compared to audit fees or total fees), the results were very similar for the restatement sample and control sample companies. Further regression analyses drew

the same conclusions, which was that the restatement sample companies were not likely to have unexpectedly high non-audit fees, fee ratios or total fees.

In conclusion, 'this empirical evidence does not support assertions that restatements are more likely to occur in firms that paid higher than normal non-audit fees or total fees to their auditors' (Raghunandan et al., 2003:231).

Kinney et al. (2004) conducted similar research to that of Raghunandan et al. (2003) by examining whether non-audit service fees are associated with the restatement of previously issued financial statements. Kinney et al. (2004) argue that it is possible that non-audit service provision could increase audit quality, 'non-audit services by the firm may increase the information available to the auditor, thus improving audit quality' (Kinney et al., 2004:563). Restatements involving GAAP violations between 1995 and 2000 were identified. Each case resulting in a re-statement was matched with a non-restating company from the same period and the same industry. The overall sample consisted of 289 matched pairs.

The results of the multivariate analysis, involving logistic regression models of restatements, showed that some unspecified non-audit services were positively associated with restatements. The study examined tax services in some detail as tax is still allowed under the Sarbanes-Oxley Act. It was found that tax services were negatively associated with restatements. Those who spent larger amounts on tax services from their auditor typically had lower restatements than those who spent small amounts or none. Therefore, problems of economic dependence are offset by the increase in financial quality which the provision of tax services can bring. If the SEC decided to ban the provision of tax services it would not necessarily improve the quality of financial statements, and in fact could damage it.

A number of perceptual studies also imply that non-audit service provision does not impair auditor independence. In an early study, Titard (1971) found that there was no great concern among financial statement users over a link between non-audit service provision and impaired auditor independence. However, those who did show concern were mainly worried about the services which would require auditors to work closely with the top management. Titard (1971) broke down non-audit services into separate

categories in order better to pin point the areas of particular concern. The services, which caused most concern, were assistance with mergers and acquisitions, executive recruitment, policy determination, personnel appraisal and selection, executive and wage incentive plans and management audits.

However, it should be noted that whilst Titard (1971) believed that no great concern existed over the provision of non-audit services, the survey was conducted over 30 years ago, before the provision of non-audit services was so wide-spread and before the damaging US corporate scandals. Titard (1971) concedes that society as well as the accounting profession is ever-changing, so it is likely that financial statement users' opinions of non-audit service provision have changed in the last 35 years. In addition, whilst Titard (1971) concludes that non-audit services are not causing a perception problem (as 51% of the sample said that they were not concerned) this means that almost half of the sample were concerned with non-audit service provision. As far back as 1971, third parties were beginning to become concerned about the damage that non-audit services might do to auditor independence.

Reckers and Stagliano (1981) attempted to examine the extent of non-audit service provision, and the perceptions of different financial statement user groups of joint provision. The participants were asked to rate how they perceived different levels of non-audit service provision to affect auditor independence (the level of non-audit services given did not exceed 12% of audit fee). The sample of participants included 50 financial analysts (sophisticated financial statement users) and 50 MBA students (relatively unsophisticated financial statement users). The sample was chosen deliberately in order to test the hypothesis that concern about the conflict of interest between non-audit service provision and loss of auditor independence decreases as accounting knowledge and sophistication increases (a hypothesis that will be re-tested in the current study).

The results of the survey showed that in each case, the MBA students seemed to have less confidence in the auditor's independence than the financial analysts did. The finding supports the hypothesis that naïve financial statement users have less confidence in auditor independence than sophisticated users. However, both groups displayed a high level of confidence in auditors' ability to remain independent, in

each of the cases of non-audit service provision. It is concluded that the provision of non-audit services is not damaging perceptions of auditor independence but as those who have less accounting knowledge have the greatest concerns, perhaps there is a need for more accounting education. Reckers and Stagliano (1981) argue that the SEC's decision to require disclosure of non-audit services rather than an outright ban is appropriate, as it allows financial statement users to make their own decisions about auditor independence and take actions accordingly.

However, whilst an important finding at the time, it should be remembered that the non-audit service levels chosen for testing (3-12% of audit fees) are quite low and the respondents may not have believed that such low amounts would damage an auditor's independence. In today's business environment, where the extent of non-audit service provision is much higher, the survey results may be different.

Scheiner (1984) also examined the perceptions of auditor independence in relation to non-audit services. However, the focus of the study was different to other perceptual studies. Scheiner (1984) examined whether the requirements of ASR No. 250 on disclosing non-audit service provision affect the amount of non-audit services which are purchased from the auditor. Because of ASR No. 250, companies might curtail purchases of non-audit services in order to avoid negative perceptions of auditor independence. Two years of data on non-audit services were analysed.

After analysis of the information obtained, the null hypothesis that there would be no difference in non-audit service purchases between the two years could not be rejected at a 5% significance level. The only non-audit service, which resulted in a rejection of the null hypothesis, was that of personnel services, the service which had received most criticism. In general, the results show that in light of ASR no. 250, companies did not reduce the quantities of non-audit services which they purchased. However, it is noted that disclosure could have affected companies in different ways, such as affecting market value or planned growth for non-audit services. The investigation of these consequences might have given a clearer indication of third party reactions to non-audit service provision. Moreover, Scheiner (1984) notes that most of the companies examined were not purchasing questionable non-audit services, such as accounting, actuarial or personnel services, which are perceived most unfavourably.

Scheiner (1984) concedes that further research is necessary. Furthermore, Scheiner (1984) only examines two years worth of data so it is impossible to determine whether non-audit service purchases started to decline over time after the introduction of ASR No. 250. An investigation of non-audit purchases over a longer period is needed to draw conclusions that are more meaningful.

Glezen and Millar (1985) also examined the effects of ASR no.250, but in a slightly different fashion to Scheiner (1984). Glezen and Millar (1985) examined two aspects, these were, whether stockholders perceive the information on non-audit services as a negative reflection on auditor independence and secondly, whether in response/anticipation of stockholder reactions, managers adjust the extent of their non-audit service provision. Glezen and Millar (1985) measure stockholder reactions in the form of approval ratios. Glezen and Millar (1985) argue that if stockholders are concerned about the effects which non-audit services have on auditor independence, they will vote against re-appointment of the auditors so approval ratios (the amount of stockholders voting to re-appoint the auditors) would decline after the disclosures. The information was determined by sending a survey to 350 companies requesting to know stockholder votes for approval (whether they had voted to re-appoint the existing auditors). Data for the second half of the research were obtained from proxy statements for each company. The results of the analysis showed that there was no decline in stockholder approval ratios between the pre-disclosure years (1976, 1977, and 1978) and the post-disclosure year (1979), in fact approval ratios tended to increase. In addition, only two (assistance in tax examinations and tax planning) of the eight non-audit services examined had negative relationships with the approval ratios, thus management did not adjust their purchases of non-audit services due to the required disclosures. These results suggest that the stockholders examined in the investigation did not perceive the provision of non-audit services as independence-impairing.

Glezen and Millar's (1985) study is a stronger measure of third party perceptions of non-audit services than that of Scheiner (1984). However, it is still not a particularly direct measure of third party perceptions of non-audit service provision, as many other factors may influence the shareholders approval of the auditors. 'A comparison of the auditor approval ratios in pre and post disclosure periods assumes that factors

other than disclosure of non-audit services do not materially affect the ratios in some systematic manner' (Glezen and Millar, 1985:863). This is a very big and very unrealistic assumption on which to base this study.

Furthermore, Glezen and Millar (1985) argued that perhaps the magnitude of non-audit services being provided at the time was not a great enough concern to the majority of shareholders. At the time the study took place (1979-1981) non-audit fee ratios ranged from 29.2% to 30.7%. However, the SEC (2001) now report that the Fortune 1000 companies average a non-audit service ratio of 269%, showing that the level and importance of non-audit service provisions has increased dramatically since the study in 1985.

In response to Glezen and Millar's (1985) study, Raghunandan (2003) investigated whether the recent changes in rules by the SEC, which require companies to disclose data concerning audit and non-audit fees, affects shareholders ratification of management's decisions on auditor selection.

The study was conducted by taking a sample of 172 companies from the Fortune 1000 companies, chosen because they had high non-audit fee ratios, some because they had low ones and some companies were selected at random. The information on shareholder ratification details was then analysed. Auditor non-approval rates were highest in high non-audit service companies, at 3.08% compared to 1.22% in low non-audit service companies and 1.67% in the random sample of companies. Raghunandan (2003:161) concludes that 'shareholders were more likely to vote against ratifying the auditor selected by management in the presence of a high non-audit fee ratio'.

However, Raghunandan (2003) concedes that whilst the proportion of shareholder votes against ratification was positively associated with the magnitude of non-audit fees, the link may be the result of other factors. The changes in shareholder ratification from the previous year were examined, to see if the new SEC disclosures had had any real effect. It was found that the changes in disclosure were also positively associated with the magnitude of non-audit services. The results show that SEC disclosures are important for investors in making their decisions, perhaps more

important than the disclosure made at the time of Scheiner's (1984) and Glezen and Millar's (1985) studies when non-audit service purchases were lower than today.

Raghunandan (2003) suggests that future research is needed as shareholder approval rates averaged around 97% even in high non-audit service companies which could show that the majority of shareholders are not worried about the magnitude of non-audit services provided. In addition, other factors besides non-audit service purchases could affect shareholder decisions, a consideration which was ignored in Glezen and Millar's (1985) study. Finally, Raghunandan, (2003:162) believes that investor reactions are likely to change over time, due to the 'Enron effect' and that as the disclosures were fairly new at the time of the study, they may not have affected investor perceptions at that stage. Raghunandan's (2003) arguments highlight the shortcomings of Scheiner's (1984) study where conclusions were based upon the first two years of disclosure. Follow-up research is required to tell whether non-audit services really do affect investors' perceptions of auditor independence.

Mishra et al. (2005) continued the work of Raghunandan (2003) in a similar study but after the SEC updated the rules on non-audit fee disclosure. After 2003, the SEC ruled that detailed disclosure was needed for non-audit services, into 'audit related', 'tax services' and 'other services' categories. The results of the study showed that investors displayed more concern for tax and other services (and voted against the ratification of auditors who supplied these services) than for audit related services. The results show that investor perceptions of auditor independence vary depending on the type of non-audit service.

### *Recruitment to the Accounting Profession*

Skerratt (1982) argued that, were accounting firms forced to restrict their activities just to auditing (in the event of an outright ban on non-audit services), it may be harder to attract and retain new creative and imaginative people to the profession. 'Expanding auditors' range of services may make the profession appear more exciting and appealing to a different group of people than in the past' (Hillison and Kennelley, 1988:33). Without these new opportunities and career paths, the audit function may be

perceived to be conducted more independently, but in reality it may be conducted less effectively (Skerratt, 1982:74).

### *Production Efficiencies and Knowledge Spillovers*

Those auditors, who provide their clients with non-audit services, may be achieving 'production efficiencies' (Dopuch and King, 1991:61). The auditor would already be familiar with the company's industry, information system and operations. Prior information of the client company causes 'knowledge spillovers' between the audit function and non-audit services (Barkess and Simnett, 1994:101), Beattie et al. (1996:1) argue that these spillovers could improve audit quality through 'a wider understanding of the client's business that results from providing other advice'. Moreover, joint provision could also benefit the client company as not only will the company have lower search costs when seeking a consultant (Simunic, 1984) but also knowledge spillovers could mean that the audit firm would be able to charge less for non-audit services than if the services were provided by a separate, outside firm (Palmrose, 1986, Citron, 2003).

However, there is some dispute over whether production efficiencies are passed on to the client in the form of a reduced price package. For example, Simunic (1984) argues that those companies who were also non-audit service purchasers from their audit firm pay higher audit fees than those clients who do not purchase non-audit services. In addition, by providing such a comprehensive package to the client, the auditor will actually get to know the client company too well causing personal relationships to form which could damage an auditor's independence (Sridharan et al., 2002).

Using a method of investigation first trialled by Simunic (1984), Davis et al. (1993) test for real auditor independence by asking the question 'does providing audit clients with non-audit services result in knowledge spillovers and audit production efficiencies that could produce economic rents for the auditor?' (Davis et al., 1993:135). Davis et al. (1993) argue that if an auditor experiences knowledge spillovers by providing audit services and non-audit services to the same client, and if these knowledge spillovers result in cost savings which are retained by the auditor, certain clients would become very profitable, thus impairing auditor independence.

The hypothesis of the study comes from previous research by Simunic (1984) which suggests that clients who purchase both non-audit services and audit services from the same auditor often pay more for the audit than clients who purchase only audit services. In order to test the hypothesis, internal private information from 10 US accounting offices about their audit clients were obtained. Davis et al. (1993) discover that, in line with previous research findings, those clients who spend most on non-audit services pay higher audit fees.

However, it is argued that these clients actually require *more* audit effort. For example, a new accounting information system might cause the need for much more audit evidence, making the audit process more complex and costly. In addition, it could be the case that the company is experiencing troubles and are employing high non-audit service levels to try to recover which would require a more complex and time-consuming audit. The investigation found no evidence that knowledge spillovers allow auditors to gain increased fees for a given level of audit effort from those clients which purchase non-audit services compared to those clients which do not. 'The results reported in this article find no empirical evidence for the argument that providing non-audit services for audit clients creates circumstances that may lead auditors to compromise their objectivity' (Davis et al., 1993:149). The initial hypothesis is rejected, because joint provision does not result in cost savings for auditors which could impair independence.

### *The Complex Business Environment*

Spindel (1989) argues that, with the business environment becoming increasingly complex, it is necessary for audit firms to perform a wide array of peripheral services, 'in order to provide a full service to their clients' (Spindel, 1989:2). Because client companies are now demanding more services from their auditor, it is important for the audit firms to meet the demand, in order to 'maintain a reputation as a service-orientated firm' (Hillison and Kennelley, 1988:34). Moreover, providing an overall package to the client also protects the audit firm through 'risk diversification' (Hillison and Kennelley, 1988:34). Risk diversification is important for audit firms due to the risky legal environment in which they operate. The auditor stands to lose

much through legal proceedings due to audit failures. A move into non-audit services may ensure continuity of revenues through a less risky channel.

Jenkins and Krawczyk (2001:73) believe that audit firms who also provide non-audit services to the same clients are increasing their 'uniqueness' to that client. By increasing uniqueness, the client is more dependent on the audit firm as the audit firm would be less replaceable, placing the audit firm in a stronger position to resist management pressures and reducing the audit firm's fear of dismissal should the audit firm not satisfy the client's demands. Joint provision could enhance auditor independence.

Jenkins and Krawczyk (2001) revive the sentiments of Goldman and Barlev (1974) who argued that the provision of non-audit services could actually increase an auditor's independence. Goldman and Barlev (1974) argue that because most non-audit services are non-routine and are of direct benefit to the client company, the client would lose its source of valuable advice if the auditor were replaced through audit failure. By benefiting the client, the audit firm is in a powerful position over the client and means that the audit firm is better equipped to resist interference and pressure from the client during auditing activities. The outright banning of non-audit services would not necessarily increase auditor independence. Instead Goldman and Barlev (1974) suggest that 'auditors' involvement should stop short of actual participation in the decision making process. This would minimise the scope of the new self-interest conflict, while allowing auditors to keep their newly found power source' (Goldman and Barlev, 1974:715). Furthermore, Arrunada (1999) argues that where auditors earn revenues from non-audit services they are likely to become more independent, as a lenient audit report would mean risking the loss of these non-audit service revenues.

McKinley et al. (1985) conducted a between-subjects study, in order to determine whether the provision of non-audit services, the accounting firm size and the accounting firm type had any bearing on bank officer loan decisions and perceptions of auditor independence. The use of a non-repeated study eliminated any demand effects (participants guessing what the objectives of the study are and responding cooperatively), giving greater faith in the results of the study. The survey involved

261 bank loan officers considering a hypothetical loan application, for which the participants had to make a loan decision, evaluate the reliability of the financial statements and evaluate the auditors' independence. The non-audit service variable was manipulated so that some applications involved the hypothetical company purchasing zero non-audit services and some companies purchasing non-audit services at a 30% level. The results indicated that neither the loan decision or the interest rate given seemed to be affected by the presence of non-audit services and that the provision of non-audit services actually led to more confidence in the reliability of the financial statements, with respondents believing that the provision of non-audit services 'led to tighter controls' (McKinley et al., 1985:893). However, the results indicated that financial statement users believed that the Big Eight auditors were more independent than smaller firms were.

These results go against the conventional argument that non-audit service provision impairs auditor independence (McKinley et al., 1985:887). It is suggested that prior research findings, which suggest that non-audit services affect perceptions of auditor independence, could be explained as a consequence of the demand effect. However, as the study was conducted in 1985, the non-audit service fee level tested was low compared to today's levels. Moreover, the participants may have believed that purchasing a small level of non-audit services from the audit firm might actually benefit the company by helping it better to implement systems which could ultimately improve financial reporting quality.

In a similar study to McKinley et al. (1985), Pany and Reckers' (1988) results challenge traditional views. In one of the first studies to examine the effects of the magnitude of non-audit service provision (Beattie and Fearnley, 2002), Pany and Reckers (1988) reported that 'this study indicated that auditor-provided management advisory services exerts little, if any, effect on typical investment or credit granting decisions, on perceptions of financial statement reliability, or on perceptions of auditor independence' (Pany and Reckers, 1988:38).

In this study of loan officers reviewing loan applications, those who were given situations where the client firm received management advisory services at 25% of the audit fee (as opposed to those given a situation with zero management advisory

services, management advisory services at 60% level and management advisory services at 90% level), were most likely to grant a loan. It could be inferred that the limited level of management advisory services gave the loan officer greater confidence in the auditors' independence. 'The loan officers were less apprehensive about granting the loan due to an awareness that the company was improving its internal control systems and yet the low fee level did not raise countervailing fears of a loss of auditor independence' (Pany and Reckers, 1988:36).

Pany and Reckers, (1988) argue that these results challenge existing research that as the level of non-audit service provision increases, the perceptions of auditor independence decrease. If regulators were to set a limit to curb the provision of non-audit services confidence in auditor independence would not increase. Furthermore, in a study of 776 UK finance directors, Hussey (1999:193) found that the majority of the respondents 'were content to permit auditors to undertake other work'.

In another perceptual study of non-audit services, Gul (1989) undertook a survey of 49 bank-lending officers in New Zealand. The objective was to determine the impact which audit committees, the financial condition of the client, competition for audit clients, the size of the audit firm and the provision of non-audit services had on bankers' perceptions of auditor independence. Like the previous surveys the study involved the use of a questionnaire with a hypothetical company outlined, the participants were given a seven-point scale on which to rate how they perceived the different aspects (above) to affect auditor independence. The results were analysed quantitatively. Gul (1989) reported that there was no relationship between the provision of management advisory services and negative perceptions of auditor independence. The bankers actually had more confidence in those auditors who provided non-audit services, consistent with the views of Goldman and Barlev (1974). However, it should be noted that the scenario given to the bank officers was one where a separate department within the audit firm provided management advisory services which may have increased confidence in auditor independence. Despite his results, Gul (1989) acknowledges that the vast amount of empirical findings suggest a negative relationship between management advisory services and perceptions of auditor independence. Consequently, Gul (1989) concludes 'clearly the issue is far

from settled and the results reported here suggest room for more research' (Gul, 1989:47).

Chung and Kallapur (2003), test the economic theory of auditor independence that incentives for auditors to compromise their independence are directly related to client importance. As a surrogate for client importance, Chung and Kallapur (2003) use a sample of proxy statements of 1,871 clients of the Big Five audit firms to determine ratios of client fees to total audit firms revenue (to determine economic dependence) and the ratio of the clients' non-audit service fees to total audit firms' revenues. Conducting regression upon these client importance ratios, in order to determine any relationships, showed that there was no association between abnormal accruals (after controlling for other variables which affect abnormal accruals) and the client importance ratios. The evidence is not consistent with the economic theory of auditor independence, but is consistent with the arguments of Goldman and Barlev (1974), who argue that non-audit services increase an auditor's worth to the client and put the auditor in a stronger position to resist client pressure. The findings of Chung and Kallapur (2003) are similar to those of Mitra (2007), who in a cross-sectional regression analysis of abnormal accrual adjustments of companies in the oil and gas industry, found that abnormal accrual adjustments were not related to fees paid for non-audit services. Mitra (2007) argues that industry specialisation and reputation protection keep auditors independent and the unique services which auditors provide to their clients actually strengthen independence.

Arguments, such as the ones above, have prevented an outright ban on non-audit services in the UK and provoked the suggestion of some safeguards against the potential risks of joint provision. For example, Hillison and Kennelley (1988) argue that auditors should give advice only (stopping short of managerial decision-making), prohibit some of the most independence threatening non-audit services, fully disclose non-audit service purchases in client financial reports and split audit firms into separate audit and non-audit divisions. The current study tests many of these safeguards. Hussey and Lan (2001:3) argue that despite concerns over joint provision, an outright ban would 'increase client costs, reduce efficiency and place restrictions on the freedom of the client to make decisions on the services they desired'.

### **3.7 Non-Audit Service Provision: Summary**

The above review of the literature highlights the wealth of studies existing on the subject of non-audit service provision. The fundamental debate about whether joint provision actually impairs auditor independence dates back over 40 years. However, it is obvious that the debate is far from resolved, with research very much divided, 'academics have studied this subject for many years and no one has yet succeeded in establishing conclusively whether the provision of non-audit services undermines independence or not' (Beattie et al., 2002:5).

The accounting profession also acknowledges the threat which the provision of non-audit services could potentially have on auditor independence. The ICAEW advise that care must be taken when auditors perform management functions, but that non-audit services are economical (as the auditor has prior knowledge of the client) and should not be banned. Instead, should a threat to independence be uncovered, steps should be taken to rectify the situation such as additional reviews or the employment of different partners or separate teams on the project. The independent body, the APB (2004:6), has advised that before providing non-audit services to an audit client, the audit engagement partner must:

- Consider whether it is probable that a reasonable and informed third party would regard the objectives of the proposed engagement as being inconsistent with the objectives of the audit of the financial statements; and
- Identify and assess the significance of any related threats to the auditors' objectivity, including any perceived loss of independence; and
- Identify and assess the effectiveness of the available safeguards to eliminate the threats or reduce them to an acceptable level (APB, 2004:6).

The APB (2004) believes that if a third party considers the non-audit service to be inconsistent with the objectives of the audit of the financial statements, then the audit engagement team should either not undertake that particular non-audit service or withdraw from the audit itself. The APB (2004) does not propose a total ban on non-audit service provision in the UK which is in contrast to the USA where, under the

Sarbanes-Oxley Act 2002, nine types of non-audit services are banned. However, there is some indication that companies are reducing their non-audit service purchases due to negative third party perceptions of joint provision. In a survey published in *Accountancy* (2003) the ratio of non-audit to audit fees had fallen from 3:1 in 2002, to 1.9:1 in 2003, 'this fall in non-audit fees could suggest that an increased awareness of corporate governance requirements in the post-Enron era has hit accountancy firms hard' (Fisher, 2004:31). The current study will examine whether non-audit service provision poses a threat to auditor independence in the current business climate.

Where the provision of non-audit services is very profitable to the auditor, the auditor would be keen to retain the client for as long as possible, resulting in a lengthy auditor-client relationship. Long association, as a threat to auditor independence, is discussed in the following section.

### **3.8 Personal Relationships: The Case of Long Association**

Mautz and Sharaf (1961) originally identified long association as potentially independence-impairing. However, concern over long association has resurfaced during the current interest in corporate governance. Agency theory states that the role of the auditor as monitor will only be successful if it is expected that the auditor will report any breaches in contract which the agent makes (Watts and Zimmerman, 1983:615). However, if the auditor and agent have been working together for many years, they will be familiar with one another. Familiarity could result in 'coalitions of the manager and the auditor against the owner' (Ballwieser, 1987:327). Carey and Simnett (2006:656) provide two reasons to be concerned about lengthy auditor-client relationships. Firstly, lengthy auditor-client relationships could result in the formation of personal relationships and secondly the audit partner's ability to remain detached and critical could deteriorate over time.

In order to combat the threat of long association, audit engagement partners are required to rotate every five years with key audit partner rotation every seven years. Currently in the UK, there is no requirement for audit firms to rotate after a set period. However, in Italy audit firms are required to rotate every three years. Mandatory audit firm rotation was also in place in Spain until 1995 (ICAEW, 2002). In the USA,

where mandatory audit firm rotation is not yet required, it is estimated that on average, the Fortune 1000 public companies keep the same auditor for 22 years (Anonymous, 2004). Furthermore, in a study of 776 UK companies, Hussey (1999) found that 40% of the sample had retained their auditor for over ten years. A report compiled by Oxera (2006) notes that currently auditor-switching rates are very low (only around 2% per annum for the FTSE 100 companies).

Mandatory audit firm rotation is the most commonly suggested safeguard against lengthy independence-impairing auditor-client relationships and is the most often suggested policy to ‘counter the perception that long-term relationships between auditors and their clients impair auditor independence and professional scepticism’ (George, 2004:22). The concept of mandatory audit firm rotation as a safeguard of auditor independence has been examined for many years by academics and professional bodies in the UK. However, the introduction of mandatory audit firm rotation appears controversial.

#### *Problems with Lengthy Association*

When an audit firm is employed by the client for a lengthy period, excessive familiarity may develop, leading to auditors’ failure to ‘maintain an attitude of professional scepticism’ (Deis and Giroux, 1992:465), damaging auditor independence in fact and appearance (Sinason et al., 2001) and causing what Bates et al. (1982:60) describe as a ‘psychological dependence’. In addition, auditors may become less challenging over time, tending to anticipate company results based on past reports rather than carrying out a thorough evaluation of changes in the client company’s circumstances (Sinason et al., 2001). Wolf et al. (1999:6) describe the change in an auditor’s attitude over time as moving from proper ‘auditing’ to an attitude of ‘what has changed since the last audit?’ which causes the audit process to become ‘stale’ (Brody and Moscovice, 1998:33).

Sinason et al. (2001:32) argue that auditors may be tempted to ‘smooth over problem areas’ in order to please management and retain the engagement, rather than adhering to professional standards. If the auditor and client become too close, the auditors may identify with management problems and form an alignment of interests (Sinason et al,

2001). Petty and Cuganesan (1996) argue that in extreme cases, a long relationship between auditor and client could even result in collusion between the two parties which would destroy the agency relationship. Wolf et al. (1999:6) state that when the same audit firm examines client reports year upon year, the staff will develop a relationship with the client management which is 'excessively friendly and trusting', the close relationship could potentially 'reduce the sharpness' of the professional scepticism required (Wolf et al., 1999:6).

### *The Concept of Mandatory Audit Firm Rotation*

The debate over mandatory audit firm rotation is a major component of the discussions on lengthy auditor-client relationships. The debate over the introduction of mandatory audit firm rotation has been a point of discussion for the accounting profession and academics for over 60 years. At present, only partner rotation is required in the UK. 'The concept of mandatory auditor rotation is that a company's auditors should provide services for a defined period only, after which they should be replaced by a different firm of auditors' (ICAEW, 2002:4).

E.I. Du Pont de Nemours and Company (USA) was an early example of an organisation that voluntarily rotated its auditors annually. The voluntary rotation scheme continued between 1910 and the 1950s (Zeff, 2003). The directors of the company believed that 'auditors should be entirely separate and divorced from any immediately preceding connection with our company' (Tullman, Director of Du Pont, cited in Zeff, (2003:4)). However, once the Du Pont family were no longer involved in running the company the mandatory audit firm rotation policy was abandoned, due to cost and persuasion from Price Waterhouse (the auditors at the time). The E.I Du Pont de Nemours and Company case study is important early evidence for the debate over mandatory audit firm rotation, as the main argument for not introducing a system of mandatory audit firm rotation in the UK is that the costs could outweigh the benefits of such a scheme (ICAEW, 2002).

### *The Proponents of Mandatory Audit Firm Rotation*

Proponents of mandatory audit firm rotation take a 'regulatory view' (Geiger and Raghunandan, 2002:69). The regulatory view states that as the length of the auditor-client relationship increases, there will be a slow and gradual erosion of auditor independence. Geiger and Raghunandan (2002:69) argue that erosion of auditor independence could be minimised under a system of mandatory audit firm rotation, preventing agents and monitors developing lengthy relationships.

Research conducted by Copley and Doucet (1993) supports the views of Geiger and Raghunandan (2002). Copley and Doucet (1993) tested a model of audit quality, when audit quality represented compliance with professional standards. The results of the research found that the probability of receiving a sub-standard audit actually increased with audit tenure. Copley and Doucet (1993) suggest that the negative effect of tenure could be due to the slow erosion of auditor objectivity and a decrease in the quality of services which the auditor supplies. Copley and Doucet (1993) argue that, because they failed to find a higher incidence of poor quality audits in the first or second years of tenure, the quality of audits could be improved through the introduction of mandatory audit firm rotation. More recently, an Australian study conducted by Carey and Simnett (2006), compared length of tenure (with 7-year tenure being considered long tenure) to three different measures of audit quality. The three measures of audit quality were auditors' propensity to issue going-concern opinions to distressed companies, amount of abnormal working capital accruals and the extent to which key earnings targets are just beaten. The investigation revealed that during the auditor's tenure, the auditor's propensity to issue going-concern modified opinions was reduced and some evidence of just beating earnings benchmarks as a result of longer tenure was found which suggests a higher level of earnings management in later years of an auditor's tenure. Carey and Simnett (2006:673) conclude that 'there is a reduction in audit quality associated with long tenure'.

The ICAEW (2002:3) argues that a system of audit firm rotation would result in better audit quality, as new auditors provide a 'fresh perspective', overcoming the problem of familiarity. Moreover, new auditors coming into the client company on a regular

basis would mean that auditors would constantly be checking each other's work, 'new blood ensures greater alertness' (Anonymous, 1958:41). Previous errors would be detected quickly and auditors may be more conscientious in their work, if the work is to be reviewed by another firm (Hoyle, 1978).

The research conducted by Deis and Giroux (1992) provides empirical support for the ICAEW (2002) arguments as the study found that auditors appear to become complacent over time. Deis and Giroux (1992) studied audit quality in the public sector, hypothesising that if audit tenure increases, audit quality would decrease (perhaps due to the audit firm aligning its interests too closely with company management). The study used multivariate regression which examined audit tenure and measures of audit quality. The results suggested that audit tenure was a significant component of audit quality and that audit quality *does* decline with length of tenure. Deis and Giroux (1992) attempt to explain this decline in audit quality as either opportunistic behaviour from the client or complacency on the auditor's part. Finally, these results can only be generalised with caution, as the study only referred to a single state (Texas) in the USA.

Other advantages of mandatory auditor rotation include the avoidance of over-familiarity, of personal relationships and the avoidance of auditors becoming economically dependent upon a client (Catanach and Walker, 1999). Without economic dependence, auditors are in a stronger position to disagree with management, as 'management's ability to fire the auditor in a controversy would become a relatively meaningless threat' (Hoyle, 1978:72).

In line with Hoyle's (1978) arguments, Gietzman and Sen (2002) examined the consequences on auditor independence of a manager's ability to influence auditor re-appointment. The study found that when the management's ability to influence the auditor's re-appointment was removed, the auditor's incentives to remain independent were improved. However, Gietzman and Sen (2002) argue that their evidence is not enough to support a universal system of mandatory audit firm rotation. Gietzman and Sen, (2002) argue that auditor independence problems are unique to the specific auditor-client relationship and the audit market structure. Therefore, mandatory rotation could be a solution to the problem of impaired auditor independence but only

in certain situations. Gietzmann and Sen, (2002) suggest that mandatory auditor rotation could prevent impaired auditor independence in an audit market which is relatively thin (i.e. there are few large clients and few new client opportunities). In a thin market, the auditors will be very concerned with retaining their existing client base, making them more willing to collude with management. 'In this setting, rotation may have a positive role to play' (Gietzmann and Sen, 2002:202). However, in well-developed audit markets a policy of mandatory audit firm rotation could involve auditors and clients incurring unnecessary costs. In a well-developed audit market reputation costs would be enough to prevent an auditor from behaving dishonestly. However, Gietzmann and Sen (2002) acknowledge that further research needs to be conducted into determining desirable levels of market concentration and examining/finding the point at which the market becomes too 'thin' and rotation should be introduced.

The ICAEW (2002) also argues that mandatory audit firm rotation would provide a better perception of auditor independence, which 'is arguably just as important [as independence in fact]' (ICAEW, 2002:12). Hoyle (1978:73) points out that 'the public view of the auditors' work is of prime importance: it must be maintained and improved'.

Knapp (1991) undertook a perceptual study focusing on surrogates for audit quality used by audit committee members. Knapp (1991) believed that it was important to determine factors which audit committee members associate with good and bad quality audits, due to the more powerful role and influence on company decisions which audit committees now have, especially in selecting company auditors. The questionnaire tested auditor size, length of audit tenure and audit strategy employed. The results suggest that length of audit tenure influenced audit committee members assessments of audit quality. Audit quality was positively correlated with five-year tenure, but negatively correlated in subsequent years. Knapp (1991:47) argues that audit committee members perceive a learning curve effect in the early years of the relationship which gradually improves quality, but 'complacency on the part of the auditor, over-reliance on the client and less rigorous audits may account for the erosion of perceived audit quality as audit tenure becomes relatively lengthy'.

The study conducted by Knapp (1991) provides indirect support for mandatory audit firm rotation by suggesting that third parties (audit committee members) start to lose confidence in an auditor's independence as their tenure becomes more 'mature' (up to a 20 year tenure) (Knapp, 1991:47). However, the study was only performed on audit committee members in Texas and so may not be generalisable to the UK.

Bates et al. (1982) conducted research on CPAs' themselves to determine the effect which lengthy association has on auditor independence. The study focused on the opinions of 67 CPAs in the US who had to make materiality decisions. Materiality decisions were the chosen criterion to measure, as materiality is basic to all auditing decisions. The CPAs were picked at random and were put into different groups which were given different lengths of time for the assumed auditor-client relationship where some of the relationships would ultimately be terminated through mandatory rotation and some would not. The results showed that the length of auditor-client relationship *did* have an effect on auditor judgements. However, it was found that rotating the audit firm employees was just as effective in eliminating this effect on judgements as audit firm rotation was. Bates et al. (1982) conclude that whilst they are in favour of mandatory rotation of some form, they do not support full-scale periodic audit firm rotation.

Furthermore, Gates et al. (2007) found that MBA and law students were more willing to invest their own money in companies where audit firm rotation was being employed. It was also revealed that whilst audit firm rotation appeared to increase perceptions of auditor independence, 'rotating the audit partner did not change the level of confidence in reported earnings' (Gates et al., 2007:12).

Beattie et al. (2002:5) argue that before such a costly strategy of mandatory audit firm rotation is imposed upon UK companies and audit firms 'the benefits would have to be clearly demonstrated'. Vanstraelen (2000) provides some evidence to support the introduction of the system. However, the research is based in Belgium where auditors are employed for a term of three years which can be renewed for further three yearly periods without restriction. Belgium was chosen for the study as it is expected that many of the companies in this country will have retained the same auditor for many years, meaning it is possible to examine the effects of a long-term auditor-client

relationship on audit quality. Vanstraelen (2000) found that companies, which had a longer relationship with their auditor, were more likely to receive a clean audit report than those with shorter tenures. It was also found that auditors seemed more willing to issue a clean audit report in their first two years of mandate than in the last year of their mandate (when they will likely know whether their appointment will be renewed).

Vanstraelen, (2000) concludes that ‘the policy implications of these findings could be in favour of mandatory auditor rotation to maintain the value of an audit for the external users’ (Vanstraelen, 2000:438). Audit firm rotation could stop the problem of auditors issuing clean audit opinions in order to get their mandate renewed, it could also stop the collusion between the auditor and client company which could take place as a result of a lengthy relationship. Whilst this paper reports an important finding, it is less relevant to the UK in comparison to Belgium and France, as there is no system of renewable long-term audit mandates here.

In an experimental study Dopuch et al. (2001) investigated whether mandatory audit firm rotation reduced the likelihood of auditors issuing reports biased in favour of the client management. The subjects of the experiment were given different scenarios based on different types of rotation and retention schemes. Some of the subjects played the managers of client companies whilst others were assigned the role of auditor. The results of the experiment revealed that audit reports biased in favour of the client management were most frequent when no system of mandatory audit firm rotation was in place, Dopuch et al. (2001:116) conclude that ‘mandatory rotation can increase auditor independence’. However, it is acknowledged that as the study was experimental, other factors such as competition and audit firm reputation were not considered as factors which might enhance auditor independence.

Nagy (2005) criticises the previous studies which have focused on mandatory audit firm rotation, as they have usually been conducted in an environment of voluntary audit firm change and not a mandatory one. The results may not transfer to an environment of mandatory audit firm rotation because if clients are voluntarily changing their auditors it is usually because they are trying to find an audit firm with a

consistent opinion to theirs which leads to lower auditor independence, not higher auditor independence.

Nagy (2005) uses the wake of the Andersen collapse to observe the independence effects which a system of forced audit change could have on audit quality. Using a combination of descriptive statistics and regression analysis he found that there was a decline in discretionary accruals for smaller ex-Andersen clients after starting with a new auditor. Furthermore, the significant positive relationship for smaller companies between discretionary accruals and short auditor tenure disappears in the period after the collapse of Andersen. He argued that the finding shows that the increase in scepticism which a new auditor has at the beginning of a relationship, mitigates risks associated with new audit engagements. However, no such relationship is found between discretionary accruals and larger companies. Nagy (2005) argues that larger companies will have greater bargaining power with their auditors. Nagy (2005) concludes that his results provide some support for the introduction of a system of mandatory audit firm rotation. However, the validity of the results should be questioned. Firstly, as is noted, all the cases examined in the study were clients from one firm (Arthur Andersen). Secondly, after the high profile collapse of Andersen, it is likely that the remaining audit firms were being extra vigilant which could be the cause of the results in the study rather than the switch of auditors. Further research is needed.

Finally, two perceptual studies, one involving Malaysian loan officers (Bakar et al., 2005) and one of users and preparers of financial statements in Barbados (Alleyne and Devonish, 2006), both found that the mandatory rotation of auditors would promote the perception of auditor independence.

### *Benefits of Lengthy Association*

Despite the previous studies' criticisms of long association, there are also studies which promote the benefits of lengthy association. For example, it has been argued that auditors (as monitors) who have more experience of a client, may be at an advantage in discovering errors in client reports, compared to an auditor with relatively little experience of that company, who is unfamiliar with the clients'

reporting systems, industry and staff etc. (Knapp, 1991). Retaining the same auditor for a lengthy period could 'preserve the continuity of background information and knowledge of the company and of management' (Morgan et al., 1963:64). In addition, George (2004) argues that audit failures are more likely to occur when the firm is conducting its first or second audit of the company, due to a lack of knowledge of the company which is 'gained over time' (George, 2004:23). In 1980, Firth found that users and preparers of financial statements did not perceive a ten-year relationship between auditor and client as potentially independence-impairing. In 1981, Firth argued that a long relationship between auditor and client would mean audits being completed quicker, a reduction in audit fees and greater auditor expertise leading to advice that is more valuable for the client. In a study of UK finance directors, Hussey and Lan (2001) found that the majority were not in favour of compulsory audit firm rotation. Those who believe that a lengthy association between agent and monitor could be beneficial to audit quality are generally opposed to a policy of mandatory audit firm rotation.

#### *The Opponents of Mandatory Audit Firm Rotation*

Opponents of mandatory audit firm rotation take an 'economic view' (Geiger and Raghunandan, 2002:69). The 'economic view' states that auditor independence is more likely to be impaired in the early years of the relationship, as auditors try to recover their initial start up costs and have no knowledge of the client. Those who take an economic view argue that mandatory audit firm rotation could damage independence, as a lengthy relationship can often be beneficial to an auditor's independence. The opponents of mandatory audit firm rotation believe that the costs of the process would far outweigh any benefits which it has to offer. George (2004:25) argues that whilst mandatory audit firm rotation injects 'new blood into long-term audit relationships', it also creates a new learning curve. With each change of auditor, audit quality suffers as 'the new auditor is unfamiliar with the client's business or operations'.

Results of a study conducted by St. Pierre and Anderson (1984) provide evidence that audit risk is highest in the early years of an auditor-client relationship. St. Pierre and Anderson (1984) examined the factors associated with 129 lawsuits filed against

public accountants. Several situational characteristics suggested by other authors were considered during this examination. These were client size, public accounting firm size, client industry, accountant experience with client (tenure) and public vs. private client. The results of the examination showed that 23% of the cases involved public accountants with three or fewer year's experience. 'This finding adds credibility to the contention that risks increase with new clients and should be noted in discussions concerning mandatory rotation of audit firms' (St. Pierre and Anderson, 1984:256). It is suggested that as the learning curve of auditors' increases, the efficiency in the collection and evaluation of evidence also increases and the auditors make fewer mistakes as they gain experience. A policy of mandatory auditor rotation would mean that auditors would be starting from scratch with new clients on a regular basis and this could cause them to make more mistakes.

Whilst this paper provided important evidence against the introduction of a policy of mandatory audit firm rotation in 1984, using sound methodology, the majority of the cases examined took place during the 1960s and 1970s. It cannot be assumed that poor financial reporting is related to short auditor tenure anymore.

However, whilst the study conducted by St. Pierre and Anderson (1984) is dated, a number of similar, more recent, studies have obtained results which confirm the early findings of St. Pierre and Anderson (1984). Johnson et al. (2002) conducted a study to determine whether the length of the auditor-client relationship affected financial-reporting quality. In the study, secondary statistics (of a sample of Big Six audit clients, industry and size matched, reported accruals), taken from COMPUSTAT were analysed against two proxies for financial reporting quality using multivariate statistical techniques. The results showed that short auditor-client tenures (2-3yrs) were associated with lower quality financial reports. No evidence was found that long auditor-client tenures (9 or more yrs) were associated with reduced financial reporting quality. Johnson et al. (2002:642) explain that, as knowledge is critical for auditors to be able to detect material misstatements 'financial reporting quality is expected to increase as client-specific knowledge increases in the early years of audit engagement'. Johnson et al. (2002) argue that the evidence produced in the study shows that under the current regulatory regime where rotation is not mandatory, long auditor-client tenures are not found to be damaging to financial reporting and there is

no need to resort to mandatory audit firm rotation. However, these results only refer to 'Big 6' audit firms and cannot be generalised to all audit firms.

Myers et al. (2003) support the conclusions of Johnson et al. (2002), (using a long time-scale of 1988-2000), stating that 'under the current system of voluntary auditor rotation, audit quality does not appear to deteriorate with tenure' (Myers et al., 2003:769). In the study, Myers et al. (2003) investigate the relationship between auditor-client tenure and the quality of earnings. As proxies for earnings quality, Myers et al. (2003) use the dispersion and sign of the absolute Jones model, abnormal accruals and absolute current accruals. The results showed that the magnitude of discretionary and current accruals declines with longer auditor tenure. 'This suggests that as the relationship lengthens, auditors limit management's ability to use accruals to increase current period earnings' (Myers et al., 2002:781). As the auditor becomes more familiar with the clients' management, the audit firms are able to place constraints on the clients' more extreme decisions in reporting financial performance. These results seem to provide further evidence that mandatory audit firm rotation is not required because a lengthy auditor-client relationship does not reduce the quality of audit reports. In fact, Myers et al. (2003) argue that a lengthy tenure could actually improve the quality of audit reports.

However, Myers et al. (2003) only examine one aspect of earnings management, other tests between different aspects of earnings management and auditor tenure could provide very different results.

Carcello and Nagy (2004) examine the relationship between audit tenure and fraudulent financial reporting. 104 companies cited for fraudulent financial reporting between 1990-2001 were compared with a matched set of 104 non-fraudulent firms. It was found that there was a significant positive relationship between short tenure (three years) and fraudulent financial reporting, supporting the argument that audit quality is lower in the early years of a relationship. The results failed to show a significant positive relationship between longer auditor tenure (over nine years) and fraudulent financial reporting. As it was found that fraudulent financial reporting is most likely to happen in the first three years or fewer of the relationship, the



introduction of 'mandatory audit firm rotation could have adverse effects on audit quality' (Carcello and Nagy, 2004:55).

However, other explanations for the results should be explored. There may be other reasons for poor financial reporting quality in the earlier years of the auditor-client relationship, rather than just a lack of client knowledge or a desire to please management. It could be the case that financially distressed companies are more likely to frequently change their auditors, in an attempt to 'opinion shop', (Ghosh and Moon, 2005:593), and find a monitor who can be influenced by the agents wishes.

Hoyle (1978) argues that in the modern business environment, auditor rotation could lead to increased audit risk. Large complex businesses will take longer to understand and it would be unreasonable to assume that the best audit work is done at the start of the engagement. Berton (1991) states that the majority of audit failures occur in the first three years of an audit firm's tenure, meaning that under mandatory audit firm rotation 'a company would be forced to switch auditors just as the quality of the audit work was improving' (Hoyle, 1978:74).

Two perceptual studies conducted by Gosh and Moon (2005) and Mansi et al. (2004) support the contentions of Hoyle (1978) and Berton (1991) that longer audit tenure could reduce audit risk. Ghosh and Moon (2005) focused on investors' perceptions of auditor tenure. The paper also examines the perceptions of independent ratings agencies and financial analysts, who play an important role in giving stock recommendations, debt ratings and earnings forecasts and influence investors. Ghosh and Moon (2005:588) describe the sample as 'capital market participants'. The objective was to uncover whether there were any changes in the perceived credibility of financial reports as auditor tenure increased. In order to measure investors' perceptions, earnings-response coefficients from contemporary returns-earnings regressions, taken from the COMPUSTAT annual files were used. From these files, 38,794 publicly traded firms between 1990 and 2000 were used. In order to measure the perceptions of the other 'capital market participants' (Ghosh and Moon, 2005:588) certain proxies for perceptions of financial reporting quality were used. These were stock ratings, debt ratings and analyst's forecasts of earnings per share. If tenure is perceived to enhance reporting quality then reported earnings will have a larger

impact on rankings and ratings than if the converse is true. This study differs from Shockley (1981) in that it examines proxies for capital market participants' perceptions of audit tenure, rather than asking the participants directly, this means that the conclusions can only be inferred.

The results found that auditor tenure was positively associated with reported earnings quality, meaning that a longer auditor-client relationship is associated with improving auditor independence and audit quality. The results also indicated that investors were more likely to anticipate current-year earnings for more than one year ahead of the earnings release for companies with lengthier auditor-client relationships. In addition, rating agencies reported earnings to be of greater significance as auditor tenure increased, this indicates that independent rating agencies perceive audited financial statements as more reliable as length of relationship increased. Finally, using earnings coefficients it was found that financial analysts relied more heavily on recent reported earnings when making forecasts about future earnings as the auditor-client relationship grew longer, thus 'analysts are more likely to rely on reported earnings to predict future earnings with longer tenure' (Ghosh and Moon, 2005:587).

In conclusion, 'capital market participants' perceive that reported earnings quality increases with the length of the auditor-client relationship. Tenure has a favourable impact upon audit quality and 'imposing mandatory limits on the duration of the auditor-client relationship might impose unintended costs on capital markets' (Ghosh and Moon, 2005:588).

Mansi et al. (2004) conducted a similar study (around the same time as Ghosh and Moon, 2005). The study examined whether the size of the auditor and the length of the auditor-client relationship affected the price which an investor would pay for a company's debt securities. Using regression analysis and a sample of 8,529 firm-year observations between 1974 and 1998, the association between auditor tenure and the return bondholders require on their corporate bonds is examined. The results indicated a negative and significant relationship between auditor size and tenure and the return demanded on investors' corporate bonds. When a larger auditor (the then Big Six) audits a company's financial statements, the bondholders have greater confidence in their quality and demand a lower rate of interest on their investment. Moreover,

investors seem to require a lower rate of interest on their corporate bonds as the length of the auditor-client relationship increases and receive a better bond rating. It is concluded that because investors appear to place a value on length of tenure between the auditor and the client it suggests that mandatory audit firm rotation 'may not be uniformly beneficial and could be viewed negatively by the capital market' (Mansi et al., 2004:790). However, other factors not previously considered may have been the cause of these results.

Mandatory audit firm rotation would be costly, both for the client company and for the auditors themselves. Ridyard and Bolle (1991) (cited in ICAEW, 2002) note that start-up costs for an audit firm for a new client in an industry in which they have some experience was around 15% of all costs and grew to 25% of all costs when the audit firm had no experience of the industry. These costs do not include the costs associated with the time which it would take the auditors to gain familiarity with the client company (Catanach and Walker, 1999). Efficiencies developed by the previous auditor would be lost because the new auditor would have to conduct the first audit 'from scratch' and 'gain the necessary experience of the client's business, operations and systems' (ICAEW, 2002:19).

Costs would also be incurred by the management of the client company who would have to go through the disruptive and time-consuming process of selecting new auditors on a regular basis. There is also a burden on the client management to supply the new auditors with the information they need on the company's corporate governance, internal control systems, market relations and organisational structure etc. (ICAEW, 2002). In addition to these costs, Petty and Cuganesan (1996) have argued that audit fees may have to increase if the audit firm is unable to absorb the high start-up costs which it will be incurring on a more regular basis. 'At present these audit start-up costs are incurred only occasionally, but with required rotation, an extra large audit bill would have to be paid every five years' (Hoyle, 1978:74). It is also the case that these extra start-up costs would have to be averaged out over a shorter period of time (Petty and Cuganesan, 1996). Opponents also argue that there is a chance that monitors may actually be more susceptible to influence from agents in the early years of the relationship due to the high start-up costs which will have been incurred and which will need to be recovered (Geiger and Raghunandan, 2002). This

problem is greater where the auditor had engaged in 'low-balling' (DeAngelo, 1981b) in order to win its client.

Geiger and Raghunandan (2002) provide evidence that auditors are more susceptible to client influence in the early years of a relationship. Geiger and Raghunandan (2002), examine audit reports for 117 companies entering bankruptcy between 1996 and 1998. Multivariate analysis was used to test for an association between the length of the auditor-client relationship and the type of audit opinion issued immediately prior to the bankruptcy. The results highlighted a positive correlation between auditor tenure and companies having been issued a going-concern modified audit report prior to the bankruptcy, 'a going-concern modified audit opinion is less likely to be issued during the initial years of an audit engagement' (Geiger and Raghunandan, 2002:74). Geiger and Raghunandan, (2002) argue that auditors are more influenced by new client management and make more mistakes in the early years of engagement. It was also argued that an auditor's 'knowledge improvement' (Geiger and Raghunandan, 2002:75) over time may lead the auditors to make fewer mistakes, as they become familiar with the client and 'more sceptical about management plans' (Geiger and Raghunandan, 2002:75). It is concluded that mandatory auditor rotation to improve audit quality is not necessary (Geiger and Raghunandan, 2002).

The study provides strong evidence against the introduction of mandatory audit firm rotation. However, the study was based upon only one aspect of an auditor's decision (i.e. whether to issue a modified opinion or not) and did not examine other audit decisions taken during the planning/execution of the audit. Moreover, the results may have been more enlightening if it could have been determined why the auditor had decided to give an unmodified decision when a modified decision was appropriate. For example, perhaps the auditor believed that the company was employing sufficient non-audit services to be able to turn around the situation. Finally, the study is based upon a very short time scale (of just two years), a repeat of the study in a different two year period would be useful to check the consistency of these results.

Mandatory audit firm rotation could disrupt the continuity of audits. Taub (2004) argues that auditors may lose interest in their work as the audit contract ends. This is in stark contrast to the proponents of mandatory audit firm rotation who argue that

knowing that other audit firms will check their work will be an incentive for auditors to do their best. Petty and Cuganesan (1996) also believe that mandatory audit firm rotation could mean the premature termination of a good and non independence-impairing auditor-client relationship.

Opponents also believe that there are not enough large audit firms in the UK to support a policy of mandatory audit firm rotation. In the UK, large listed companies will be limited to a choice of four audit firms, which is further limited if certain conflicts of interest arise, such as if one of the Big Four audit firms already audits a main competitor, or if one of them already provides the company with non-audit services which are incompatible with conducting an audit. A report by London Economics (2006) acknowledges that the audit market has become increasingly concentrated over the last 20 years as a result of mergers, globalisation, technological innovations and the recent demise of Andersen.

The ICAEW (2002) also indicate concern at the loss of the signals which are given out to the market when there is a change of auditor. Currently, a change in auditor might suggest a conflict of interest/dispute, but under a system of mandatory audit firm rotation, auditors would have to change and these important signals of trouble would be lost. 'If the change is due to differences with the auditor and a wish to seek a more lenient one, the market is in a better position to evaluate the event than if it takes place under the guise of a legal obligation' (Arrunada and Paz-Ares, 1997:35).

Mandatory audit firm rotation could also hamper an auditor's industry specialisation. Audit firms will not have any incentives to invest in the development of their audit process, which they would do when they expect a long-term relationship with their clients (ICAEW, 2002). A lack of investment could result in backward audit technologies and less investment in the people who perform the audits, leading to a lower quality auditing profession. In addition, audit firms would have a disincentive to innovate their audit technology as they would have to hand over their documentation to competitors once their engagement was finished, having 'a negative effect on an industry in which such innovations are becoming increasingly important' (Arrunada and Paz-Ares, 1997:37). Arrunada and Paz-Ares (1997) also argue that a system of rotation does not reward auditors who achieve greater

efficiency because the system would reduce potential demand for efficient auditors and less efficient auditors would not be punished because demand would not fall as much as it would do, without rotation. Audit firms would also have fewer incentives to specialise in certain industries, if they know that they would only be auditing that specialised company for a limited time and that the experience gained by the audit firm would be useless when auditing other companies. If audit firms are unwilling to invest, it could make it especially hard for companies in specialised industries to find audit firms with the correct knowledge who can perform an acceptable standard of audit (Arrunada and Paz-Ares, 1997).

Finally, some opponents have argued that audit firm rotation is unnecessary because in many companies, staff rotation is so high that the monitor-agent relationship would naturally re-new itself (ICAEW, 2002). A number of empirical studies echo these arguments against mandatory audit firm rotation.

The only study directly to determine perceptions of long association and to discover that long association had no negative affect on perceptions was conducted by Shockley (1981). The objective of the study was to obtain opinions from the (then) Big Eight partners, local and regional firms, commercial loan officers and financial analysts of the effects of competition in the audit market, managerial advisory service provision, audit-firm size and tenure, on auditor independence. A strength of the paper was the wide range of participants which were selected. The mailed survey presented the participants with 16 different scenarios, which represented all the possible combinations of the four independent variables. The different scenarios and combinations of variables made it harder for the participant to guess the objectives of the study. Shockley (1981) hypothesised that auditors who have performed a given client's audit for a period longer than five years would be perceived as having a greater risk of losing independence than an audit firm which had performed the audit for five or fewer years.

The results showed that whilst there were some differences in the opinions of the four groups of participants, there was a general consensus that 'audit firms operating in highly competitive environments, firms providing MAS and smaller audit firms are perceived as having a higher risk of losing independence. An audit firm's tenure with

a given client is not significant' (Shockley, 1981:785). Shockley, (1981) argues that because tenure had no significant effect on perceptions of auditor independence, any policy changes made (i.e. mandatory audit firm rotation) to reduce average tenure 'may have little positive effect on perceptions of auditors' independence' (Shockley, 1981:798).

However, it should be noted that other authors such as Johnson et al. (2002) and Carcello and Nagy (2004) have taken a period of nine years to define long association, with five years (the time-span used by Shockley, (1981) to define long association) being described as a medium length of tenure. Perhaps under Johnson et al's (2002) definitions of long association, the participants might have perceived long association differently. Furthermore, the study was conducted over 20 years ago and it is likely that perceptions of auditor independence have changed during this time, especially in light of Enron, where the monitors were exposed for having a close relationship with the agents. However, since few perceptual studies have been conducted on long association in the last 20 years, it is impossible to know for sure how perceptions have changed. The current study intends to fill this gap in the literature.

### **3.9 Long Association: Summary**

It has become apparent that 'mandatory rotation of auditors has received relatively sparse attention in academic circles' (Arrunada and Paz-Ares, 1997:31). In addition, as identified by the ICAEW (2002), many of the empirical studies were not UK focused. Beattie et al. (2002:5) also state that they are 'not aware of evidence from the UK that rotation would enhance independence'. Little direct evidence has been found to argue whether mandatory audit firm rotation should or should not be introduced, as the debate has relied too heavily upon 'anecdotal evidence and isolated cases' (Johnson et al., 2002:640). The small number of empirical studies in this area are either inconclusive or they are not current. None of these studies provide enough clear evidence to solve the debate, although the majority of studies examined were not in favour of a policy of mandatory audit firm rotation. Furthermore, only a few studies have paid attention to how third parties perceive lengthy auditor-client relationships and, if lengthy association is perceived negatively, whether a policy of mandatory

audit firm rotation would be a preferred safeguard or perhaps the current guidelines of partner rotation are seen to be sufficient. The present study intends to fill this gap in the literature.

It is also important to note the accounting profession's acknowledgement of the threat to auditor independence which long association creates. The ICAEW state that audit engagement partners must rotate every seven years and must not return to the original role for a further five years. The APB (2004) state that a lengthy auditor-client relationship could lead to self-interest, self-review and familiarity threats, with the severity of the threat depending on three factors. The three factors include, the role of the individual in the engagement team, the proportion of time that the audit client contributes to the individual's annual billable hours, and/or, the length of time that the individual has been associated with that audit engagement (APB, 2004:5).

The following section examines client employment of a former auditor. In comparison to lengthy association, client employment of a former auditor also has the potential to bring auditors and clients close together, risking impaired auditor independence.

### **3.10 Personal Relationships: The Case of Client Employment of a Former Auditor**

Ex-auditor employment by the client company also referred to as 'the revolving door' (Clikeman, 1998:42) and 'job hopping' (Byrnes, 1999:93) has been identified in the academic literature as an auditor-client relationship which has the potential to damage auditor independence, particularly if whilst working for the client, the ex-auditors retain strong connections with their former employers. In a recent survey conducted by Accountancy (2007) it was revealed that 19 of the FTSE 100 finance directors are alumni of their current audit firm.

Where monitors are interested in becoming agents a conflict of interest arises between the auditors' self-interest and their duties as monitors to principals of client companies. Monitors may be unwilling to find fault in their future employers' accounts. A situation where an auditor is considering employment at the client company could damage auditor independence. Hussey and Lan (2001:171) argue that

‘the “familiarity threat” can be compounded in situations where the current company finance director was formally employed by the firm doing the external auditing, a not uncommon occurrence’. Basioudis (2007:32) notes that ‘the audit process may be weakened when auditors are appointed to key management positions with their audit clients’

The APB recommends a minimum of two years as a ‘cooling-off’ period before a former partner of the audit firm or a member of the engagement team can join the client company.

However, despite potential threats to auditor independence, it is ‘not un-common for certified public accountants to be offered senior management positions with client firms’ (Imhoff, 1978:870). Having conducted one of the few empirical studies which concludes that ex-auditor employment does not affect independence perceptions, Firth (1981) argues that the benefits of an ex-auditor joining the client company are often overlooked. Beasley et al. (2000) gives some examples of the benefits of ex-auditor employment from the perspective of the client company.

Firstly, the Big Four accounting firms hire the best performing students from the top business schools and, accounting firms give their employees a high level of training and exposure to numerous types of business environments. The client company is assured that any staff, which they ‘poach’ from the audit firm, will be highly trained and capable. Secondly, the ex-auditor will already be familiar with the client’s business strategy, industry and financial reporting process. Finally, the client company will have already had the benefit of watching the auditor perform over a number of years.

From the ex-auditors’ perspective the benefits of a personnel transfer are clear, the auditor will receive a higher status job with a healthy salary within a company in which they are already familiar. Imhoff (1978) argues that some individuals enter public accounting firms with the expectation of using their auditing experience to obtain a managerial position within a client company further down the line. Wright and Booker (2005:26) argue that if ex-auditor employment is banned then accounting career opportunities will be limited, making the profession less attractive, ‘the

revolving-door enticement allows public accounting firms to recruit qualified graduates by offering a better opportunity to become corporate executives’.

The benefits of ex-auditor employment outlined appear mainly to accrue to the ex-auditor and the future employer, rather than having any beneficial consequences for auditor independence.

The following sections will outline the main threats to auditor independence associated with ex-auditor employment which were found from reviewing the relevant literature. However, the following review of the ex-auditor employment literature further highlights an argument made by Parlin and Bartlett (1994:188) that ‘very little research exists on employment effects on auditor independence’.

#### *Threats to Auditor Independence before the Auditor Leaves the Audit Firm*

Lennox (2005) divides the threats associated with ex-auditor employment into two areas, those threats which occur before the auditor leaves the audit firm (when the auditor is still a monitor) and those threats which relate to the impairment of auditor independence once the former auditor works for the client (when the auditor has become an agent). This section outlines some of the threats to auditor independence which are caused by auditors considering employment with their client company.

Evidence from a questionnaire-based perceptual study conducted by Lindsey et al. (1987) suggested that Canadian bankers, financial analysts and auditors were concerned that a job offer made to an auditor by a client company could influence auditor independence. Clikeman (1998:42) argues that ‘job-hunting auditors may be more interested in winning the favour of their future employers than in critically evaluating the fairness of the financial statements’. Furthermore, Iyer and Raghunandan (2002) express concern that, should an auditor be offered a position at the client company, that auditor may not approach the audit with an ‘appropriate level of scepticism’ (Iyer and Raghunandan, 2002:487). However, Bartlett (1997) reports evidence that a majority of CPAs and bankers considered that a lucrative job offer would not prevent an auditor from forming an appropriate opinion in the face of a client’s manipulation of financial statements.

Kaplan and Whitecotton (2001) also look at possible threats to auditor independence which accrue from an auditor considering employment with the client company. However, in contrast to Lindsay et al. (1987) and Bartlett (1997), Kaplan and Whitecotton's (2001) study focuses on the safeguards, which have been put in place to protect against impaired auditor independence rather than examining the effect which, ex-auditor employment could have. The focus of the research is to examine the course of action which auditors take when they discover that an audit manager is considering moving to the client company, but has not complied with the ethical rulings by resigning from the audit engagement team. Audit seniors were presented with hypothetical case studies. The results showed that co-workers in accounting firms, were unlikely to blow the whistle on each other if someone was considering employment with an audit client due to 'perceptions of high personal costs and low personal responsibility' (Kaplan and Whitecotton, 2001:62). The results of the survey question how effective ethical standards and safeguards are in preventing independence-impairment through ex-auditor employment.

However, Kaplan and Whitecotton's (2001) research is only tested on audit seniors from one firm, meaning that the results cannot be generalised outside this firm. Other firms with different cultures may find safeguards against ex-auditor employment to be more effective.

#### *Threats to Auditor Independence after the Auditor Leaves the Audit Firm*

The following section considers the threats to auditor independence once the former auditor works for the client company (Lennox, 2005).

Imhoff (1978), the earliest example of a study carried out on ex-auditor employment, examined the extent of ex-auditor employment, the acceptable time lapse between auditing and working for the client company and also whether the previous rank of the ex-auditor had any effect on perceptions of auditor independence. Imhoff's (1978) study was concerned with the consequences of auditor independence once an auditor had left the audit firm in order to join the client company. The study was questionnaire-based and involved two phases. In phase one, participating offices of the (then) Big Eight accounting firms were contacted and requested to fill out a survey

regarding their staff turnover. Results of the questionnaire showed that 53 out of the 258 staff who left their CPA firm had taken jobs with their client company. The finding indicated that at the time, it was not 'uncommon for a CPA to accept employment with a former client' (Imhoff, 1978:874). However, only two of the (then) Big Eight accounting firms agreed to participate in the phase one survey. The external validity of the result is questioned.

Phase two of the research involved a second survey sent to a group of CPAs and a group of bankers and financial analysts (as users of audited accounting data). The questionnaire described a hypothetical situation in which the ex-auditor accepted a position within the client company. Two variables were manipulated, whether the auditor had taken a supervisory or non-supervisory role and, the time lag between working as the auditor of the client company and accepting the new position within the client company. The survey measured the auditor independence perceptions of these two groups, rather than using surrogate indicators to try to measure actual independence.

The results of the phase two survey indicated that the users of the audited information perceived a problem more frequently than the CPAs (who may have been attempting to project an independent image of their profession), indicating that the users were 'less tolerant than CPAs of the potential problem presented by such job transfers' (Imhoff, 1978:876). However, it is impossible to tell whether the CPAs would have been honest in their responses when answering sensitive questions about their profession.

Changes in time interval had a significant impact on the responses of both groups, with auditor independence concerns decreasing as the time lapse increased. In general, the CPAs believed that supervisors could perform independently as long as the time lapse was greater than six months. However, the users indicated that this time lapse should not be less than 18 months. Neither group questioned the independence of a non-supervisor until the time lapse went below six months. These results show that it is possible that ex-auditor employment within the client company harms the credibility of the accounting profession, whether or not an auditor's actual

independence is damaged in reality. Concerns about independence heighten as the time lapse between the auditor leaving the audit firm and joining the client decreases.

Phase two of Imhoff's (1978) study is replicated to some extent by the current research. The current study will also examine time lapses between the ex-auditor leaving the audit firm and joining the client company and the past position which the ex-auditor held. However, the current study will focus on investors' perceptions rather than the perceptions of CPAs, bankers and financial analysts.

Identifying a gap in the literature, Koh and Mahathevan (1993) built upon Imhoff's study using similar research methodology but with a between-subject design. Koh and Mahathevan (1993) argue that a between-subject design reduces bias as the respondents are unaware of the research focus rather than the within-subject method used by Imhoff (1978).

Two more variables were introduced to Koh and Mahathevan's (1993) study which were overlooked by Imhoff (1978). These were the position held by the ex-auditor in the client company and the audit opinion issued by the ex-auditor in the last audit conducted prior to accepting the position with the client company. The position held by the ex-auditor in the client company is also examined by the current study.

In contrast to Imhoff (1978), the sample of Koh and Mahathevan's (1993) study focused on the perceptions of middle-managers in Singapore. Like Imhoff (1978), the results of the survey showed that the shorter the time, the more the independence of the last audit was questioned, with the independence of the last audit being questioned most at six months. In addition, the independence of subsequent audits was questioned most when the ex-auditor accepted a position as a preparer of the financial statements as opposed to a non-preparer. As preparer, the ex-auditor would have to work closely with audit firm ex-colleagues, meaning that the agents and the monitors would not be independent from one another. In the position as preparer of financial statements it was found that the independence of the last audit was questioned more when the last audit opinion was unqualified as opposed to qualified. Finally, the independence of subsequent audits was questioned more when the ex-auditor was in a supervisory position at the audit firm compared to a non-supervisory position. Most

managers would view the supervisor as having a greater knowledge of the audit process and more influence over ex-colleagues than a non-supervisor has.

Koh and Mahathevan (1993) conclude that the results highlight 'the negative effects on perceived independence when an ex-auditor accepts employment with an audit client. This may have important implications for the auditing profession' (Koh and Mahathevan, 1993:239). Negative third party perceptions of auditor independence could seriously reduce the worth of the audit report. However, the perceptions of managers in Singapore might not necessarily be the same as the perceptions of UK managers. The results may not be the same if the study were replicated in the UK. In addition, the study only focused on the perceptions of one group of people, middle-managers, so the results cannot be generalised to other groups such as investors who are the focus of the current study.

A similar, but more recent study, conducted by Wright and Booker (2005) supports the conclusions of Koh and Mathevan (1993). In a perceptual study of members of the state boards of accountancy in the USA, Wright and Booker (2005) found that ex-auditor employment of senior-level auditors at a senior-level in the client company damaged independence perceptions. The results showed that significant cooling-off periods did reduce the impact of ex-auditor employment upon independence perceptions.

Menon and Williams (2004) attempted to determine the 'real' consequences of ex-auditor employment. However, Menon and Williams (2004) are sceptical and argue that it is not guaranteed that ex-auditor employment actually causes an independence problem as auditors have strong economic reasons (litigation/reputation costs) for conducting independent audits. In response to the limited research into ex-auditor employment, the Jones (1991) model is used to calculate abnormal accruals for firms in 1998 and 1999. Despite Menon and Williams' (2004) early scepticism the results find that client firms who have employed a former audit partner are more likely to report larger signed and unsigned abnormal accruals than other firms. Menon and Williams (2004) argue that auditors lower their assessment of risk for client firms who have employed a former audit partner and raise the acceptable threshold for accruals. Lower professional scepticism is a violation of independence and a

consequence of the monitor and agent not being independent of one another. Auditors need to examine whether they are applying a high enough level of scepticism when auditing client companies who have employed a former partner.

However, there is a criticism of Menon and Williams (2004). The analysis of the study is restricted to just a two year period, further analysis over a longer timescale would provide greater confidence in the results and could highlight more substantial trends. In addition, similar to Lennox's (2005) study, other variables apart from ex-auditor employment cannot be ruled out as a cause for the results.

In comparison to Menon and Williams (2004), Lennox (2005) also focuses on the 'real' consequences of ex-auditor employment after the auditor has joined the client company, which is in contrast to the perceptions based work of Imhoff (1978), Koh and Mathevan (1993) and Wright and Booker (2005). Lennox (2005) is the first to identify two different types of affiliation involved in an ex-auditor joining a client company. The first is employment affiliations, where an individual leaves an audit firm and joins a client company. Secondly, there are alma mater affiliations where executives persuade their companies to appoint their former audit firms. Lennox (2005) states that the latter affiliations are often ignored in the literature.

If affiliations do impair audit quality, then the affiliated companies would be more likely to receive a clean audit opinion. Lennox (2005) hypothesises that the affiliations reduce the likelihood that a problem will be discovered/reported. Audit opinions of a sample of SEC registrants recorded on COMPUSTAT from 1995-1998 were examined. Using advanced statistical tests, Lennox (2005) concludes that 71.3% of affiliations are employment affiliations, where the individual has left the audit firm and immediately worked for the audit client. Lennox (2005) finds that companies receive clean audit opinions more often when their executives are affiliated with the audit firm. This finding shows that regulators are right to be concerned about ex-auditor employment because similar to the findings of Parlin and Bartlett (1994), 'executive-auditor affiliations can impair audit quality' (Lennox, 2005:228). However, despite his suggestion that alma mater affiliations could impair independence, no association was found between this type of affiliation and receiving a clean audit opinion.

A note of caution should be applied to Lennox's (2005) results. In looking at just one aspect (executives being affiliated with the audit firm and companies receiving a clean audit opinion), it is impossible to rule out other factors which might be causing the relationship. A better measure of auditor independence in relation to ex-auditor employment would be to determine whether the companies who received a clean audit opinion actually deserved a qualified one.

Similar to the work of Lennox (2005) and Menon and Williams (2004), Geiger et al. (2005) examine whether the concerns about auditor independence, which the 'revolving door' practice has sparked, and the following restrictions in the 2002 Sarbanes-Oxley Act (a year cooling-off period) are warranted in terms of 'real' auditor independence. However, in contrast to previous work Geiger et al. (2005) reject the argument that ex-auditor employment impairs auditor independence.

Geiger et al. (2005) based their rejection upon an examination of earnings management. In the study, a 'test sample' including 117 companies which had employed individuals from their audit firm between 1989-1999, was compared to three control groups. The first group consisting of newly hired executives who did not work for the audit firm immediately prior to joining the company. The second group (to test accounting general knowledge) included newly hired executives who had previously worked for an audit firm other than the company's external auditor. The third group was a 'no hire' group, containing companies who maintained their existing financial reporting personnel. In comparison to Menon and Williams (2004), using the Jones (1991) model to estimate total discretionary accruals, the results consistently showed that the companies in the test group did not show any higher increases in absolute discretionary accruals for the time immediately prior to hiring or the period immediately after hiring. There does not appear to be an increase in the amount of earnings management by companies who have recently hired auditors from the company's external audit firm compared to earlier periods of the sample and compared to the control groups. However, the study only focused on one possible measure of impaired independence, which was earnings management.

### *The Threat of Working with Former Colleagues*

Mahoney et al. (1994) question whether continuing auditors can be sufficiently independent when dealing with the management of the client company who were previously colleagues, superiors or even friends. Moreover, Iyer and Raghunandan (2002:487) argue that auditors may be reluctant to 'challenge the decisions of their former colleagues'. To test their suspicions, Iyer and Raghunandan (2002) conducted a perceptual study into the employment of ex-auditors in the client company. However, the focus of the study was different to Imhoff (1978) and Koh and Mahathevan (1993). Iyer and Raghunandan's (2002) study focuses on perceptions of company executives and managers on their ability to resolve differences with auditors who were previously colleagues. The purpose of the study was to examine clients' perceptions about their influence on auditors who were previously colleagues. The study employed a questionnaire sent out to 757 randomly selected alumni of accounting firms. The results showed that whilst 26% of alumni agreed that they could resolve disagreements more easily with their former colleagues, 36% disagreed. Rank and time since leaving the CPA firm were not significantly associated with ability to resolve disagreements. Iyer and Raghunandan (2002:496) conclude that auditors need to be 'sensitized' in order to maintain a professional detachment when dealing with former colleagues in resolving disputes. However, it is questionable just how useful it would be to 'sensitise' auditors because non-independence often affects subconscious judgements.

Iyer and Raghunandan's (2002) study assumes that resolving disagreements with ex-colleagues is negative, and that former personnel of the audit firm would be able to influence an auditor's objective state of mind. However, ability to resolve disputes with ex-colleagues from the audit firm may not always damage independence, there is only a need for concern when the resolution involves the auditor conceding to the wishes of the management. It is questioned whether perceived ability to resolve disputes with former colleagues is an accurate measure for determining levels of auditor independence in relation to ex-auditor employment. Iyer and Raghunandan (2002) suggest that the study could be improved by determining the nature of the disagreements between the auditor and the client company as the nature of the disagreement might have some bearing on how easily the dispute is resolved.

Continuing the theme of concern for former auditors working with their ex-colleagues, Clikeman (1998:42) expresses concern that remaining 'staff and senior auditors may place undue reliance on the representations of their former superior'. An earlier study conducted by Parlin and Bartlett (1994) may have fuelled Clikeman's (1998) concerns.

Parlin and Bartlett (1994) argue that with pressure on auditors to increase efficiency, the auditors are increasingly relying on their judgements of the honesty and reliability of the client's personnel as a substitute for gathering additional evidence for audits. Should the client personnel comprise a former audit firm colleague, auditors may reduce the amount of audit evidence which they collect at the client company. However, trust in former colleagues could be misplaced because with a change of job the ex-auditor will have changed loyalties and be subject to new incentives. Reliance on former colleagues' reputations could be increasing audit risk.

In order to test whether auditors are relying on judgements instead of conducting thorough audits, Parlin and Bartlett (1994) asked employees from the 'Big Six' accounting firms in California, to make a decision about the appropriate planning level of materiality for a (fictional) audit client. The case study given to the respondents described a manufacturing company operating in an industry experiencing a mild recession, resulting in the client experiencing a 5% decrease in sales and profit. Half the respondents were given information concerning the client controller having been the audit manager in charge of the client's prior year audit, but half the respondents (the control group) were given no such information. It is argued that the control group would be more likely to decrease preliminary estimates of materiality (PEM) or keep them the same. Should the group with information on the client controller's prior employment history increase PEM, the group may have been influenced by the information concerning the client controller. Levels of accounting experience were also tested.

T-test comparisons were made of the mean changes to PEM from the results received. It is argued that whilst the results were not significant, due to the small response rate (only 37 usable replies), the results do seem to show that on average, the respondents with information about the client controllers employment history did tend to increase

PEM's in the face of the risk of recession. However, the control group, on average, tended to decrease PEM, which implies a greater concern for the impending recession. The extent of auditing experience was also found to affect results. Moreover, experienced auditors without knowledge of the client controller's previous employment were more conservative in their PEM levels than were those auditors who possessed this knowledge.

Parlin and Bartlett, (1994:197) argue that often auditors find a 'comfort level' with their clients which can inappropriately influence the outcomes of the audit, such knowledge that a member of the client's personnel was a former audit colleague could increase the comfort level and increase audit risk. 'The results indicate that the propensity to increase PEM is attributable to the knowledge that the client's controller was an audit manager' (Parlin and Bartlett, 1994:197). Parlin and Bartlett (1994) conclude that ex-auditor employment reduces auditor independence.

However, the low response rate calls the external validity of Parlin and Bartlett's (1994) results into question.

#### *The Threat of the Ex-Auditor's Knowledge of Audit Firm Methodology*

Ex-auditors' knowledge of the audit firms' audit methodology may enable them to circumvent audit procedures. 'Such knowledge may enable the ex-auditor to design a misstatement that is unlikely to be detected by his or her former firm' (Beasley et al., 2000:37). Results of Firth's (1981) perceptual, questionnaire-based study imply that bankers were concerned about the ex-auditor having knowledge about the audit firm's practices. The study was based upon bankers' lending decisions in light of certain auditor-client relationships. To test perceptions of ex-auditor employment, the bankers were told that the financial director had previously been an audit partner. The mean loan offered by the bankers to a company where ex-auditor employment had taken place was significantly lower than those offered to an 'independent' company. Firth (1981) argues that bankers were concerned that auditors would not be able to remain unbiased in their judgements when dealing with a former colleague and that bankers would be worried about financial directors taking advantage of their knowledge of the auditing firms' techniques. Despite the lack of detail in relation to

ex-auditor employment, the study does give initial indications of third party perceptions of client employment of a former auditor.

However, earlier evidence from Firth in 1980 is contradictory to the 1981 findings. Firth (1980) conducted a questionnaire survey in order to determine 'the role and importance of auditor independence as perceived by various interested parties in the United Kingdom' (Firth, 1980:451). The questionnaire outlined 29 different auditor-client relationships and was sent to both users and preparers of financial statements. The results showed that in general, as with Imhoff's (1978) sample, the users of financial statements were much more sceptical of auditor independence in each relationship than were the preparers. As discussed earlier it should be questioned how honest an auditor would be when answering questions related to an auditor's ethics.

When the respondents were given the scenario, '*the recently appointed financial director of a company is responsible for producing its accounts. He was previously a partner in the accounting firm which does the audit*' (Firth, 1980:463), the majority of respondents indicated that the auditor could still maintain independence. Firth (1980) offers little explanation for the finding apart from to advise that more consideration be given to the possible benefits of ex-auditor employment. However, Firth (1980) does not outline the benefits of ex-auditor employment in any detail, only advising that ex-auditor employment could lead to audits being completed more quickly, reducing the audit fee and increasing company profitability.

#### *The Threat of Ex-Auditor Employment for Perceptions of Auditor Independence*

Even if objectivity is not impaired in reality by ex-auditor employment, public perceptions of auditor independence may be damaged, causing a loss of confidence in the client company's audit reports. Basioudis (2007:34) argues that 'such a "cosy" business relationship between auditors and their clients may be considered to cause impairment, or *appearance* of impairment, of the auditor's judgement or independence'. Enron, Global Crossing, Waste Management, Independent Insurance (UK) and HIH Insurance (Australia), all employed key corporate personnel who had been hired from the company's external auditor and have all recently been involved in

high profile scandals (Geiger, et al., 2005). These scandals will have done little to convince third parties of the viability of ex-auditor employment.

Beasley et al. (2000) argue that as a rule, ex-auditor employment can benefit both the ex-auditor and the company, with no decline in the quality of financial reporting. Beasley et al. (2000) attempt to evaluate the evidence over the effects of ex-auditor employment and argue that there is little empirical evidence that ex-auditor employment has harmed the financial reporting process. However, in a previous study conducted by Beasley et al. of fraudulent financial reporting between 1987 and 1997, it was found that in 11% of the cases the CFO had had previous experience with the company's audit firm immediately before joining the company. Beasley et al. (2000) argue that ex-auditor employment only damages auditor independence in the minority of cases, but concede that these cases may be enough to damage perceptions of auditor independence. Damaged independence perceptions could have an impact on perceptions of professional independence as outlined by Mautz and Sharaf (1961).

#### *Safeguards against the Threat of Ex-Auditor Employment*

A number of authors have suggested possible safeguards against the risk to auditor independence which ex-auditor employment causes.

Imhoff (1978) offers some solutions in order to curb the effect which ex-auditor employment has on the credibility of the auditing profession. These include systematic staff rotation among auditors in all CPA firms (now in place in the UK), requesting that auditors who are considering a position within the client company withdraw from engagement prior to accepting the position and mandatory CPA firm rotation (a highly contentious issue). However, Imhoff (1978) admits that none of these solutions would be without costs and drawbacks.

Lennox (2005) suggests that audit firms should regularly change their audit methodologies in order to prevent circumvention by former colleagues. This suggested safeguard against ex-auditor employment is tested in the current study. However, regular changes to audit firm methodology would be costly and disruptive for the audit firm. Lennox (2005) also suggests changing audit team members in order

to prevent judgements being biased by personal friendships. However, Lennox (2005) notes that often affiliations affect auditors' unconscious judgements and so there is no way to mitigate against the effect of affiliations. If Lennox (2005) is correct, Iyer and Raghunandan's (2002) proposal to sensitise remaining auditors appears redundant.

Beasley et al. (2000) offer some possible safeguards against the threat of ex-auditor employment. These include a mandatory 'cooling-off' period, having the last audit conducted by the departing auditor being reviewed by another individual in the firm to assess the objectivity and impartiality of the work performed and examining the relationships between the remaining auditors and their former colleague, perhaps replacing the engagement team with new personnel.

Many of the safeguards suggested in the previous literature were recognised in the APB's (2004) Ethical Standards and are tested in the current study.

### **3.11 Client Employment of a Former Auditor: Summary**

After evaluating the literature on ex-auditor employment in client companies, the majority of both perceptual and non-perceptual studies undertaken have found either that 'perceptions' of auditor independence are impaired due to ex-auditor employment or that 'actual' auditor independence has been damaged by ex-auditor employment. The studies seem to be in agreement that an increase in the length of time between leaving the audit firm and joining the client company can help to safeguard against damaged auditor independence. However, there is no consensus on the length of cooling-off period. Other safeguards against the threat of ex-auditor employment apart from a cooling-off period were also suggested in the various studies, many of which are now incorporated in the APB's Ethical Standards (2004) and will be tested by the current study. However, the results of Kaplan and Whitecotton's (2001) model provide some doubt as to how effective the ethical standards are. Few studies concluded that ex-auditor employment did not impair auditor independence.

The ICAEW acknowledges the threat of ex-auditor employment, noting that the practice may damage independence or at least the appearance of auditor independence. The APB (2004) state that ex-auditor employment could affect the

objectivity and independence of auditors, in the form of self-interest, familiarity and intimidation. The threats to auditor independence will depend upon the position that the individual had in the engagement team/firm, the position that the individual has taken at the audit client, the amount of involvement that the individual will have with the engagement team (including former colleagues) and the length of time since that individual was a member of the engagement team or was employed by the audit firm (APB, 2004:16).

### **3.12 Financial Involvement in the Client Company**

Firth (1980) also suggested that an auditor's financial involvement in the client company could cause the breakdown of an effective agency relationship. Firth (1980) identifies the potential for impaired auditor independence when the auditor owns shares in the client company or when trusteeships are involved.

In his 1980 study, Firth found that the majority of the respondents (who were chartered accountants, financial analysts and loan officers) perceived an auditor's ownership of shares in the client company as potentially independence-impairing. In contrast, in an examination of bankers' loan decisions, Firth (1981) found that respondents saw an auditor's ownership of shares in the client company as an expression of confidence in the company by the auditor.

However, the question of an auditor's financial involvement in the client company is not relevant to the current study, as Beattie et al. (1999:76) argue that subsequent changes in the UK regulatory framework have since prohibited auditor financial involvement and many of the other auditor-client relationships which Firth (1980) had examined.

It appears that the APB's Ethical Standards for Auditors (2004) prevent an auditor's financial involvement with a client company and mean that financial involvement is no longer a real threat to auditor independence. The APB (2004) state that the audit firm or audit partner should not have any financial interest in the client company and that audit firms should not make or accept a loan from the client company. The APB

(2004) also state that audit firms or partners should not enter into a business relationship with an audit client.

### **3.13 Chapter Summary**

The purpose of this chapter was briefly to introduce the previous literature in the area of auditor independence. In this chapter the concept of auditor independence is defined and there is a brief examination of why auditor independence is so important to a functional agency relationship.

The academic literature on the subject of auditor independence is vast and so the review of the literature was broken into four main areas, as outlined by Firth in 1980. The areas, which this chapter introduced, were economic dependence, non-audit service provision, long association and ex-auditor employment. The issue of an auditor's financial involvement within the client company was also briefly outlined although the issue is no longer current.

One of the major findings of this literature review is the lack of formal theory relating to auditor independence, with no models in existence (Beattie et al., 1999). Early studies divided auditor independence into 'real' and 'perceived', but with a concept so difficult to define, it appears that no theory has evolved. The majority of studies tend not to have a theoretical basis and are instead based upon previous studies.

This literature review has highlighted a number of un-resolved problems in the area of auditor independence and a number of areas where gaps in the literature occur. There is a great need for more research in this critical area of corporate governance.

Drawing upon the literature reviewed in this chapter, the following chapter outlines the research hypotheses.

## **Chapter Four: Development of the Research Hypotheses**

### **4.1 Introduction**

The previous chapters have highlighted that the current study is based upon the agency relationship between investors, auditors and managers. For the agency relationship to function effectively it is important that investors perceive the managers and auditors to be independent of one another and to be working in the investors' best interests.

Chapter three examined the concept of auditor independence in more detail based upon the previous literature. In this chapter four auditor-client relationships were identified which could result in the investor not perceiving auditor independence.

This chapter summarises the literature in the areas of economic dependence, non-audit service provision, long association and ex-auditor employment and develops the research hypotheses in each of the four areas. The background variables, which are not directly related to the current study but which could affect investor perceptions of auditor independence are also outlined.

### **4.2 Economic Dependence: Hypothesis Development**

After reviewing the literature on economic dependence (detailed in the previous chapter), two observations should be made. Firstly, limited literature appears to exist which examines the effect of audit fees upon auditor independence with most studies tending to assume that it is only when non-audit fees are introduced that an auditor's objectivity may be impaired. Secondly, it has become apparent that there is an obvious divide in opinion over whether economic dependence actually impairs auditor independence. Studies such as Firth (1980, 1981), Gul (1991) and Beattie et al. (1999), which examine users' and preparers' perceptions of auditor independence seem to agree that when a company pays large audit fees to the auditor it will damage perceptions of auditor independence. However, studies which focus on real auditor independence, such as Craswell et al. (2002), who examined the propensity to issue

unqualified audit opinions in relation to fee dependence, argue that there is no evidence that audit fees are damaging auditor independence.

The obvious divide in opinion over whether economic dependence impairs auditor independence leads to the formation of the first hypothesis of the study. Due to the lack of consensus in the literature for *all* of the topics examined in the current study each of the hypotheses will be stated in their null form (as Mitra, 2007 suggests). Hypothesis 1 is stated below:

**H1: A situation where an individual audit partner is dependent upon one client for 10% of the income he or she generates will have no influence on investors' perceptions of auditor independence.**

#### **4.3 Non-Audit Service Provision: Hypothesis Development**

The review of the non-audit service literature in the previous chapter highlights joint provision as a controversial practice. It is clear from the divided literature in the area of non-audit service provision that commentators cannot agree as to whether joint provision poses a threat to auditor independence. Reynolds et al, (2004:32) argue that there is a need for more research in this area as 'paradoxically, fees paid to the auditor constitute an incentive both for and against objectivity'.

Mautz and Sharaf (1961) were among the first to argue that auditors should stick only to auditing activities. Since then, other authors have argued that the provision of non-audit services could damage auditor independence. Firth (1980, 1981), Shockley (1981), Beattie et al (1999) and Canning and Gwilliam (1999) are just a few examples of studies which concluded that the joint provision of audit and non-audit services damages perceptions of auditor independence. Furthermore, Firth (1997) argues that when a client purchases large amounts of non-audit services from the auditor, it signals that the two companies have an economic bond. Studies such as the one conducted by Church and Schneider (1993) also cause concern in relation to the self review threat, as it is questioned how independent auditors can be in auditing their own work. Titard's (1971) study highlights independence concerns in relation to auditors engaging in management decision making.

However, Chapter Three also demonstrates the wealth of literature which argues that non-audit service provision does not impair auditor independence. Studies such as Barkess and Simnett (1994), Craswell (1999) and DeFond et al. (2002) claim not to find a link between audit qualifications/going-concern decisions and levels of non-audit service fees. Furthermore, Goldman and Barlev (1974) and Jenkins and Krawczyk (2001) have both argued that the provision of non-audit services actually puts auditors in a stronger position against client companies and increases auditor independence. Other authors such as Antle (1999) argue that non-audit services do not damage auditor independence because auditors wish to protect their reputation in order to sell on further lucrative services to clients.

It is clear that more research needs to be conducted to resolve the debate over the provision of non-audit services. This debate leads to the development of the second hypothesis of the current study, stated below in its null form:

**H2: The provision of non-audit services will have no effect on investors' perceptions of auditor independence.**

#### **4.4 Long Association: Hypothesis Development**

From reviewing the literature in Chapter Three it can be seen that there is much debate over whether long association impairs auditor independence and whether mandatory audit firm rotation should be introduced better to protect auditor independence.

Ballweiser (1987) argues that a long relationship between auditor and client could result in a familiarity threat as auditor independence is slowly eroded over time. Coupley and Doucet (1993) found that the likelihood of receiving a substandard audit increased with the length of audit tenure and Carey and Simnett (2006) echoed this finding. Furthermore, it has been argued that long association damages *perceptions* of auditor independence. Knapp (1991) found that a long relationship between auditor and client company damaged audit committee members' perceptions of auditor independence.

However, other authors have argued that auditing is a learning curve and that auditors will produce better audits as they gain more experience of the client. George (2004) argues that auditor failings are more likely to occur in the early years of the auditor-client relationship, this was also found to be the case by St Pierre and Andersen (1984). Furthermore, Carcello and Nargy (2004) found that fraudulent financial reporting was more likely to occur in the early years of the auditor-client relationship, with Geiger and Raghunandan (2002) arguing that auditors are more susceptible to client influence at the beginning of the relationship. Finally, Myers et al. (2003) reported no evidence that auditor independence deteriorates with long tenure.

It appears that more research is needed in the area of long association to determine whether the introduction of mandatory audit firm rotation is necessary. The third hypothesis of the study is stated below in its null form:

**H3: Client employment of the same auditor for over five years has no influence on investors' perceptions of auditor independence.**

#### **4.5 Ex-Auditor Employment: Hypothesis Development**

Chapter Three highlights that ex-auditor employment poses a number of risks for auditor independence before the auditor leaves the audit firm (Clikeman, 1998), after the auditor joins the client company (Imhoff, 1978 and Koh and Mathevan, 1993), when the auditor works with former colleagues (Mahoney et al., 1994), due to the auditor's knowledge of audit methodologies (Firth, 1981) and for the perceptions of auditor independence (Beasley et al., 2000).

Ex-auditor employment is probably the most overlooked area in the auditor independence literature, despite the weight of evidence suggesting that ex-auditor employment impairs auditor independence (or the perception of auditor independence). The gap in the literature surrounding ex-auditor employment shows that the area is ripe for future research. It is the intention of the current study to fill this gap in the literature. The fourth hypothesis of the current study relates to ex-auditor employment and is stated below in its null form:

**H4: Employment of a former auditor in a senior management role has no influence on investors' perceptions of auditor independence.**

*The Background Variables:*

The following hypotheses relate to factors which are not directly relevant to the current study but which could effect perceptions of auditor independence.

#### **4.6 Size of Investment Portfolio: Hypothesis Development**

Whilst there is no strong theoretical reason to suggest that the size of the investment portfolio will have an effect on the responses given, Pany and Reckers (1983) have suggested that larger institutional investors may be more concerned about auditor independence issues than smaller institutional investors and private shareholders. This is because the decisions, which the larger institutional investors make, are in the public eye and will receive greater attention, it might do harm to an institutional investors' reputation to invest in a company which collapses. Size of investment portfolio will be examined in the current study to determine whether it affects auditor independence perceptions:

**H5: There is no difference between investors with different sized investment portfolios in their perceptions of the four potentially independence-impairing auditor-client relationships.**

The size of the institutional investment company will also be examined by the current research to determine whether size has an affect on institutional investors' perceptions of the four relationships:

**H6: There is no difference between institutional investors from small, medium and large sized companies in their perceptions of the four potentially independence-impairing auditor-client relationships.**

#### **4.7 Respondents' Level of Accounting Education: Hypothesis Development**

Accounting education was first tested by Reckers and Stagliano (1981) who suggested that those expressing the greatest apprehension about auditor independence would be those who did not understand the audit function. Reckers and Stagliano (1981) argued that greater accounting education could help to reduce concerns about auditor independence. However, since then, Pany and Reckers (1983,1984) and Bartlett (1993) have rejected the assumption that accounting education affects perceptions of auditor independence. Respondents' level of accounting education will be re-tested in the current study:

**H7: There is no difference between investors with and investors without accounting qualifications in their perceptions of the four potentially independence-impairing auditor-client relationships.**

#### **4.8 Respondents' Employment History: Hypothesis Development**

Examining the respondent's employment history helps to test whether the respondent was ever an accountant who moved over to employment with the client company. Whilst it has never been formally stated, common sense suggests that those who have taken part in such a personnel transfer may be more in favour of the practice of ex-auditor employment and less concerned about the implications that it has for auditor independence. Whilst employment history may affect responses to the section on ex-auditor employment, the related hypothesis is stated in its null form:

**H8: There is no difference between those who have undertaken ex-auditor employment with the client company and those who have not, in their perceptions of the four potentially independence-impairing auditor-client relationships.**

#### **4.9 Biographical Data: Hypothesis Development**

As with most other perceptual studies the respondents will be asked for their gender, age and (for institutional investors) their length of employment in the current

company. Biographical data may identify factors which cause people to become more concerned about auditor independence issues. For example, a number of authors (Hudgens and Fatkin, 1984, Zinkhan and Karande, 1991, Powell and Ansic, 1997, and Levin et al., 2001) have suggested that in business and financial situations, women are more risk-averse than men are. The implications for the current study could be that women will be more concerned about independence-impairing risks than men will. However, other authors such as Masters (1989) suggest that there is no difference between men and women in decision-making and risk taking. As there appears to be no consensus in the literature on gender, this is an interesting factor to explore:

**H9: There is no difference between men and women in their perceptions of the four potentially independence-impairing auditor-client relationships.**

Other authors have also identified age of respondent as a significant factor. Estes and Hosseini (1988) hypothesised that as life experience grows with age, individuals become more confident with age. Older respondents may be less worried about the risky situations outlined in the questionnaire than the younger ones. However, in the end, their study did not find age to be a significant variable. Lauriola and Levin (2001) found the opposite, that young adults were less risk adverse than older adults. If this is the case then the younger respondents will be less worried about the auditor independence risks than will the older ones. The current study will examine whether the age of the respondent has an impact on auditor independence perceptions:

**H10: There is no difference between respondents of different ages in their perceptions of the four potentially independence-impairing auditor-client relationships.**

#### **4.10 Institutional/Private Investors: Hypothesis Development**

The current study will focus on investors' perceptions of the four auditor-client relationships. Investors are one of the main user groups of audited financial statements and so their faith in auditor independence is vital. Bakar et al. (2005) reiterate the importance of perceived auditor independence by stating that the credibility of financial statements rests upon the perception that the auditor is

independent. Should independence not be credible, company financial statements are of no real value.

Markelovich et al. (2005:6) highlight how 'the issues surrounding auditor independence and investor confidence in the financial statements of companies have been widely debated'. However, there is no consensus in the academic literature on auditor independence to indicate how investors perceive auditor-client relationships. Furthermore, Solomon (2002) suggests that scandals like Enron have caused shareholders to become interested in the issue of non-audit services and other auditor independence issues after it was revealed that in 2000 Enron paid Arthur Andersen (their auditor) \$25 million for its audit and \$27 million for non-auditing work. This new interest now means that shareholders are starting to demand 'conflict of interest policies' (Solomon, 2002:1), which should increase public confidence in the auditing profession. The current study will determine investors' perceptions of auditor-client relationships in the wake of the recent high-profile accounting scandals and the resultant interest in auditor independence issues. Unlike previous studies which have examined 'general' investor perceptions of auditor independence (for example, Pany and Reckers, 1984), the current study will provide an original comparison of the views of institutional and private investors, which has so far been over-looked by previous researchers.

It is expected that differences will be detected in the auditor independence perceptions of the two groups of investors due to the different demographics and different motivations for investing that institutional and private investors have. Titard (1971) implies that institutional investors may be more concerned about the issues relating to auditor independence than private shareholders because an individual who decides to buy a share in a company is the only one affected by that decision. However, institutional investors buy shares for thousands of investors and so their decisions will be of greater significance. Furthermore, whilst the institutional investors are likely to have a good understanding of auditor independence issues, the private investors may not be so well informed. However, it could also be argued that private investors may be more concerned about auditor independence issues than institutional investors as private investors stand to lose their own money (and income) through making a poor investment decision. The current study will investigate these differences.

For the purpose of the current research the related hypothesis is stated in its null form:

**H11: There is no difference between institutional and private investors in their perceptions of the four potentially independence-impairing auditor-client relationships.**

#### **4.11 Level of Accounting Information Consulted Before Investing: Hypothesis Development**

The investors will be asked which sources of accounting information they read before making investment decisions. It could be argued that the less concerned the respondents are with reading sources of accounting information thoroughly before investing, (preferring to rely on share prices as an indication of company performance), the less likely these respondents are to be concerned with corporate governance issues within the companies in which they invest.

It has been suggested that private shareholders tend to be more 'passive' (Bartlett and Chandler, 1997:247) than institutional shareholders. These shareholders have a 'lack of interest in much of the detailed disclosure' (Bartlett and Chandler, 1997:254). If this is the case, then private shareholders are unlikely to concentrate on accounting information when making investment decisions. However, institutional investors would be expected to read more widely as they have more resources to do so and more at stake when making investment decisions.

Lee and Tweedie (1976) imply that investors without an accounting background do not read and understand accounting information as carefully as those with an accounting background. Lee and Tweedie (1975) suggest that women read sources of accounting information less thoroughly than men. Bartlett and Chandler (1997) found that male respondents tend to read each section of the annual report more thoroughly than their female counterparts do.

Bartlett and Chandler (1997:255) suggest that size of investment portfolio appeared not to impact on the degree to which financial statements are read. However, one would expect increased readership to be associated with increased portfolio size and

the degree of shareholding in a particular company to be associated with the degree of readership in that particular company's annual report. Only a weak link was found to support this assumption.

The current study will examine whether the characteristics discussed above affect the levels/detail of accounting information consulted before investing.

**H12: The respondents' demographics will have no effect on the level of accounting information consulted before investing.**

#### **4.12 Chapter Summary**

In this chapter the main findings of the literature have been summarised and used to develop the research hypotheses. There are twelve research hypotheses, four of these relate to the main auditor-client relationships examined by the current study and the remaining eight focus on background variables which could effect perceptions of auditor independence. The research hypotheses have been stated in their null form.

The following chapter outlines the research methodology employed in the current research.

## **Chapter Five: Methodology**

### **5.1 Introduction**

The current thesis is based upon the fundamental agency relationship which exists between investors, management and auditors. The concept of agency theory was introduced in Chapter Two where it is acknowledged that management may not always work in the best interests of investors and so auditors are required to give credibility to management's statements. Should a close relationship form between the management and the auditor, the auditor may no longer behave in an independent manner. If the auditors are not seen to be in an independent position, their work will lose value. Chapter Three, the critical literature examination, used the basis of Firth's (1980, 1981) work, to examine certain auditor-client relationships which could cause the auditor to lose independence and introduced the concept of real and perceived auditor independence. Whilst an auditor may be behaving in an independent manner, a close relationship between the auditor and client could damage perceptions of auditor independence which is damaging for the auditor's reputation and the credibility of their work. Through the literature examination four auditor-client relationships were found to be worthy of further research: economic dependence, non-audit service provision, long association and ex-auditor employment in the client company. Chapter Four outlined the research hypotheses.

The focus of this chapter is on the methodology employed in this study further to investigate the four auditor-client relationships. The choice of a postal questionnaire is justified and the sample (of institutional and private investors) outlined. The pilot study, which influenced the current study, the outline of the questionnaire and the ethical questions arising, are all addressed in this chapter. Finally, the data analysis stage is discussed.

### **5.2 Differing Research Approaches**

The following section considers the different approaches which could have been employed in order further to investigate the auditor-client relationships. In considering which research methodologies to employ, it is important to acknowledge

the differing perspectives or ‘paradigms’ which guide research and result in alternative methods of data collection and analysis.

For this study, there were two approaches which could have been used to collect the data. These were the deductive and the inductive approach.

### *Deductive Approach*

The deductive approach to research assumes that theory is implicit in the existing literature and that hypotheses can be deduced from that theory. Once the hypotheses are constructed, data are collected in order to confirm or reject these hypotheses, which in turn lead to a revision of the theory. The deductive approach to the research process is guided by a positivist ‘set of beliefs’ (Guba, 1990:17). Positivist researchers are guided by the belief that a social reality exists external to individuals and that this reality can be observed and measured (Bryman, 2004). Positivists insist on objectivity in research and argue that the researcher must be truly detached from the observed. To be detached researchers must not interfere in the research process in any way and not impose their feelings or social perspectives upon the observed. The positivist approach involves conducting value-free, bias-free research. Positivist researchers focus upon *explaining* human behaviour.

Quantitative research methods are most appropriate for maintaining positivist principles. Positivists view surveys as a way to collect facts and to create knowledge, which will form the basis for the generation of theories. Self-completion questionnaires uphold positivist assumptions, as detachment is inherent in the research method. Self-completion questionnaires do not invite close personal contact between the researcher and the observed and so there is no opportunity for the researcher to ‘contaminate’ the data (Thomas, 2003:2). Furthermore, a self-completion questionnaire containing mainly closed questions gives the researcher little opportunity for individual interpretation of the results. Self-completion questionnaires have been widely used in the previous auditor independence studies e.g. Firth (1980, 1981), Shockley (1981), Lindsay et al. (1987), Gul (1991), Bartlett (1993), Beattie et al. (1999) and Iyer and Raghunandan (2002). The majority of these studies have targeted auditors, bankers, financial journalists and investors.

However, it has been argued that it is unrealistic to assume that a research method can ever be truly positivist and completely value-free. For example, in the case of the questionnaire, some subjectivity will have been inherent in the original choice and phrasing of the questions. Guba (1990:18) concedes that ‘all such systems or paradigms are human constructions and hence subject to all the errors and foibles that inevitably accompany human endeavours’.

Post-positivists acknowledge the difficulty involved with eliminating bias from research. Guba (1990:20) argues that post-positivism is a less naïve approach to research than a positivistic approach. Post-positivists agree that although a reality does exist which is external to individuals, it is impossible for humans to perceive it and to be completely objective. Post-positivism is a modified form of the positivist paradigm, which recognises that it is impossible for researchers to disregard their own beliefs whilst conducting research and not to interfere or alter the observed in any way. Post-positivists advocate the use of qualitative methods in research, but argue that the results of such inquiries should be verified in some way. Often the results from the qualitative methods will be triangulated with additional quantitative methods. Canning and Gwilliam (1999) is an example of a multi-method study, where questionnaires and interviews were used to validate the findings of one another.

### *Inductive Approach*

The second research approach, which could have been employed in the current study, was an inductive one. The inductive approach is less scientific than the deductive approach and involves building up a theory as the research develops rather than through the existing literature. Saunders et al. (2000:89) argue that those following an inductive approach often criticise the deductive approach for being too rigid and for not allowing alternate explanations to be constructed. Constructivists advocate the inductive approach to research. The constructivist paradigm is concerned with understanding human behaviour (how people make sense of the world around them). In contrast to positivists, constructivists argue that no one reality exists, but that reality is based on how each individual interprets the world in terms of that individual’s culture, background and social experiences. Similar elements of reality will be shared among individuals and across cultures but there will always be

multiple, subjective and conflicting social realities. In contrast to positivist researchers, rather than *explaining* why things happen, constructivist researchers focus on *understanding* why things happen.

Constructivists advocate the use of in-depth qualitative research methods which allow the researcher to interact with the participant in order to understand the participant's culture, behaviour, meanings and understandings. Constructivists believe that research findings will be continuously created as the study proceeds, with these findings often being revised as the researcher becomes better informed. Ethnography and in-depth interviews are appropriate research methods for use by constructivist researchers as these methods allow the researcher to have close contact with the participants.

Although the positivist and constructivist paradigms, which guide research, are in stark contrast to one another, Bryman (2004:454) from the 'technical' school of thought warns not to be too caught up in the divide between particular paradigms, as it is becoming more common for research strategies to be 'fused'.

### **5.3 Research Approach of the Current Study**

A number of different research strategies could have been employed in the current study to investigate investor perceptions of auditor independence. Under the constructivist approach, investor perceptions of auditor independence could have been explored through ethnography or in-depth interviews. Under ethnography, investors could have been observed making their investment decisions. However, this research method would not have restricted the research to one or two case studies. Trends and relationships would not have been uncovered.

The most appropriate research methods for use in the current study were interviews or a postal questionnaire. By using interviews it would have been possible to probe participants and to deal with topics in greater depth. However, due to cost and time constraints fewer participants could have been sampled than could be sampled using a postal questionnaire (interviews take longer to conduct as they can only be conducted one at a time and costs of travelling to each respondent are far higher than mailing a

questionnaire). Furthermore, problems surrounding access to busy chief executives to conduct the interviews would have further restricted the sample.

In light of the reasons discussed, a survey, in the form of a self-completion questionnaire, was the most appropriate research method to conduct the current study. A survey approach was considered to be the most appropriate research method to address the research hypotheses as a large sample of investors could be contacted. With more participants, there is a greater chance that trends and relationships in perceptions might be identified. Positivists also argue that there are fewer opportunities for bias when using a postal questionnaire rather than interviews because the questionnaire is presented in exactly the same way to each respondent and respondents are not affected by their attitudes towards the interviewer. However, it is acknowledged that in using a postal questionnaire there will be no opportunity to probe respondents and receive in-depth information.

A survey 'allows the collection of a large amount of data from a sizeable population in a highly economic way' and is one of the most widely used strategies in business and management research (Saunders et al., 2000:92). Robson (1993:124) outlines the main features of a survey:

- The collection of a small amount of data in a standardised form from a relatively large number of individuals; and
- The selection of samples of individuals from known populations.

The survey provides a 'structured' and 'systematic' (De Vaus, 1986:3) method of collecting data, 'with the purpose of analysing the relationship between certain variables' (Oppenheim, 1966:1). Roberts (1999) argues that a survey method can provide more realism in the results it produces than could be produced from a 'set up' experiment. Robson (1993:125) argues that a survey is the 'central real world strategy', which provides a 'simple and straightforward approach to the study of attitudes, values, beliefs and motives' (Robson, 1993:128). Furthermore, guided by positivist beliefs, a self-completion survey would mean that the researcher would have no contact with the participants and would not be able to influence the participants in

anyway. With the emphasis on close-ended questions, there is little room for individual interpretation of the results.

However, elements of the current research appear to be in contrast with positivist assumptions. For example, as the objective of the study is to examine investor perceptions, a Likert scale will be employed in the questionnaire to enable investors to express their attitudes. Whilst the results will be analysed in a quantitative manner, the focus of the questionnaire upon *understanding* investor perceptions appears to fuse elements of constructivism into the current research. Whilst the research approach is quantitative and deductive in nature, some elements of constructivist thinking have been 'fused' (Bryman, 2004:454) with positivism.

#### **5.4 Outline of the Current Research**

The basis of the current study is deductive and scientific in nature. The critical literature examination highlighted four main areas of auditor independence which would benefit from further research and a number of research hypotheses have been deduced from this literature. Reviewing the existing literature has also helped to form research questions which guide the current research. With the research questions in mind, a self-completion questionnaire was constructed to test the research hypotheses. These data collected from the questionnaires are analysed in a quantitative fashion and the results will inform the existing literature on auditor independence.

#### **5.5 The Pilot Survey**

Saunders et al. (2000) express the importance of conducting a pilot study in order to increase response rates. For the current study, the pilot survey formed the basis of earlier research for a Masters dissertation, which focused exclusively on the provision of non-audit services. The postal questionnaire was sent to a sample of institutional investors and a final response rate of 18% was recorded. The objective of the questionnaire was to determine perceptions of non-audit services, but also to test the format and design of the questionnaire, the Likert scale and the follow-up strategy.

A review of the pilot study, once completed, highlighted a number of flaws in the research approach. The lessons learned guided the current research.

Firstly, the timing for sending out the questionnaires was revised. For the pilot survey, the only option was to send the questionnaires during the summer vacation. However, as Kervin (1992) points out, the summer is the most likely time for people to be away from work, reducing the chance that they will respond. In light of the low pilot response rate, for the current survey, the summer was avoided. The institutional investor survey was sent out in May 2005 and the private investor survey was sent out in September 2005.

Secondly, the pilot survey revealed the importance of a good follow-up strategy. After mailing a first reminder and another copy of the questionnaire, the response rate was doubled. A second reminder might have yielded further responses. However, due to the time constraints involved in the pilot study sending out further reminders would have been impossible. In light of the success which the follow-up letter had for the pilot study, a comprehensive follow-up strategy was also employed in the current study.

Thirdly, the pilot questionnaire assisted the design of the current questionnaire. The majority of the questions on personal information and non-audit services were left unchanged for the current questionnaire as few problems were revealed. However, the pilot questionnaire highlighted some style problems. For example, for each question, the respondents were given a three-point scale on which to indicate their perceptions, but many respondents had written comments in the margin or ticked in-between the boxes. The three-point scale did not give respondents enough scope to indicate their perceptions. For the current questionnaire, the scale was increased to a five-point scale, to provide a wider scope for expressing perceptions. Furthermore, the pilot study highlighted participants' unwillingness to complete open-ended questions (as most were left blank), so only one open-ended question has been included in the current survey. In the pilot questionnaire, there were a number of open-ended questions included, but as most were not completed, the study findings were constricted. In contrast, the closed-ended questions were always completed, thus indicating that respondents prefer this style of questioning and find it easier to

complete. The current questionnaires heavily emphasise closed-ended questions in an attempt to increase response rates.

Furthermore, the pilot study made a very important contribution to the choice of subject matter to be included in the current questionnaires. As previously stated, the pilot questionnaire focused exclusively on auditors' provision of non-audit services. However, interested respondents were annotating their questionnaires with other factors which they perceived to be independence-impairing. It appeared that the respondents perceived the subject tackled in the questionnaire to be too narrow. For this reason, the auditor independence literature was revisited and further potentially independence-impairing auditor-client relationships were determined which were worthy of further research, these relationships were incorporated into the current questionnaires.

Finally, the covering letter for the questionnaire was revised following the pilot study. After the original mailing of the pilot questionnaire many phone calls, emails and letters were received from the respondents wanting to know more about the researcher, the research and about why that particular person was chosen. It was decided that future covering letters should provide more information for the participants to ensure that the respondents are satisfied that the research is genuine and understand the reasons for the sample selection.

The above discussion indicates the important contribution that the pilot study had on the design and format of the current questionnaire. The pilot study proved to be useful in gaining an insight into how best to construct future questionnaires, the subject matter to include and the need for a comprehensive follow-up strategy. Had a pilot study not been completed, the overall response rate of the current questionnaires may have been lower due to the number of open-ended questions, the small Likert scale and due to the lack of information in the covering letter.

Once the current questionnaires were constructed (having been informed by the pilot questionnaire) the current questionnaires were further revised in light of advice and suggestions from colleagues at Cardiff University. Revising the current questionnaires

a number of times ensured that the final questionnaires had the best chance of receiving good response rates.

Further discussion of how the pilot study informed the design of the current questionnaires is outlined in section 5.10 'The Questionnaire Design'.

## **5.6 Data Collection**

Data for the current study were collected in two stages. The first stage involved sending a questionnaire to a large group of institutional investors and the second stage involved sending a shortened version of the same questionnaire to a large group of private shareholders. The purpose of the data collection was to address the following research questions, which emerged from a review of the literature. The following research questions guided the construction of the questionnaire:

1. Do investors perceive economic dependence as a threat to auditor independence?
2. What are investor perceptions of the current 10% limit on auditor income?
3. Do investors perceive non-audit service provision as a threat to auditor independence?
4. Do investors perceive co-contracting as a threat to auditor independence?
5. At what point of audit fees to non-audit fees do investors become concerned about auditor independence?
6. Which particular non-audit service causes the greatest concern?
7. How do investors perceive the suggested safeguards against non-audit service provision?
8. Do investors perceive long association as a threat to auditor independence?
9. After how long do investors become concerned about the length of an auditor-client relationship?
10. What are investor perceptions of audit partner rotation?
11. What are investor perceptions of audit firm rotation?
12. Do investors perceive ex-auditor employment as a threat to auditor independence?

13. Had ex-auditor employment taken place, would investors be concerned about the independence of past/future audits?
14. What are investor perceptions of the current cooling-off period for auditors?
15. How do institutional investors perceive the suggested safeguards against ex-auditor employment?
16. Is there a relationship between the background variables and perceptions of the potentially independence-impairing auditor-client relationships?

## **5.7 The Sample**

As the current research is based upon the agency relationship, the principals of organisations were selected to be the sample for investigation. Under agency theory, the principals of organisations (investors) put their trust in the monitors (auditors) to give an independent opinion of the accuracy of managements' statements. In light of this relationship, it is important that the principals of the organisation have faith in the objectivity of the auditors. This research focuses on how investors perceive these four auditor-client relationships and whether the investors consider the four relationships to be independence-impairing.

Beattie and Fearnley (2002:xi) argue that the benchmark for measuring perceptions of independence is 'what a well-informed investor or a third party would believe'. For the purpose of the current study, the 'well-informed' investors were taken to be the institutional investors. The responses, which these investors give, will be contrasted with those of private investors who are likely to be less familiar with auditor independence issues and who may perceive auditor independence issues differently.

### *Institutional Investor Survey: The Sample*

Since no complete list of institutional investors is known to exist, a random sample of the entire population was not feasible for the current study. Instead, 719 names and addresses of UK institutional investors were selected at random from various lists of insurers, banks, building societies, fund managers, pension funds and investment trusts and their chief executives were mailed a copy of the questionnaire. The lists used to acquire names and addresses, included that of the Association of British

Insurers (ABI), which represents 400 companies who transact 95% of the business of UK insurance companies and whose members account for 20% of the investments on the London Stock Market. In addition, the Investment Management Association (IMA) was chosen, as it is a trade body for the UK investment management industry, whose members manage over £2,000 billion worth of assets in the form of pension funds, investment funds and stocks and shares. Other lists included those of the Association of Investment Trust Companies, the British Bankers Association, the Building Societies Association and the Council of Mortgage Lenders. Furthermore, various A-Z lists of fund managers and investment trusts were provided by the Financial Times, Find.co.uk, Finance Link and Financial Express on the World Wide Web. The sample drawn represents a wide range of institutional investors.

#### *Private Investor Survey: The Sample*

In order to provide a point of comparison with institutional investors' perceptions, the second survey targeted private investors. The register of members for two companies was obtained from Companies House for Amstrad PLC and Jarvis PLC. The sampling technique used was 'stratified random sampling' (Saunders et al., 2000:165). Stratified random sampling means that the sampling frame of private investors was broken down in to two subsets (Amstrad and Jarvis) and then a random sample of 460 names was taken from each stratum and sent a copy of the questionnaire (companies and institutional investors were excluded from the sample).

It is important to note that both Amstrad PLC and Jarvis PLC have recently been unstable. In 2001, Amstrad's profits fell from £13million to £1million and sales halved. It should also be noted that Sir Alan Sugar, who was the chairman and CEO of Amstrad at the time of study, was the main shareholder in Amstrad (and also a very dominant personality at Amstrad). This presents a situation where a principal of a company, also acts as an agent. Therefore, Amstrad's corporate governance structure is not typical of other companies of the same size and this 'uniqueness' might have appealed to a certain type of private investor.

In 2005 Jarvis's auditors were uncertain as to whether the company could remain in business. Jarvis's problems stem from a train derailment in 2002, which killed seven

people on track which the company maintained, leaving Jarvis in serious financial trouble. The Daily Telegraph reported that in June 2005, Jarvis's shareholders were being offered just 25p for every £1 of their entitlement, 'they have been warned that rejecting the proposals could leave them with nothing' (Aldrick, 2005:1). Because of the two companies' history, those who invest in Amstrad and Jarvis may be more likely to have an awareness of corporate governance, which could increase response rates.

## **5.8 The Postal Questionnaire**

The survey strategy was operationalised using a postal questionnaire, 'questionnaires are the most widely used data collection technique in surveys' (Roberts, 1999:57). A postal questionnaire is an 'impersonal survey method' (Nachmias and Nachmias, 1996:225), which is important for upholding positivist beliefs. A postal questionnaire requires each participant to respond to an identical set of questions in a predetermined sequence (Saunders et al., 2000). In comparison to an interviewer-administered questionnaire, a postal questionnaire must be self-completed, whereby the respondents must read and answer the questions themselves (Bryman and Bell, 2003:141). A postal questionnaire technique has a number of benefits over other data collection techniques. 'Businessmen and academic researchers favour mail surveys for reasons of expediency, since data can be procured more quickly, more abundantly, and more cheaply than when a personal interview is employed' (Kanuk and Berenson, 1975:440). The choice of a postal questionnaire will be discussed in the following section.

### *Strengths of a Postal Questionnaire*

Firstly, a postal questionnaire offers considerable cost savings in comparison to an interviewer-administered questionnaire, 'a mailed study costs far less than an interview study with the same sample size' (Bailey, 1982:156). As Nachmias and Nachmias (1996:225) point out, the only costs incurred from a postal questionnaire are those of the 'planning, sampling, duplicating, mailing and providing stamped, self-addressed envelopes'. Essentially, a population such as the one sampled in the current study, which was geographically dispersed, could be reached for the price of a

first class stamp, which is in stark contrast to the travel expenses associated with sending interviewers to administer the questionnaires and paying for their time (Moser and Kalton, 1971). Bailey (1982) also argues that cost savings can be made even when a number of follow-up letters (including the original questionnaire) are sent out. Dillman et al., (1974:754) state that, 'low cost is one of the major appeals of the mail survey procedure'. Nachmias and Nachmias (1996) also believe that processing and analysing the data from a postal questionnaire is simpler and cheaper than other survey methods.

From a positivist perspective, a second benefit of using a mail questionnaire technique is the reduction in bias compared to using an interviewer-administered questionnaire (Nachmias and Nachmias, 1996). An interview situation is full of opportunities for bias; the interviewer may unconsciously reveal opinions or the respondent may react differently to different interviewers based upon the interviewer's race or gender. In addition, 'though the interviewing procedure is standardised, there will always remain differences in the way in which questions are put to each respondent and these may or may not have an important influence on the results' (Oppenheim, 1966:31). This potential for bias in an interviewer-administered questionnaire could affect the way in which the participant responds to the questions being asked. Bryman and Bell (2003) argue that the very nature of a postal questionnaire ensures that it is not subject to interviewer variability and bias. More generally, a benefit of questionnaires is that each respondent must answer the same questions and in most cases (where close-ended questions are used), will have to consider the same set of alternative responses (Oppenheim, 1966). The standardisation of questionnaires ensures that the results will require little subjective, individual interpretation, in line with positivist philosophy.

Furthermore, the postal questionnaire technique offers considerable time savings in comparison to an interview technique (Bryman and Bell, 2003). The questionnaires were sent out in a large batch simultaneously with the bulk of the replies being returned within a few weeks, including the follow-up responses. However, 'interviews are generally performed sequentially and may take months to complete' (Bailey, 1982:156).

Finally, a mailed questionnaire gives respondents an increased opportunity to be accurate in their responses, as they have time to reflect on each question. However, with an interviewer-administered questionnaire, respondents are forced to give their first answer. In addition, with no interviewer present, respondents are not forced to complete the whole questionnaire in one go (Bailey, 1982).

However, the postal questionnaire method is also subject to a large amount of criticism. Dillman et al. (1974:744) describe the use of a postal questionnaire as a 'paradox', because 'the method itself is widely condemned. Yet, use continues at a very high level'.

The following section will outline some of the weaknesses associated with postal questionnaires and how these potential weaknesses have been addressed by the current study.

#### *Weaknesses of the Postal Questionnaire*

It is argued that 'one of the major disadvantages of the mail questionnaire is the difficulty of ensuring a high percentage of returns' (Donald, 1960:99). Bryman and Bell (2003:144) have argued that postal questionnaires 'typically result in lower response rates than comparable interviewer based studies'. Wallace and Mellor (1988) argue that those involved in accounting are becoming less willing to respond to the increased volume of time-consuming postal questionnaires which they receive.

There is little consensus among the relevant literature over what constitutes an acceptable response rate, with most authors concentrating on methods to increase response rates rather than offering a guide of acceptable return levels. Reluctance to advise on what is an acceptable response rate could be due to the huge variation in response rates between surveys. Miller (1983:102) compiled the return rates from a number of different surveys and found that response rates ranged from between 3% and 71%. In another summary of response rates, Miller (1983) attempts to gauge a mean return level by averaging out the responses to 183 mail questionnaires. Miller (1983) concludes that the mean response rate was 48%, but notes that there is a wide deviation in the responses to these surveys (almost 20%).

Some authors have indicated what they perceive to be acceptable response rates. Mangione (1995) (quoted in Bryman and Bell, 2003:144) argues that any response rate below 50% is 'unacceptable' (but gives no indication of what this rule is based upon), whilst Wikipedia encyclopaedia (on-line) states that for a postal questionnaire one can expect a response rate of between 5% and 30%. Jarrett (2005) notes that response rates have consistently declined since the 1950s, when a good questionnaire could expect a response rate of 90%. Miller, (1983:97) argues that postal questionnaires have become a victim of their own success, 'the popularity of the method is often defeating because many respondents are overburdened by the number of questionnaires that reach them'.

Many researchers, in the field of auditor independence, have had trouble securing a high response rate. For example, Gul (1991), received 49 responses and Parlin and Bartlett (1994) received just 37 usable replies.

Whilst a low response rate in itself is not a large problem (Moser and Kalton, 1971), the returns will not be 'representative of the original sample drawn' (Oppenheim, 1966:34), as the characteristics of those who respond are likely to be different to those who have not responded. 'Low response rates may lead to doubtful inferences' (Wallace and Cooke, 1990). If the returns do not represent the original sample, the study has been subject to 'non-response bias'. Wallace and Mellor (1988) argue that those who respond (especially those responding early) are more likely to be interested in the research topic and favourably disposed towards the research objectives. Non-responders may not perceive the research topic to be interesting, meaning that those investors who are most concerned/interested in auditor independence are more likely to reply and bias the sample. Other non-responders may be overburdened with work or other questionnaires. Whitehead (1991:10) argues that where a certain segment of the sample finds the questionnaire topic more interesting/relevant than others and is consequently over-represented in the sample, 'self-selection bias' occurs. Self-selection bias is not only a problem concerning postal questionnaires, self-selection bias may also be present when conducting interviews as those who agree to be interviewed are more likely to be interested in the research topic. Whitehead (1991) argues that to overcome the problem of self-selection bias, information must be sought about those who did not respond. However, in the current study it would have

been virtually impossible to determine information about non-responders without causing harassment. An alternate method for testing self-selection bias was employed by checking that those who had accounting qualifications were not over-represented in the study. Due to the nature of the questionnaire, those who had accounting qualifications were considered to be the ones most likely to respond, because they would have a better understanding of the subject area.

In order to mitigate non-response bias, Oppenheim (1966) suggests a technique of comparing early and late responses in order to see if the results differ significantly. Oppenheim's (1966) assumption is that late responses will be closer to those of non-respondents. Oppenheim's (1966) system is most commonly known as the 'surrogate method' (Wallace and Mellor, 1988:134), with late respondents viewed as 'surrogates' for those who did not respond at all. The surrogate method was used in studies such as Shockley (1981), Pany and Reckers (1983) and Knapp (1985) as well as in the current study.

However, there are many steps which can be taken before the questionnaires are sent out in order to try to ensure a good response rate. A number of studies have focused upon how to increase responses to postal questionnaires including Dillman et al. (1974), Kanuk and Berenson (1975), Linsky (1975) and Heberlein and Baumgartner (1978). In general, these studies examine follow-up techniques, pre-contacting participants, anonymity, the format and length of the questionnaire, building up a relationship with the respondent and personalisation of the questionnaires as ways to increase response rates.

### *Follow-up Letters*

Although there is no single agreed strategy to ensure a high response rate to a postal questionnaire, follow-up letters have been found to have the greatest effect on response rates (Bailey, 1982). 'It seems safe to assume that follow-ups will receive a response rate approximately 20% higher than no follow-up at all' (Bailey, 1982:170). Heberlein and Baumgartner (1978) note that each follow-up stimulates added returns, with the second and third mailing generating 12% and 10% returns of the initial sample, on top of the 20% netted from the first follow-up letter. Wallace and Cooke

(1990:285) argue that ‘pestering’ the participants with more than one mailing weakens people’s resistance towards the research and makes them more likely to respond. Dillman et al. (1974) argue that no matter how well the questionnaire is constructed, persistence pays off. Robson (1993), who warns that after such a long time it is likely that the initial questionnaire will be lost or thrown away, also advised sending a replacement questionnaire with the follow-up letter.

For the current study, two polite follow-up letters were sent to all non-respondents in the institutional investor survey. The first follow-up was a reminder letter sent out one month after the original mailing with the second follow-up being sent out two months after the original contact had been made containing a second copy of the questionnaire in case the first had been lost. The second follow-up was sent to the remaining people who had yet to reply. This follow-up strategy was more comprehensive than that used in the pilot study. Only one follow-up letter was necessary for the private investor survey as the original mailing had more success than that of the institutional investor survey.

#### *Pre-Contacting Participants Prior to Posting the Questionnaire*

Despite the distinct advantages that pre-contacting the participants by telephone could have for forming relationships, this strategy was not followed in the current study. Pre-contacting is a time-consuming and costly strategy. Moreover, when pre-contacting is combined with two follow-up letters the participants may feel harassed by the researcher. Linsky (1975:87) suggests that if it is a decision between pre-contact and follow-ups, ‘available data suggest that a follow-up is more productive’. Furthermore, Kanuk and Berenson (1975) found a preliminary letter to be very ineffective but a follow-up technique to be very effective. Kanuk and Berenson (1975) note that when pre-contacting and follow-up letters were combined, they were no more effective than just the use of a follow-up.

#### *Anonymity*

A postal questionnaire offers the respondents a greater assurance of anonymity. Bailey (1982) argues that anonymity may make the respondent more willing to give

socially undesirable answers. Robson, (1993:129) believes that anonymity will 'encourage frankness'. For the current study, self-completion gave the respondents the opportunity to express their own opinions. Bryman (1989) believes that with no interviewer present, respondents may not be so eager to present themselves in a positive light.

However, whilst a participant might feel anonymous when completing a postal questionnaire, in order for follow-up letters to be better targeted and to avoid annoying those who have already responded, anonymity could not be guaranteed in the original covering letter, 'all we can do is claim that replies will be kept confidential' (Moser and Kalton, 1971:266). However, it was considered too intrusive to ask respondents for their name or company name. Instead, a secret serial number was written on each reply paid envelope which was later matched against a list of names. The respondents may have assumed that identification was impossible (Bailey, 1982), but follow-up letters had only to be sent to those who had definitely not replied. Secret serial numbers were chosen in favour of the alternative strategy of asking respondents to mail a postcard separately from the questionnaire. The postcard strategy was not used in the current study, as there is a risk that respondents may lose the postcards, forget to mail the postcards or mail the postcard even when the questionnaire has not been completed.

Bailey (1982) argues that failure to guarantee anonymity should not significantly affect the response rates to questionnaires which are not of a sensitive nature. Kanuk and Berenson (1975:446) concluded that 'identification of respondents in attitude questionnaire surveys conducted under less than highly threatening circumstances is not likely to result in serious statistical or practical distortion'.

### *Questionnaire Format and Length*

Unlike an interviewer-administered questionnaire, under self-completion there is no supervision to ensure that the respondent completes the whole questionnaire and does not leave any questions unanswered (Bailey, 1982). However, a clear and professional format can help to avoid the partial completion of questionnaires. For example, Bryman and Bell (2003) warn that questionnaires, which contain many open-ended

questions, are much harder for the respondent to fill in, meaning that the chance of receiving incomplete questionnaires in return is higher. 'Postal questionnaires should comprise as few open questions as possible, since people are often deterred by the prospect of having to write a lot' (Bryman and Bell, 2003:146). When questions look too long and boring, fewer people are likely to fill them in, 'free response questions are easy to ask, difficult to answer and still more difficult to analyse' (Oppenheim, 1966:41). In the current study, only one open-ended question was included. This open-ended question was offered as a way for the respondent to elaborate on the previous closed-question and was designed to be an alternative to an interviewer-administered 'probe'.

The questionnaire format itself was designed to look as professional and clear as possible in order to increase responses. Robson (1993) argued that a good design could help to get a questionnaire taken more seriously. The questionnaire was presented in an attractive booklet form, printed on both sides. Dillman et al. (1974) suggest an attractive questionnaire design as part of their 'Total Design Method' to help increase response rates.

The length of the questionnaire was also considered. Whilst Kervin (1992) argued that generally the longer the questionnaire the lower the response rate, Heberlein and Baumgartner (1978:459) argue that the length of the questionnaire can actually signal importance to the respondent, reassuring that the research is not just 'a passing curiosity'. It was decided that the layout was more important than the length of the questionnaire. Bailey (1982) suggests that it is better for the format to be less cluttered, making the questionnaire look simpler, even if this involves the questionnaire looking longer. A clear and spaced out design was used in the current study. However, the length of the questionnaire was still taken into account and each question was considered carefully before inclusion. The final version of the institutional investor survey was seven pages long compared to four pages for the private investor version. The private investor version of the questionnaire only contained the main questions in each section to avoid the questionnaire looking too complex.

Oppenheim (1966) argues that a big disadvantage of a self-completion questionnaire is that by eliminating the interviewer, no further clarification of the questions can be given and confusion could occur. If this is the case then the respondent may not be answering the question in the way in which it was intended by the researcher (Saunders et al., 2000). 'Simple and concise language' (Ghauri and Gronhaug, 2002:98) was used for the questions and instructions. For the closed-answer questions a consistent five-point scale was used which went from negative to positive in each question, to make it quicker and easier to complete (Easterby-Smith et al., 1991). For the institutional investor survey, the audience was chief executives, who are likely to have a high level of education and a good understanding of the topic area. Furthermore, the respondent's interest in the topic should help to raise response rates. 'When the content of the questionnaire is salient to the respondent and the respondent is knowledgeable and interested in the topic, the cost of responding may be reduced, and personal input to the study may be judged by the respondent as more important' (Herberlein and Baumgartner, 1978:458).

Finally, to overcome the problems of not having an interviewer present, a contact number and email address was supplied. Providing contact details gave the respondents the option to get in touch with the researcher to ask questions and receive clarifications.

It was also possible to test the reliability of the questionnaire through the consistency of responses. Throughout the questionnaire similar questions were presented to the respondent in alternative forms, the responses to these similar questions could be compared to check the internal consistency of the questionnaire, this is called the 'alternative form' approach (Saunders et al., 2000:10). It is important to note that the alternative form approach is not the most accurate way to test for reliability, as it is difficult to ensure that the questions used in alternative forms are equivalent to each other (Saunders et al., 2000). However, the alternative form approach was the method most suited to the current study.

Other methods used to test for reliability are the test, re-test approach and Cronbach's Alpha Coefficient. The test, re-test approach involves administering the same questionnaire to the same group of respondents twice to check that they respond in the

same manner. However, for the current study it was decided that the respondents (especially busy chief executives) would be unwilling to complete the same questionnaire a second time. Furthermore, it is unlikely that the respondents would give exactly the same answers a second time, especially if a long time had passed between the two mailings or if the respondents 'mood state' (Pallant, 2005:6) differed significantly from the first time.

Finally, Cronbach's Alpha Coefficient tests whether all the items which make up a scale in the questionnaire are measuring the same thing. However, the alpha values are dependent upon the number of items within a scale and any scale with less than ten items will always produce an alpha level lower than 0.7, which is below the recommended reliability level (Pallant, 2005). Cronbach's alpha was not appropriate to the current study as each scale only had between two and five items.

#### *Building a Relationship with the Respondent*

Building up a relationship with the respondent and gaining trust is difficult when no interviewer is present. 'Social exchange theory' (Bailey, 1982:160) states that participants are more likely to be responsive when they trust the researcher. Oppenheim (1966) adds that building up a rapport with respondents helps to maintain interest throughout the survey. Rapport is difficult to build up when using a postal questionnaire but a good covering letter can help. Construction of the covering letter was considered in detail. As recommended by Linsky (1975), the letter stressed the importance of the respondents by stating exactly why they were chosen to participate and why it was important to return the questionnaire. In addition, by stating that their input could help to inform the current debate on corporate governance, it gave 'social utility' to the research, convincing the respondents that the research was worthwhile (Linsky, 1975:94). The letter took a polite tone, which Bryman and Bell (2003) argue to be of great importance, and stressed the simplicity of completing the questionnaire (Kervin, 1992). No deadline was given to the respondents as Linsky (1975) argued that the effectiveness of using a deadline in order to increase response rates was not established. The fact that the research was conducted at Cardiff University under the supervision of Professor Roy Chandler was also mentioned in the covering letter in order to add credibility to the research. Moreover, the covering letter was printed on

Cardiff University letter headed paper. Bailey (1982:162) argues that ‘sponsorship’ by a credible university ‘offers proof of legitimacy’ and might make the respondent more willing to trust the study. Nachmias and Nachmias, (1996:227) argue that ‘the sponsorship of a questionnaire has a significant effect on respondents, often motivating them to fill it out and return it’.

Finally, Bailey (1982) argues that by sending a stamped addressed envelope with every questionnaire, the researcher is showing trust that the respondent will reply. Moreover, a stamped addressed envelope makes it easy and costless to reply, perhaps motivating the participant to return the questionnaire. Inducements to reply, such as cash rewards, have also been suggested to increase response rates (Bailey, 1982). However, despite consideration, no cash rewards were offered in the current study due to the tight budget and the number of questionnaires sent out. It was decided that for the institutional investors in particular, the level of cash reward, which could possibly be offered, would be insignificant to the chief executives and would have little effect on their propensity to respond. Nachmias and Nachmias (1996:227) also warn that a small cash reward could harm response rates, ‘the problem of offering money is that some respondents will be indignant that the researchers consider the respondent’s time worth so little and thus may not respond at all’.

### *Personalisation of the Questionnaires*

In a self-completion questionnaire, there is no control over who answers the questions ‘you can never be sure whether the right person has answered the questionnaire’ (Bryman and Bell, 2003:143). This was likely to be the case for the institutional investor survey, which was directed at chief executives. In some cases, the questionnaire may have been passed to a subordinate to complete (Bryman and Bell, 2003). There could have been a great deal of variation in the roles and status of the respondents (Bryman, 1989). However, completion of the questionnaires by subordinates was almost impossible to control. It has been suggested that the chief executive should be addressed by name on the envelope and covering letter, but with such a big sample, it would have been far too time consuming to uncover each of the participants’ names. The envelope could only be addressed impersonally to the “chief executive”. Being impersonal may have increased the chances that the questionnaire

was opened and completed by someone other than the chief executive or that the questionnaire was simply considered 'junk mail' and disposed of. However, Linsky (1975:92) warns that personalisation can be a 'double edged sword', whilst response rates might increase, the participants may not be certain that their responses will be anonymous; 'empirical evidence indicates that personalisation of the mailing has no clear-cut advantage in terms of improved response rates'. Personalisation was not used for institutional investors, but was included in the private investor survey, as the researcher had access to the names of each respondent.

### *Other Problems with Postal Questionnaires*

Bailey (1982:158) warns against the problems of distinguishing between 'bad addresses' and 'non-responses'. Sosdian and Sharp (1980:397) explain that it is difficult to establish clear-cut categories of 'reached' and 'unreached' respondents, all the researcher knows is how many questionnaires were sent out and how many were returned. 'But in fact, the researcher does not know the number of questionnaires that reached the eyes of the intended respondent, and gave him the opportunity to decide whether or not to respond' (Sosdian and Sharp, 1982:158). Bailey (1982) argues that while some incorrect addresses will be returned to the researcher, others will be thrown away before even reaching the respondent and some may be forwarded to other bad addresses. It is difficult to guard against this risk but few mistakes were expected as the addresses were taken from the most recently filed register of members.

Another problem associated with survey research is the 'demand effect' (Gul, 1989:45). The demand effect describes a situation where the respondents 'respond cooperatively with the researcher's hypotheses' (Knapp, 1985:209). Although there is no way to check for the demand effect, it can be mitigated by making sure that the instructions are worded in a neutral manner (Knapp, 1985:209). In the current study, the covering letter introduced the topic area and the research objectives. Taking a neutral tone and only providing necessary information also helped to uphold the positivist principle of not influencing the participants.

Despite the disadvantages of using a postal questionnaire, ‘provided they are carefully planned and executed and due regard is paid to the question of the response rate, surveys of the general population can often profitably be conducted by mail questionnaire’ (Moser and Kalton, 1971:268). In the case of the current study, postal questionnaires were considered the most effective method for reaching such a large sample of investors.

The ethical issues involved with the use of a survey technique will be discussed in the following section.

### **5.9 Ethical Issues**

The survey technique is probably the least ethically challenging technique which can be used in research because respondents experience less inconvenience and intrusion than the subjects of other research studies (Burgess, 1985). Additionally, due to the topic area and material included in the current questionnaire, it is unlikely that the survey caused any harm or was distressing to the respondents.

However, although ‘the real risks and potential costs of being a respondent in most surveys are minimal’ (Floyd and Fowler, 2002:152), there are still ethical issues to be addressed. For example, the respondent has a right to know the purpose of the study and how the results will be used. The principle of ‘informed consent’ (Kervin, 1992:450) was addressed in the covering letter, which explained the debate over auditor independence. The covering letter also reassured the respondents that any information given in the questionnaire would be kept confidential. As discussed earlier, it would be unethical to guarantee anonymity in the letter, as the respondents were being identified in order better to target the follow-up letters.

### **5.10 The Questionnaire Design**

In the following section, the design of the questionnaire will be outlined section by section. The differences between the institutional investor version of the questionnaire and the private investor version of the questionnaire will also be discussed.

### *Differences between the Two Surveys*

Whilst all the participants in the institutional investor survey were chief executives of companies and were assumed to be well educated with an existing knowledge of auditor independence issues, the characteristics of the participants of the private investor survey were unknown. The private investor survey was required to be less technical and more comprehensible, in order to reflect the unknown characteristics of the private investors.

The nature of the questions included in the private investor survey were very similar to those included in the institutional investor survey. However, some changes to the style and length of the questionnaire were made.

The length and detail of the private investor questionnaire was cut down considerably from the institutional investor version of the questionnaire in order to elicit a higher response rate and prevent private investors giving up on the questionnaire half way through. 'Short questionnaires are often recommended for resulting in higher response rates than longer questionnaires' (Linsky, 1975:89). Only the most direct questions were left in each section of the questionnaire, omitting the ones which required more detail and a greater understanding of the issues. Dillman et al., (1974:748) argue that 'lengthy questionnaires seem likely to tire the respondent'.

Finally, whilst the remaining questions were taken directly from the institutional investor questionnaire, in places the language used in the private investor questionnaire was modified. The accounting terminology with which chief executives would have been familiar was replaced with simpler language and more explanation, 'the questions should be adjusted and adapted to the characteristics of the respondents' (Ghuri and Gronhaug, 2002:98). For example, the title of Section 1 was changed from 'ex-auditor employment within the client company' to 'a company employs a former auditor'. In addition, the term 'personnel transfer' was replaced with further explanation, 'a company which employed at a senior level a former member of the audit team' and 'audit engagement partner' was replaced with 'senior auditor'. Some other questions were also re-worded and Section 4 (the non-audit

service section) offered a short explanation of non-audit services at the beginning of the section.

### *The Questionnaire Format*

The questionnaire is divided into five sections, intended to make the questionnaire seem shorter and easier to complete.

### *Section 1: Ex-Auditor Employment within the Client Company*

Section 1 deals with Hypothesis 4, that the practice of auditors leaving their accounting firm to join their former client company has no effect on investors' perceptions of auditor independence.

#### Question 1

Question 1 determines whether investors perceive ex-auditor employment as damaging for auditor independence and whether the investor would consider withdrawing investment in a company where ex-auditor employment had taken place. In the final part of the question, respondents are asked whether they would be concerned about the last audit that the auditor had completed before leaving the accounting firm to join the client company. Koh and Mahathevan (1993) first researched concern over the final audit completed by the departing member of staff and suggest that the independence of the audit could be impaired. Koh and Mahathevan (1993) also suggest that future audits may be impaired, as the remaining audit team would be working with old colleagues and friends. The results of Question 1 were used extensively in the data analysis as parts of the question ask investors directly if ex-auditor employment damages their perceptions of independence. Question 1 addresses Research Questions 12 and 13:

12. *Do investors perceive ex-auditor employment as a threat to auditor independence?*
13. *Had ex-auditor employment taken place, would investors be concerned about the independence of past/future audits?*

The style of Question 1 is used throughout the questionnaire, as it is a good way to combine a number of questions under the same general ‘theme’, making the questionnaire quicker to complete.

### Question 2

Question 2 determines whether the level of concern for damaged auditor independence varies with the time lapse between the auditor leaving the audit firm and joining the client company. Suggested cooling-off periods are tested in relation to the position of the auditor in the accounting firm and the position which the ex-auditor accepts in the client company, areas of concern outlined by the APB (2004). Both Imhoff (1978) and Koh and Mahathevan (1993) suggest that the acceptable time lapse between the auditor leaving the accounting firm and joining the client company will be dependent upon the past and present position of the employee in question. The time frame presented in Question 2 is based upon the results of Imhoff (1978) and Koh and Mahathevan (1993), who suggested that independence is questioned most by users and preparers of financial statements at six months, with users of financial statements believing that the time lapse should not be less than 18 months. Furthermore, the APB (2004) advises that there should be a two-year cooling-off period for ex-auditors, whilst the Sarbanes-Oxley Act (2002) in the USA stipulates a one-year cooling-off period. Question 2 tests whether investors agree with the APB’s (2004) cooling-off period and responds to Research Question 14:

14. *What are investor perceptions of the current cooling-off period for auditors?*

### Question 3 (not included for private investors)

The final question in Section 1 determines whether investors perceive the existing two-year cooling-off period as a sufficient safeguard for auditor independence, or whether they would be in favour of further safeguards. The safeguards listed in Question 3 are the ones which have previously been suggested in the literature, but an option was also given for investors to suggest their own solutions. The scale, ‘not in favour, unsure, in favour’ was tested in the pilot study. Question 3 addresses Research Question 15:

15. *How do institutional investors perceive the suggested safeguards against ex-auditor employment?*

*Section 2: Long Association between the Audit Firm and the Client Company*

Section 2 deals with Hypothesis 3, that an auditor-client relationship of over five years will not damage investor perceptions of independence. Whilst this has been a much discussed area, few studies have focused on third party perceptions of lengthy auditor-client relationships.

Question 4 (Question 3 for private investors)

Question 4 determines whether investors are aware of the issues surrounding a lengthy auditor-client relationship and whether a lengthy auditor-client relationship would prevent investors from investing in a company. As parts of Question 4 ask respondents directly whether long tenure affects their perceptions of auditor independence, the results of Question 4 were used extensively in the data analysis. A period of five years is chosen to represent a lengthy auditor-client relationship, as currently in the UK audit engagement partners are required to rotate every five years. Furthermore, Knapp (1991) discovered that audit committee members perceived audit quality to rise until the fifth year of the relationship, whereupon they perceived audit quality to decline. However, long tenure is not uncommon, a study conducted by London Economics (2006) indicates that over half the companies surveyed had employed their auditor for over 7 years. Question 4 addresses Research Question 8:

8. *Do investors perceive long association as a threat to auditor independence?*

Question 5 (not included for the private investors)

Question 5 indicates an investor's optimum length of auditor client-relationship, i.e. the point at which he or she would view the length of relationship as independence-impairing. The scale offers categories of years, with the final one being greater than 20 years. A period of greater than 20 years is chosen, as in the USA it is estimated that the Fortune 1000 public companies keep the same auditors for 22 years (Sinnott,

2004:31). 'Less than 1 year' is included for those who believe that a different auditor should audit a company every year. A 'not ever' option is also included for those respondents who do not believe that length of relationship could impair auditor independence. Question 5 addresses Research Question 9:

9. *After how long do investors become concerned about the length of an auditor-client relationship?*

#### Question 6 (Question 4 for private investors)

Question 6 determines whether investors perceive the APB's (2004) recommendation for partner rotation every five years as being a sufficient safeguard against the risks of long tenure. The participants are asked to indicate whether they consider partner rotation 'sufficient', 'not sufficient', 'not needed' or 'unsure'. Question 6 addresses Research Question 10:

10. *What are investor perceptions of audit partner rotation?*

#### Question 7 (Question 5 for private investors)

Question 7 extends Question 6, by asking respondents whether they would be in favour of mandatory audit firm rotation. This is an important question as there is a significant body of literature which suggests that audit firm rotation would be the best safeguard against the risks of a long auditor-client relationship. However, there is also a significant amount of literature which argues that such a scheme is not the solution because audit quality is lowest in the early years of an auditor-client relationship. Question 7 addresses Research Question 11:

11. *What are investor perceptions of audit firm rotation?*

#### Question 8 (not included for private investors)

Question 8 also contributes to Research Question 11 and is directed only at those respondents who would be in favour of mandatory audit firm rotation. Question 8

requires investors to indicate the point at which they would like to see audit firms rotate, should mandatory audit firm rotation be introduced. The scale is similar to that used for Question 5 (without the 'not needed' option).

#### Question 9 (not included for private investors)

Question 9 is directed only at those respondents who indicate that they would not be in favour of a system of mandatory audit firm rotation. The idea of the question was to determine the exact reasons why these respondents were against mandatory audit firm rotation. The reasons given were a combination of those suggested in the existing literature by authors such as Taub (2004), ICAEW (2002), Arrunada and Paz-Ares (1997) and Hoyle (1978). Respondents are asked to tick the arguments against mandatory audit firm rotation, which they perceive to be most valid, and then rank the three arguments which they perceive to be the most important. Question 9 also contributes to Research Question 11.

#### *Section 3: An Auditor's Economic Dependence upon a Client Company*

Section 3 examines the issue of economic dependence. Few studies have focused on the issue of audit fees alone causing economic dependence, most tending to consider the provision of non-audit services as a greater threat to auditor independence. Gul (1991) argues that there is a need for research which determines whether the size of audit fees alone could damage perceptions of auditor independence, regardless of the provision of non-audit services. Section 3 is designed to address Hypothesis 1; that an individual auditor partner's economic dependence upon a client has no effect on investors' perceptions of auditor independence.

#### Question 10 (Question 6 for private investors)

Question 10 takes the same format as Questions 1 and 4. The intention of Question 10 is to uncover whether investors consider how much a company pays to its auditors and how much this amount contributes to the auditors' total income. The objective of the question is to uncover whether investors believe that audit fees alone can cause economic dependence and whether investors believe that auditors who are

economically dependent upon a client would be able to maintain their independence. Finally, Question 10 is designed to find out whether investors would not invest in a company if they perceived that the auditors were dependent upon that company for a large proportion of their income. The results of Question 10 were used extensively in the data analysis, as the questions ask respondents directly whether economic dependence affects their perceptions of auditor independence. Question 10 addresses Research Question 1:

1. *Do investors perceive economic dependence as a threat to auditor independence?*

#### Question 11 (not included for private investors)

Question 11 is designed in response to Beattie and Fearnley's (2002) arguments that the APB should reduce the level of proportionate income which one company is allowed to pay to its auditor from 10% to below 5%. Question 11 asks at what point of fees paid by one client to the auditor, would investors become concerned about auditor independence. Significant percentage levels found in the literature were a 1% level, which was trialled in a similar investigation by Bartlett (1993), the 5% level suggested by Beattie and Fearnley (2002), the 10% level which is currently in place and 15% and 20% levels used by Firth (1981). These significant levels are incorporated into numerical categories for Question 11. Question 11 addresses Research Question 2:

2. *What are investor perceptions of the current 10% limit on auditor income?*

#### *Section 4: The Provision of Non-Audit Services*

Section 4 relates to Hypothesis 2; that an auditor's provision of non-audit services has no effect on investor perceptions of auditor independence. Whilst non-audit service provision has been discussed widely in the academic and professional literature, to date there has been no consensus.

### Question 12 (Question 7 for private investors)

Question 12 formed part of the pilot study conducted in 2004. However, the scale given for respondents to express their opinions has been widened. The intention of Question 12 is to determine whether investors consider the level of non-audit services which a company employs from its auditor, before investing in that company. Question 12 also tests whether the provision of non-audit services by an auditor would affect investors' confidence in an auditor's ability to remain independent. The results of Question 12 were widely used in the data analysis stage as Question 12 asks respondents directly about their perceptions of non-audit service provision. The question also looked at whether investors perceive Big Four auditors as more independent than smaller (non-Big Four) auditors (although this part of the question was not included for the private investors). Both McKinley et al. (1985) and Gul (1989) suggest that third parties have more confidence in the Big Four auditors, than smaller ones. More recently, Oxera (2006:i) found that reputation favoured the Big Four auditors 'whether this is based on real or perceived differences with mid-tier firms', this was also the finding of a survey conducted by London Economics (2006). However, results from the pilot survey, tentatively suggested that there was no difference in the perceptions of Big Four and smaller accounting firms. Finally, Question 12 has been changed slightly from the original pilot to include the issue of accounting firms going into business with their clients to provide specialist non-audit services for other companies. 'CPA firms wish to both audit and work together with audit clients on consulting engagements for a third party' (Lowe and Pany, 1995:2), it is suggested that this growing trend, for client and auditor to go into business together to provide non-audit services for another company (co-contracting), could impair auditor independence, or at least the perception of it (Lowe and Pany, 1994, 1995). However, little research into the effect which co-contracting could have on perceptions has been conducted to date. Question 12 addresses Research Questions 3 and 4:

3. *Do investors perceive non-audit service provision as a threat to auditor independence?*
4. *Do investors perceive co-contracting as a threat to auditor independence?*

### Question 13 (Question 8 for private investors)

Question 13 determines the point at which the balance of non-audit service fees to audit fees concerns investors. The scale has been altered from the pilot, as the results to the pilot survey were mainly clustered at the lowest end of the scale. The current scale contains lower percentages and does not go up as high as the pilot scale. Question 13 addresses Research Question 5:

5. *At what point of audit fees to non-audit fees do investors become concerned about auditor independence?*

### Question 14 (not included for private investors)

Question 14 remains unchanged from the pilot survey and determines investor's perceptions of individual non-audit services. Titard (1971) was one of the first studies to treat non-audit services individually when testing independence perceptions. Krishnan et al. (2005) acknowledged that treating non-audit services in an aggregate form might have been a limitation of their research. Furthermore, Mishra et al. (2005) find evidence to suggest that investor perceptions of different non-audit services vary. The individual non-audit services listed in Question 14 are all banned (except for tax services) in the US under the Sarbanes-Oxley Act (2002). Question 14 will help identify whether UK investors believe that these non-audit services should be banned in the UK. Question 14 addresses Research Question 6:

6. *Which particular non-audit service causes the greatest concern?*

### Questions 15 (Question 9 for private investors) and 16 (not included for private investors)

Questions 15 and 16 explore possible solutions and regulations for the provision of non-audit services. Auditor independence enhancement strategies have often been ignored in the academic literature (Beattie et al., 1999 and Alleyne and Devonish 2006). The format of questions 15 and 16 have not been changed from the pilot survey. Question 15 determines whether investors would be more comfortable with an

auditor's independence if separate personnel in the same firm supplied non-audit services, as suggested by Pany and Reckers (1984). Question 15 reflects the current trend for accounting firms to set up separate divisions which deal only with non-audit services (ABI, 2002). However, the respondents could also indicate that they would or would not be in favour of an outright ban on the provision of non-audit services, regardless of whether services are provided by audit personnel. If respondents indicate that they would be in favour of a ban, they are asked whether this ban should be by law or professional rules. The second part of Question 15 determines whether investors would still be in favour of a self-regulating accounting profession or not. Question 16 deals with five possible safeguards against the provision of non-audit services. Many of the safeguards listed in Question 16 were suggested by the ABI in a paper written after the Enron collapse (ABI, 2002). Participants are given the option of indicating whether they would be in favour or not in favour of each of these alternatives. The list of suggested safeguards of independence is followed by an open-ended section which gives participants the opportunity to elaborate on why they would not be in favour of any of the safeguards. This is the only open-ended question in the entire survey, as the pilot survey showed that the respondents tended to leave the open sections blank. Questions 15 and 16 address Research Question 7:

7. *How do investors perceive the suggested safeguards against non-audit service provision?*

#### *Section 5: Some Information about You (And Your Organisation)*

Section 5, the final section, deals mainly with 'factual' questions (Easterby-Smith et al., 1991:119) and background variables. Although Section 5 is easy to complete and could have been placed at the front of the questionnaire to draw the respondents in, it is placed at the back of the survey to be completed after the other questions. If the respondents are faced with Section 5 first it is possible that they might consider the only purpose of the survey to be obtaining personal information, which might make the respondents less likely to complete the questionnaire. By putting Section 5 at the back of the questionnaire, the respondents will already have determined the nature of the questionnaire and may be more willing to answer a few questions about themselves. 'Personal data questions should always come near the end of a

questionnaire' (Oppenheim, 2003:109), as by this time the respondents should be 'convinced that the inquiry is genuine' (Oppenheim, 2003:132). A few short lines are added to reassure the respondents before they complete the section that the answers they give are for statistical comparisons only and are not intended for identification purposes. All of the following questions address Research Question 16:

16. *Is there a relationship between the background variables and perceptions of the potentially independence-impairing auditor client relationships?*

Question 17 (Question 10 for private investors)

Question 17 deals with the gender of the participant, in order to determine whether gender affects perceptions of auditor independence.

Question 18 (Question 11 for private investors)

Question 18 deals with the age of the respondent and is used to test whether age affects investor concern for the issues examined in the current questionnaire.

Question 19 and 20 (Questions 12 and 13 for private investors)

Questions 19 and 20 are designed to determine the respondent's level of accounting background and are used to test whether levels of accounting education/understanding of the audit function affect perceptions of auditor independence. Reckers and Stagliano (1981), Pany and Reckers (1983, 1984) and Bartlett (1993) have also investigated the connection between understanding of accounting and perceptions of accounting issues. However, there is no agreement about whether a connection exists. Questions 19 and 20 also appeared in the pilot survey, but the results were inconclusive.

Question 21 (14 for private investors)

Question 21 concerns whether the respondent has ever been part of a personnel transfer, like those examined in Section 1. It is considered reasonable to predict that

those respondents, who had taken part in a transfer, would be the least concerned about the implications of ex-auditor employment for auditor independence.

Question 22 (Question 15 for private investors)

Question 22 determines how thoroughly investors consider each company prior to investing in it. Question 22 is intended to address the background variable focusing on levels of accounting information consulted before investing. It is predicted that the more sources of information respondents refer to, (and thus the more conscientious they are), the more likely respondents are to have an awareness of factors which could potentially impair auditor independence. Those investors who merely base their investment decisions upon share prices or company reports are likely to be less concerned about their investments and less concerned about issues affecting corporate governance than an investor who consults many sources of information before making investment decisions. Bartlett and Chandler (1997:247) have suggested that private shareholders have a 'passive' attitude towards investing and have little interest in detailed disclosure. The private investors, which Bartlett and Chandler (1997) refer to, may have a lower awareness of the corporate governance in place in the company in which they are investing than institutional investors who make investment decisions as part of their job.

The following questions are slightly different for institutional and private shareholders:

For the institutional investors, Question 23 (asking how many companies the institutional investor invests in) and 24 (asking how many employees the institutional investor employs) are designed to determine how large the institutional investment company is. It could be argued that the larger investment companies might be more concerned about auditor independence issues than the smaller ones because the bigger companies are in charge of larger investments and more people's money. However, it could also be argued that larger companies might be less concerned about auditor independence because they have more resources to employ when making investment decisions which might give greater confidence in the decisions made.

For the private shareholders, the final question (Question 16) is designed to determine the shareholder's portfolio size. It could be argued that a shareholder who owns more shares in different companies (who has more experience of investing) will be more aware/concerned about auditor independence issues than smaller shareholders will. However, as auditor independence issues have recently been highly publicised, it is possible that all shareholders (no matter what their portfolio size) will be aware of auditor independence issues.

### **5.11 Analysis of Responses**

The objective of the data analysis was to explore relationships related to the four areas of auditor independence. In addition, connections between responses and certain background variables also required investigation.

As a large amount of standardised data were collected, the most appropriate data analysis techniques to use were quantitative in nature, with 'analysis conducted through the use of diagrams and statistics' (Saunders et al., 2000:380). Quantitative analysis requires little individual interpretation of the results by the researcher, which helps to keep the data bias-free and upholds positivist principles. Quantitative data is in contrast to qualitative data, which is not collected in a standardised format. Qualitative data are based upon meanings which are 'expressed through words' rather than numbers (Saunders et al., 2000:381) and require far more individual interpretation by the researcher.

The majority of the statistical analyses were undertaken on the computer package SPSS, a comprehensive IT package which organises, stores and helps statistically to analyse large amounts of data.

### **5.12 Descriptive Statistics**

Before relationships within the data were explored, these data collected from the questionnaires were descriptively analysed. The descriptive phase of the data analysis was very important in summarising the raw data and describing the main findings

(Coakes and Steed, 1999). The descriptive analysis was conducted through the calculation of percentages, means and the use of tables to display/organise the data.

### **5.13 Methods of Analysis: Parametric vs. Non-Parametric Testing**

There are two types of statistical testing which could have been employed to analyse relationships within these data. These types are broadly categorised as parametric tests and non-parametric tests. It is generally understood that parametric tests such as correlation, regression and t-testing are more powerful than their non-parametric equivalents. However, it is not appropriate to use parametric testing in all circumstances (Bryman and Cramer, 1997).

Parametric tests are based on a number of stringent assumptions about the population from which the sample has been drawn and are not appropriate to all data sets (Pallant, 2005). Bryman and Cramer (1997:117) outline the main assumptions of parametric tests:

1. The level/scale of measurement is of equal interval or ratio scaling.
2. The distribution of the population scores is normal.
3. The variances of both variables are equal/homogeneous.

In contrast, non-parametric tests are often labelled ‘distribution-free’ tests because they are not underpinned by such stringent requirements. Pallant (2005:286) argues that there are certain circumstances where the use of non-parametric tests would be more appropriate than parametric tests. These circumstances are:

1. When data are measured on nominal (categorical) or ordinal (ranked) scales.
2. On small samples.
3. When the data do not meet the assumptions of parametric tests.

However, despite these guidelines the decision over which type of testing to perform is not always a clear one. Bryman and Cramer (1997) state that some researchers (such as Labovitz, 1970, in Bryman and Cramer, 1997:57), suggest that all ordinal variables can be treated as interval variables and that there are no clear guidelines for

an analyst to state when a variable is definitely ordinal or when it is definitely interval. Labovitz (1970) argues that when treating an ordinal variable as an interval variable a minimal amount of error will occur, especially when it is weighed against the benefits which occur from using parametric tests. However, Bryman and Cramer (1997) are cautious, stating that Labovitz's (1970) view is a controversial one and not one which all researchers share.

#### 5.14 Testing the Normality of the Data

As previously discussed, when using parametric tests data are assumed to be 'normal'. Normal data are described as data which forms a symmetrical 'bell-shaped curve' (Pallant, 2005:53), with most frequencies bunched in the centre and fewer towards the extremes.

Before any data analysis could take place, the first stage was to assess the normality of the data collected from the two questionnaires, this analysis helped to determine which statistical tests were appropriate to perform upon the data. SPSS was used to produce the means, trimmed means, skewness and kurtosis of the data collected by the four main questions in both questionnaires. The results are displayed in Table 5.1:

Table 5.1 Tests for Normality

Perceptions of:	INSTITUTIONAL INVESTORS				PRIVATE INVESTORS			
	Mean	Trimmed Mean	Skewness	Kurtosis	Mean	Trimmed Mean	Skewness	Kurtosis
Ex-Auditor Employment	1.74	1.71	.512	-1.273	1.93	1.93	.116	-1.372
Long Association	1.69	1.66	.582	-1.042	1.88	1.78	.219	-1.395
Economic Dependence	2.32	2.17	-.656	-1.125	2.31	2.34	-.621	-1.332
Non-Audit Service Provision	2.13	2.14	-.243	-1.580	2.24	2.26	-.411	-1.095

As there are no large differences between the mean and the trimmed mean for both the institutional and the private investor data, it shows that there are no outliers in the data and that the extreme values are not having a large impact on the mean. The trimmed mean was calculated by excluding the lowest 5% of observations and the highest 5% of observations. The purpose of calculating the trimmed mean is to

produce a figure which is not effected by outliers. However, as the current variables were ordinal in nature and based upon responses to a Likert scale, the only outliers in the data would have been the result of errors in the original recording of the data.

Most importantly, Table 5.1 shows that the data received from the two questionnaires is not normal. Perfectly normal data have a skewness and kurtosis value of 0. The above results show that the ex-auditor employment and long association data were positively skewed, meaning that the values were clustered mainly at the lower end of the scale (so the respondents would have disagreed most often that ex-auditor employment and long association affect their perceptions of auditor independence). However, the data for economic dependence and non-audit service provision were negatively skewed, with the values being mainly clustered at the higher end of the scale (so the respondents would have agreed most often that economic dependence and non-audit service provision impair their perceptions of auditor independence). All of the variables had a negative kurtosis figure, which means that the distribution of the values was fairly flat (with few peaks).

The above tests have shown that the data collected are not normal and confirms that the use of parametric tests, which assume normality in the data would not be appropriate for the current investigation. Pallant (2005:58) assures that non-normal data is not uncommon in the social sciences and ‘does not necessarily indicate a problem with the scale, but rather reflects the underlying nature of the construct being measured’ (especially when people are expressing opinions). Furthermore, Pallant (2005) suggests that in dealing with non-normal data, there is little choice but to abandon parametric testing in favour of non-parametric testing, or to engage in transforming the variables.

### **5.15 Main Variables used in the Current Study**

The following variables were used for data analysis in the current study:

### *Nominal Variables:*

Nominal variables require the classification of individuals in terms of a 'concept' (Bryman and Cramer, 1997:56). Data whose values cannot be measured numerically but can be allocated to a category are nominal in nature. However, these categories have no particular order. These variables included gender and questions which required a yes or no answer.

### *Ordinal Variables:*

As with nominal data, ordinal data also require individuals to be categorised. However, unlike nominal categories, ordinal categories can be ordered, for example, by the strength of an individual's agreement or disagreement with a statement (Bryman and Cramer, 1997). However, the actual numerical values on which the categories are based are not recorded (Pallant, 2005) and 'care should be taken in attributing to the categories of an ordinal scale an arithmetic quality that the scaling seems to imply' (Bryman and Cramer, 1997:56). Ordinal variables were included in the questions which required respondents to indicate agreement or disagreement with a series of statements, and other questions which required the respondents to indicate whether they were in favour or not in favour of a range of suggested solutions to listed problems. Kinnear and Gray (2000:10) argue that if the data have been measured at an ordinal or nominal level in the first place 'a non-parametric test is the only possibility'.

### *Interval Variables:*

In terms of interval data, responses to questions can be categorised, with each category having a numerical significance. These categories can be assigned 'a position on a numerical scale' (Saunders et al., 2000:328), with intervals between each category being identical. An interval scale is the highest level of measurement (Bryman and Cramer, 1997). Only one question in the current study was based upon an interval scale, that of investment portfolio size.

However, as interval variables are needed for parametric testing, a number of variables were created which approximated to interval variables. A Spearman's Rank Order Correlation Test was used to test whether the respondents' answers to all the questions within sections were related (for example, if they agreed with one statement did they agree with all the others?), the responses to negatively worded questions were reversed. Where the test showed that the responses to questions in each section were highly correlated, respondents were given a total score for their responses within sections. For example, where each question had previously been scored out of five (1 for strongly disagree, 2 for disagree and 3 for neutral etc), each respondent would now have a score out of 25 (for a five question section). Those respondents with a high total score had generally agreed with the statements in the sections whereas those with low scores had generally disagreed. The resultant approximate interval variables could then be used in more powerful parametric tests.

### **5.16 Parametric Tests Used**

Computing interval variables by adding scores made it possible to use parametric tests.

#### *Independent Samples T-Test*

Independent Samples T-Tests are used for uncovering whether the mean scores, on an interval variable, differ significantly for two different groups. Pallant (2005:206) explains that 'in statistical terms, you are testing the probability that the two sets of scores (e.g. for males and females) came from the same population'. T-testing requires one nominal independent variable and one interval dependent variable. Roscoe (1969:165) argues that t-testing is a very powerful statistical tool, which can be used for a wide variety of research problems and consequently 'is one of the most popular statistical tests'.

Should a statistically significant difference be found in the mean scores for the two groups, Eta Squared can be calculated. Eta Squared will indicate the 'proportion of variance in the dependent variable that is explained by the independent variable' (Pallant, 2005:208). The result of the Eta Squared test will range from 0 to 1 and can

be used in conjunction with Cohen's (1988) guidelines (Pallant, 2005:209) to indicate whether the independent variable has a small, moderate or large effect on the dependent variable.

#### *Pearson Product-Moment Correlation*

The Pearson Product-Moment test for correlation is used to determine the strength and direction of a relationship between two or more variables. Pearson Product-Moment Correlation is the parametric alternative to the Spearman's Rank Order Correlation. However, the Pearson test uses interval rather than ordinal variables. Like its non-parametric alternative, the result of the Pearson Product-Moment Correlation test can range from -1 and +1, with the absolute value indicating the strength of the relationship and the sign indicating the direction of the relationship.

#### **5.17 Non-Parametric Tests Used**

The non-parametric tests, which were employed in the current study, are discussed in the following section.

#### *The Chi-Square Test for Independence*

The Chi-Square Test for Independence is used to determine whether two nominal or ordinal variables are independent or associated (Leach, 1979). Each of the nominal variables used in the test can have two or more categories, for example, gender, which has two categories. The Chi-Square Test compares the observed values (the actual frequencies) with what could be expected if the two distributions were completely independent (what would occur by chance). The Chi-Square Test calculates the probability that the two variables are independent. A probability of 0.05 or smaller means it is 95% certain that the variables are significantly associated (Saunders et al., 2000:359). However, the Chi-Squared figure does not indicate the strength or direction of a relationship; a Cramer's V test is used to indicate the strength of a relationship and the Phi statistic can be used to indicate the strength and direction of a relationship for 2x2 Chi-Square tests.

Roscoe (1969:194) argues that the Chi-Square Test is the most valuable of all the non-parametric tests available. However, Roscoe (1969:194) concedes that ‘requirements with respect to minimum expected frequencies have proved to be a severe handicap in the use of the Chi-Square statistic’. Roscoe (1969) notes that where it is not appropriate to collapse cells together to meet the minimum cell frequency of 5, a different non-parametric test must be used.

### *The Mann-Whitney U Test*

The Mann-Whitney Test is used to investigate the differences between two independent groups on an interval measure and requires a nominal variable and an ordinal variable. The Mann-Whitney Test could be used to investigate a question such as; do accounting qualifications (nominal) affect perceptions of ex-auditor employment (ordinal)? The Mann-Whitney Test works by comparing medians. By converting the scores on the interval variable to ranks across the two groups, it evaluates whether the ranks for the two groups differ significantly (Pallant, 2005:292). Roscoe, (1969:175) argues that the Mann-Whitney Test is almost as powerful as its parametric counterpart, ‘about 95% relative power with typical research samples’ and is one of the more useful of the non-parametric tests and much more ‘flexible in the circumstances in which it can be used’ than the parametric t-test (Silver, 1997:225). Neave and Worthington (1988:109) confirm this in stating that ‘as with all the distribution-free procedures, it retains its validity over a vastly broader range of sampling situations’ and is an ‘extremely good and widely used test’.

### *The Kruskal-Wallis Test*

The Kruskal-Wallis Test is an extension to the Mann-Whitney Test, but compares more than two groups. Neave and Worthington (1988:109) describe the Kruskal-Wallis Test as a popular test with very good power. Similar to Mann-Whitney, the Kruskal-Wallis Test converts the scores to ranks and compares the mean ranks for each group. The Kruskal-Wallis Test requires one ordinal dependent variable, such as perceptions of non-audit services and one nominal independent variable with three or more categories, such as age. The Kruskal-Wallis Test uses ‘between-groups’ analysis so the same people cannot be in different groups (Pallant, 2005:294).

### *Spearman's Rank Order Correlation Test*

The Spearman's Rank Order Correlation Test computes the correlation between ranks. The Spearman's Rank Order Correlation Test has a parametric equivalent of the Pearson's Product-Moment Correlation. The purpose of the Spearman's Rank Order Correlation Test is to calculate the strength of the relationship between two or more ordinal variables. Neave and Worthington (1988:109) explain that the Spearman's Rank Order Correlation Test examines whether the variables increase together, which is positive correlation, or whether one variable increases as the other variable decreases (negative correlation), either of these effects is classed as 'monotonicity'. The final correlation can range from -1 to +1, and this indicates how strong the relationship is, with 0 indicating no relationship at all. The coefficient of determination can also be calculated which demonstrates how much variance the variables share (how much the variables overlap).

## **5.18 Multivariate Techniques Used**

### *Regression Techniques*

The data analysis techniques discussed so far have involved comparing perceptions of the four auditor-client relationships in relation to one single independent variable at a time. However, more sophisticated, multivariate data analysis techniques, such as multiple regression, allow the interrelationships between a set of variables to be investigated. These multivariate techniques can indicate to the researcher how accurately a set of variables can predict a specific outcome. In terms of the current study, these multivariate techniques could be used to produce a model which indicates whether the background variables (such as age, gender and accounting qualifications) explain the perceptions of non-audit service provision (or any of the auditor-client relationships). The model can also indicate which of the background variables in particular best predicts the dependent variable. 'In regression analysis we fit a predictive model to our data and use that model to predict values of the dependent variable from one or more independent variables' (Field, 2005:144).

However, whilst multiple regression is a valuable statistical tool, it is based upon a number of assumptions which the current data does not fully meet. Firstly, multiple (linear) regression assumes that the data used for analysis is 'normal'. The initial analyses have established that the current data is not normal and may not meet the assumptions of multiple regression. Despite this, Pallant (2005) argues that the larger the sample size, the more robust the test will be to modest violations of the assumptions. However, the biggest obstacle in applying multiple regression techniques to the current data is the assumption the test makes about the measurement level of the data employed in the model. Multiple regression requires the dependent variable to be interval in nature and the majority of all the variables employed in the current study are ordinal. By including an ordinal dependent variable in a multiple regression model, the ordering of the variable would be forgotten and assumed to be interval; this could cause information to be lost. Despite the current data not meeting all of the assumptions of multiple regression, the test was still employed (with violations of assumptions clearly outlined) in order to provide a higher level of statistical analysis.

Another regression technique is logistic regression. Logistic regression does not assume normality in the data and does not require the dependent variable to be interval. However, logistic regression requires dichotomous dependent variables (variables with just two categories). In order to apply logistic regression to the current study the ordinal dependent variables had to be collapsed into two categories, again this could result in a loss of information.

The current study also engaged in a less commonly known technique called 'ordinal regression' (SPSS inc., 1999:241). Ordinal regression ensures a greater level of accuracy in the data analysis by extending the general linear model and incorporating the ordinal nature of dependent variables.

Chen and Hughes (2004:6) outline the main features of ordinal regression:

- The dependent variable is ordinal in nature and may not be equally spaced

- A 'link' function is employed to explain the effect of the independent variable on the dependent variable without the need for the assumption of normality or constant variances
- The assumption of 'Parallel lines' should not be violated. 'The test of parallel lines can help you assess whether the assumption that the parameters are the same for all categories is reasonable' (SPSS inc., 1999:254). However, Chan (2005) argues that the test will often be violated as it is very sensitive to sample size and the number of independent variables. The model can also be assessed by using the Pseudo R-square and the classification table of accuracies.
- Ordinal regression is not affected by the direction of the coding scheme.

Chen and Hughes (2004:16) sum up ordinal regression as 'a practical tool that should be added to a practicing researcher's toolkit'.

All three of the outlined regression techniques were employed in the current data analysis. Using three different regression techniques helped to validate the findings and minimise the problems associated with the violation of assumptions. Using a range of techniques also helps to prove that the findings are robust and not dependent upon the type of technique employed.

### *Multivariate Analysis of Variance*

Multivariate Analysis of Variance (MANOVA) was also employed in the current data analysis. MANOVA extends the usual analysis of variance (ANOVA) technique by examining more than one dependent variable at a time. Using MANOVA helps to reduce the risk of a Type 1 error which often occurs when a series of ANOVA tests are employed (finding a significant result which does not exist in reality). In a MANOVA test, one independent variable is examined in relation to a number of dependent variables, which are combined, to determine whether there is a significant difference between the groups on the independent variable in terms of the combined dependent variable. For example, in terms of the current data, MANOVA could indicate whether there is a statistically significant difference between men and women

in their overall perceptions of auditor independence (their perceptions of economic dependence, non-audit service provision, long tenure and ex-auditor employment combined). The previous tests only examined one dependent variable at a time.

However, whilst a useful statistical tool the drawback of employing a MANOVA technique is the number of assumptions upon which it is based. The test assumes:

- A large sample size
- Normal data
- No outliers
- Homogeneity of variance-covariance matrices
- No multicollinearity among the dependent variables.

Whilst the current data does not meet the assumptions of MANOVA in their entirety, the large sample size employed helped the test to be robust to the modest violations and meant that the test was worthwhile to pursue and would provide meaningful results.

### **5.19 Main Variables Used for Analysis**

Four main questions were taken from each section of the questionnaire to represent investor perceptions and the results of these questions were used extensively in the data analysis stage. The four main questions asked investors directly whether each of the relationships impaired their perceptions of auditor independence. These variables are outlined here:

1. The '**Alumni Threat**' variable represents responses to the question of whether or not investors perceive ex-auditor employment as a threat to auditor independence. This variable was taken from Section 1 of the questionnaire.
2. The '**Length Threat**' variable represents responses to the question of whether or not investors perceive a relationship of over five years between auditor and client as a threat to independence. This variable was taken from Section 2 of the questionnaire.

3. The **'Economic Dependence'** variable represents responses to the question of whether or not investors would invest in a company if they perceived an auditor to be economically dependent upon it. This variable was taken from Section 3 of the questionnaire.
4. The **'Non-Audit Services'** variable represents responses to the question of whether or not non-audit service provision affected investor confidence in auditor independence. This variable was taken from Section 4 of the questionnaire.

These variables were included in both questionnaires in order to provide a point of comparison for the two sets of investor perceptions. In the results chapter these variables will be referred to as 'the four main questions'.

Whilst for each of these four questions five choices of response were given, in many cases SPSS was used to collapse the variable into three categories (disagree, neutral, agree) in order to give more meaningful results. For the majority of questions, the respondents were reluctant to indicate extreme opinions such as strongly disagree or strongly agree. In a perceptual study similar to the current research, Bakar et al. (2005) also found that respondents were reluctant to indicate a strong opinion, seeming to prefer more moderate choices.

## **5.20 Chapter Summary**

This chapter outlined the research methods employed in the current study. In this chapter the inductive and deductive research approaches were discussed and a justification is given for the use of a deductive, positivistic approach to the current research. The use of a survey as the research strategy is outlined and a discussion of how this strategy was conducted through a postal questionnaire is provided. The many weaknesses associated with using a postal questionnaire are acknowledged and a section is provided on how the weaknesses of the postal questionnaire have been addressed in the current study. This chapter also outlines the sample for the survey.

The way in which the questionnaire was designed for both the institutional and the private shareholders was also outlined in detail in this chapter. Finally, the statistical tools used to analyse the results of the questionnaires were explained.

The following chapter will discuss the results of the two postal questionnaires.

## **Chapter Six: Survey Results**

### **6.1 Introduction**

The purpose of this thesis was to investigate investor perceptions of four auditor-client relationships. The research has been underpinned by agency theory which outlines the important relationship between investors, management and auditors. The agency relationship demonstrates how investors, as principals of organisations, delegate the day-to-day running of organisations to management (their agents). However, agents are often self-serving and may not work in the best interests of principals. Therefore, the principals employ auditors, to be monitors of the agents. It is the job of the monitor to give credibility to the financial statements produced by the agents. Unfortunately, the agency relationship does not always operate effectively and the agents and monitors may form a relationship which damages the independence of the monitor's mental attitude. Chapter Three examined the literature which has investigated auditor-client relationships and the effect of these relationships on an effective agency relationship. There is a large amount of previous literature and so it was structured around a framework first used by Firth (1980) focusing on, fees, conflicts of interest, personal relationships and financial involvement. From the literature review, four main auditor-client relationships were identified as unresolved areas; these were economic dependence, the provision of non-audit services, long association and ex-auditor employment in the client company.

The previous chapter outlined the research methodology employed to investigate these four auditor-client relationships. Although different research methods were considered, the current research was most suited to a deductive approach, underpinned by positivist principles. Chapter Five discussed the sample selection (institutional and private investors) and detailed the mailed questionnaire which was sent to them. The methodology chapter concluded with a discussion of the parametric and non-parametric tests used to analyse the data received from the questionnaires. The current chapter reports the results from this data analysis.

This chapter will begin with a discussion of the survey response rates. The data will be descriptively analysed and then exposed to parametric and non-parametric testing.

This chapter also examines the issue of consistency of responses, non-response bias and self-selection bias. Throughout the chapter, the study hypotheses from Chapter Four will be revisited.

## **6.2 Response Rates**

The first section of this chapter outlines the response rates obtained from the two surveys employed in the current study.

### *Institutional Investors*

After three mailings, of the 719 institutional investors contacted, 223 responded. This is a 31% response rate. However, of these responses only 16% (113) were usable responses. As the questionnaire focused on busy chief executives, 16% is considered an acceptable response rate.

60% of the overall responses came from the original mailing, with follow-up letters yielding a response of around two-thirds the number of original replies. This is in line with Miller's (1983:101) predictions that follow-up letters could possibly increase total returns by 50% (see Chapter Five for a discussion of acceptable response rates). The first follow-up letter was much less successful than the second one, accounting for only 6% of the total responses. As the first follow-up letter did not include a replacement questionnaire, those who had misplaced the original copy could not respond. In providing a new copy of the questionnaire with the second follow-up letter, the response rates were greatly increased, with 34% of the total response rate coming from the second mailing. Moreover, due to the small amount of returns received from the first follow-up, replacement questionnaires were sent with the first reminder for the private investor survey.

There were various reasons for the unusable responses, many chief executives simply returned the questionnaire un-answered, some returned the questionnaire incomplete, others claimed heavy workloads and some explained their company policy not to complete questionnaires.

### *Private Investors*

900 questionnaires were sent out to a sample of private investors from Jarvis PLC and Amstrad PLC. Of the 900 questionnaires sent out, 254 usable responses were received which is a 28% response rate. Many un-usable responses were also received, these tended to be in the form of half-filled in questionnaires, blank returns from people who no longer invested and those who refused to participate. A 28% response rate was acceptable, as the questionnaire was relatively specialised and complicated. 69% of the total responses came from the original mailing and 31% came from the follow-up mailing. The second mailing was far more successful than the institutional investor survey as a second copy of the questionnaire was sent with each reminder. 176 replies were received from the original mailing, with 78 received from the follow-up, the follow-up increased total returns by almost 50%, which was predicted by Miller (1983:101).

### **6.3 Respondent Characteristics**

The focus of the final section of the questionnaire was to obtain personal information about the respondents. The personal information obtained will be tested against the respondents' answers to determine if certain characteristics (background variables) affect perceptions of the four auditor-client relationships.

Table 6.2 summarises the characteristics of those who replied to the two surveys:

**Table 6.2 Characteristics of Respondents**

<b>Characteristics</b>	<b>% of Institutional Investors</b>	<b>% of Private Investors</b>
Male	94%	79%
Female	6%	21%
With Accounting Qualifications	58%	15%
Of those: Financial Accountants	95%	85%
Of those: Management Accountants	5%	15%
Without Accounting Qualifications	42%	84%
Experience in Accounting Firms: None	39%	6%
Experience in Accounting Firms: A Small Firm	5%	3.5%
Experience in Accounting Firms: A Medium Firm	8%	5%
Experience in Accounting Firms: Big Four	48%	85%
Age- Under 30 yrs	3.5%	1%
Age- 30-40 yrs	24%	7%
Age- 41-50 yrs	30%	13%
Age- 51-60 yrs	39%	27%
Age- Over 60 yrs	3.5%	51%
Undertaken a Personnel Transfer	14%	2%
Not Undertaken a Personnel Transfer	86%	98%
Company Employs < 100	44%	N/A
Company Employs 100-250	18%	N/A
Company Employs 251-500	10%	N/A
Company Employs > 500	28%	N/A
Mean Number of Companies Invested in:	259.75	24
Standard Deviation:	447.814	49.677

A few important observations should be made from Table 6.2. Firstly, in terms of the institutional investors, more of the respondents were men than women, as there are more male chief executives than females. In 2005, the Department of Trade and Industry reported that only one of the FTSE 100 companies employed a female chief executive. Moreover, in the USA, in 2005 only two of the Fortune 500 companies had female chief executives.

A slight majority of the sample had accounting qualifications. It is possible that those with accounting qualifications understood the topic of the questionnaire more thoroughly and were more likely to respond. Of those respondents who indicated that they had accounting qualifications, the overwhelming majority were financial accountants (ICAEW, ICAS, ICAI and ACCA) rather than management accountants (CIMA). This is perhaps unsurprising as there are more bodies offering qualifications in financial accounting than there are offering qualifications in management accounting. In addition, 14% of the sample had undertaken a personnel transfer of the

type described in the questionnaire, this personal experience may have influenced perceptions of ex-auditor employment.

Finally, the majority of responses came from small companies with fewer than 100 employees. It is possible that in a small company the questionnaire would have reached the chief executive easier. Additionally, it means that the results of the data analysis apply more to small institutional investors than they do to large institutional investors.

In terms of the private investors, as was the case for the institutional investor survey far more men than women replied. More male respondents could indicate that more men than women invest in Jarvis and Amstrad shares. Secondly, the ages of the respondents were more dispersed than the ages of the institutional investors. This could be because the questionnaire was not aimed at a specific person in a specified job. However, the analysis shows that half of the respondents were over 60 years old. In terms of accounting background, the vast majority of respondents had no accounting qualifications and little experience of working within accounting firms, which is in contrast to the institutional investors. However, as was the case for the institutional investors, the majority of those who indicated that they possessed accounting qualifications were chartered accountants rather than management accountants. Moreover, only 2% of the respondents had ever undertaken a personnel transfer. Finally, the mean investment portfolio size was 24, which is similar to the findings of Bartlett and Chandler (1997) who found that the majority of private investors in their survey invested in 21 or more companies.

#### **6.4 Descriptive Statistics**

In the following section, responses to both surveys will be descriptively analysed in order to draw conclusions about investors' perceptions of economic dependence, non-audit service provision, long association and ex-auditor employment. The private investor survey does not address every research question as the questionnaire was modified and shortened to reflect the audience. The percentages recorded in the following tables have been rounded.

## Economic Dependence

Table 6.3 reports investors' perceptions of economic dependence:

**Table 6.3 Investors' Perceptions of Economic Dependence**

	Institutional Investors			Private Investors		
	Yes	Neutral	No	Yes	Neutral	No
Do investors consider the size of audit fees which the company is paying before investing?	11%	32%	57%	21.5%	45%	32%
Would investors invest if they perceived the auditor to be economically dependent upon their chosen company?	21%	26%	52%	9%	22%	68%
Do investors believe that an auditor can be economically dependent upon a client but still retain independence?	27.5%	15%	56%	25.5%	19%	55%
Do investors believe that audit fees alone can damage auditor independence?	40%	21%	38%	N/A	N/A	N/A

### *Institutional Investors*

Table 6.3 goes some way to responding to Research Question 1 (Do investors perceive economic dependence as a threat to auditor independence?). The results show that institutional investors do not tend to consider the size of the (audit) fees paid to the auditor before they invest in a certain company, but do seem to indicate their awareness of the potentially independence-impairing consequences of economic dependence. 52% of the respondents agreed that they would not invest in a company if they perceived the auditors to be economically dependent upon it. In addition, the majority of respondents indicated that they did not believe that an audit firm could be dependent upon a client for its income and retain its independence. This finding is in line with Flint's (1988) argument that monitors who are economically dependent upon an agent are likely to put their own interests above those of the principal's. However, institutional investors were divided in their opinion of whether audit fees alone (without non-audit fees) could damage independence. The majority (40%) of respondents believed that audit fees could damage independence, but 38% believed that they could not, this provides some support for Gul's (1991) conclusion that auditors do not need to be providing non-audit services to lose their independence. In answering Research Question 1, these results support the existing perceptual studies in the area of economic dependence. Existing studies include Gul (1991) and Firth

(1980,1981), who conclude that economic dependence damages perceptions of auditor independence.

*Private Investors*

In response to Research Question 1, similar to institutional investors, the majority of private investors do not consider the amount of audit fees which a client is paying to its auditor before investing. However, with 68% of respondents indicating that they would not invest in a company where they perceived an auditor to be economically dependent, it does appear that private investors are worried about the consequences of economic dependence. 55% of private investors agreed that it was not possible for an auditor to be economically dependent upon a client and retain independence. It appears that private investors believe that economic dependence could damage an effective agency relationship.

Table 6.4 reports institutional investors’ perceptions of the current 10% income limit for auditors, this question was not included in the private investor survey:

**Table 6.4 Institutional Investors’ Perceptions of the 10% Income Limit**

	INSTITUTIONAL INVESTORS		
	Yes	Neutral	No
Do Institutional investors perceive the 10% income limit as an adequate safeguard?	74%	12%	13%
<b>OF THOSE WHO DON’T PERCEIVE THE 10% LIMIT AS ADEQUATE:</b>			
Should it be <10%?	79%	N/A	N/A
Should it be 11-20%?	10.5%	N/A	N/A
Should it be 21+%?	10%	N/A	N/A

In answering Research Question 2 (what are investor perceptions of the current 10% limit on auditor income?), it appears that the overwhelming majority of institutional investors are satisfied with the current legislation, which prevents audit firms receiving more than 10% of their income from one client. However, of those who are not satisfied with current regulations, the vast majority support Beattie and Fearnley’s (2002) contentions that the income limit should be reduced to below the current 10% limit.

In conclusion, the descriptive statistics from the economic dependence section of the survey appear to indicate that institutional and private investors do perceive economic dependence as a threat to auditor independence.

### *The Hypothesis*

**H1:** A situation where an individual audit partner is dependent upon one client for 10% of the income he or she generates will have no influence on investors' perceptions of auditor independence.

Responses to whether the two sets of investors would still invest should they perceive that the auditor is economically dependent upon the client were aggregated. The overwhelming majority of the investors who expressed an opinion (64%) indicated that they would not invest in a company if they perceived the auditor to be reliant upon the client for a large amount of income, which suggests that economic dependence is damaging investors' perceptions of auditor independence.

**The results of the current research reject H1, as a situation where the auditor is dependent upon one client for his or her income *does* have an influence on the majority of investors' perceptions of auditor independence.**

### **Non-audit services**

The non-audit service section was previously tested in the pilot study conducted in 2004 (discussed in Chapter 5). The pilot questionnaire used a similar format to the current questionnaire but focused exclusively on institutional investors.

Table 6.5 reports investor perceptions of non-audit service provision:

**Table 6.5 Investors' Perceptions of Non-Audit Service Provision**

	Institutional Investors			Private Investors		
	Yes	Neutral	No	Yes	Neutral	No
Do investors consider the amount of non-audit services a company purchases from its auditor before investing?	28%	34%	38%	18.5%	53%	28%
Do investors perceive non-audit services as a threat to auditor independence?	43%	26.5%	30%	42.5%	39%	19%
Do investors perceive co-contracting as a threat to auditor independence?	43%	34%	21%	34%	40%	25%
Are investors confident of the independence of Big 4 auditors?	32%	38%	29%	N/A	N/A	N/A
Are investors confident of the independence of smaller auditors?	21%	36%	41.5%	N/A	N/A	N/A

### *Institutional Investors*

In response to Research Question 3 (do investors perceive non-audit service provision as a threat to auditor independence?) Table 6.5 shows that the majority of institutional investors do not consider the amount of non-audit services the company purchases from its auditor before investing. However, it is important to note that of the four relationships examined, the highest percentage of respondents indicated that they *did* consider non-audit services before investing than for any of the other relationships (28% compared with, 11.5% for ex-auditor employment, 15% for long association and 11% for economic dependence). In addition, the majority of respondents indicated that they did perceive non-audit services as a threat to auditor independence.

It appears that of all the relationships examined in the current study, the provision of non-audit services is the one which causes the most concern in relation to auditor independence, perhaps because the threat of non-audit services is the most widely publicised and well-known threat of the four auditor-client relationships. The amount of literature on non-audit service provision is large in comparison to the literature existing on the other three auditor-client relationships.

The majority of institutional investors also indicated that they perceived co-contracting with an audit client as a threat to auditor independence (Research Question 4), this finding supports Lowe and Pany's (1994, 1995) findings, that co-contracting negatively affects loan officers' lending decisions. Furthermore, as was the finding of Alleyne and Devonish (2006), institutional investors have greater

confidence in the Big Four accounting firms' independence when supplying non-audit services than in smaller accounting firms' independence. This was also the finding of McKinley et al. (1985), Bakar et al. (2005), The Oxera Report (2006) and supports the contentions of economic theory. One reason for the greater confidence in Big Four auditors could be that respondents believe (as economic theory states) that because smaller auditors have fewer clients, they may be dependent on each one for a larger slice of their income; auditors from small firms may be very reluctant to alienate clients and may have incentives to compromise their independence. The current findings also suggest that high-profile accounting scandals such as Enron have not damaged perceptions of the professional integrity of the Big Four or that it has taken a relatively short period to restore. The pilot study conducted in 2004 found that respondents had no confidence in the independence of Big Four or smaller accounting firms when they supplied non-audit services. Although the pilot study was based upon a small sample, it is possible that perceptions of the Big Four have recovered since 2004.

#### *Private Investors*

The data in Table 6.5 provides the material for responding to Research Question 3. As with the institutional investors, it appears that the majority of private investors do not consider the amount of non-audit services which a company is purchasing from their auditor before investing. However, it does appear that the majority of private investors are concerned about non-audit service provision threatening auditor independence. Furthermore, in relation to Research Question 4, which asks for investor perceptions of co-contracting, the results of the current study support the work of Lowe and Pany (1994, 1995), as the majority of private investors perceive co-contracting as a threat to auditor independence.

Research Question 5 was concerned with investors' perceptions of a company's ratio of audit to non-audit fees. The results to this question were divided but the majority of institutional investors indicated that they would become concerned when non-audit services totalled 11-20% of audit fees; this is slightly lower than was indicated in the pilot study where institutional investors indicated that they would become concerned

when non-audit fees were between 21-30% of audit fees. However, the results are by no means conclusive and the research question cannot be addressed with confidence.

In comparison to the institutional investors, there was also little agreement among private investors about an independence-impairing level of non-audit services. As with the institutional investors, the majority of private investors indicated that they would be concerned about non-audit fees when they reached 11-20% of audit fees, but these results are by no means conclusive. These results go some way to answering Research Question 5.

Research Question 6 examines institutional investors' perceptions of individual non-audit services and was first used in Titard's (1971) study. The results showed that the non-audit services which institutional investors indicated were the most damaging to auditor independence were, internal audit services (also discovered in Titard's, (1971) study and empirically tested by Lowe et al. (1999) and Swanger and Chewning (2001) with the same conclusions), valuation of assets and liabilities, investment advice, bookkeeping and actuarial services. Those non-audit services which caused the least concern were tax services (not banned under the Sarbanes-Oxley Act, 2002 but found to affect investor perceptions by Mishra et al., 2005), human resource services, expert services, legal services (in contrast to the findings of Quick and Warming-Rasmussen, 2005) and information systems design and implementation (also found by Titard, 1971 but in contrast to the findings of Quick and Warming-Rasmussen, 2005). These findings were roughly the same as those found in the pilot study with the vast majority of respondents indicating that they did not believe that human resource or tax services had any effect on auditor independence. These results provide a guide to policy-makers about which non-audit services institutional investors believe should be prohibited. Furthermore, the results confirm the findings of Mishra et al. (2005), who found that investor perceptions of different non-audit services vary.

Of all the individual non-audit services examined, the finding that information systems design and implementation did not damage perceptions of auditor independence was perhaps the most surprising. It might be expected that when auditors design systems for their client company which the auditor later has to audit (causing a self-review threat), investors would perceive such a non-audit service as

potentially independence-impairing. Church and Schneider's (1993) study indicates that those auditors who help design and implement a system for the client company are less likely to find fault with this system, which could result in lower quality audits.

Table 6.6 reports investor perceptions of safeguards of auditor independence:

**Table 6.6 Non-Audit Service Provision: Safeguards of Auditor Independence**

	Institutional Investors			Private Investors		
	Yes	Unsure	No	Yes	Unsure	No
Should non-audit services be banned if audit personnel provide them?	59%	6%	34%	59%	14%	26%
Should non-audit services be banned if different personnel provide them?	11.5%	5%	82%	24%	21%	55%
Should a ban be by law?	13%	N/A	N/A	41%	N/A	N/A
Should a ban be by professional rules?	86%	N/A	N/A	52%	N/A	N/A
Are you unsure what form the ban should take?	1%	N/A	N/A	7%	N/A	N/A
ALTERNATIVE SAFEGUARDS:						
Would be in favour of a prescribed ratio of audit to non-audit fees?	31%	18%	50%	N/A	N/A	N/A
Would be in favour of strengthened audit committees?	70%	17%	11.5%	N/A	N/A	N/A
Would be in favour of putting non-audit work out to tender?	27%	18%	53%	N/A	N/A	N/A
Would be in favour of better justification in the annual report of the need for non-audit services?	57.5%	18%	23%	N/A	N/A	N/A
Would be in favour of greater shareholder power?	20%	26%	54%	N/A	N/A	N/A

### *Institutional Investors*

Table 6.6 clearly shows that the majority of institutional investors want a ban on audit personnel providing non-audit services. However, if a separate division of the same firm provides the non-audit services, confidence in auditor independence increases substantially and 82% of the institutional investors would not be in favour of a full-scale ban. The current findings support the findings of Pany and Reckers (1984) and Lowe et al. (1999) and those of the pilot survey. Of those who were in favour of a total ban on non-audit services, in comparison to Hussey and Lan's (2001) findings, 86% stated that they would prefer this ban to take the form of professional rules. This is an interesting finding as it shows that institutional investors still trust the accounting profession to self-regulate (through standards and guidelines issued by the professional bodies and the APB), even after the high profile accounting scandals

which have taken place. The pilot study also found that respondents would prefer a ban on non-audit services to be in the form of professional rules. In response to Research Question 7, which asks for investor perceptions of the suggested safeguards on non-audit service provision, it appears that institutional investors are only in favour of a ban on non-audit service provision when audit personnel provide the services.

Institutional investors were also questioned on their perceptions of alternative safeguards on non-audit service provision (some of which were suggested by the Association of British Insurers in 2002 after the Enron collapse); this was the only question in the survey to contain both qualitative and quantitative aspects. The results showed that the majority of respondents would not be in favour of a prescribed ratio of non-audit fees to audit fees. A number of the respondents cited their reason as reluctance to enforce further regulation upon companies and thus '*straight jacket*' company decisions. Moreover, other institutional investors believed that a prescribed ratio would be too simplistic and inflexible, which would not be appropriate for all companies in all industries. Besides these arguments, one of the greatest fears of institutional investors regarding a prescribed ratio was that it might lead to companies manipulating audit and non-audit fees in order to remain below the limit, thus encouraging creative accounting.

The majority of institutional investors were also against forcing companies to put non-audit service work out to tender. As with the prescribed ratio, the respondents indicated that they would not be in favour of further regulation which would be inflexible and increase costs for the client company. Other respondents argued that putting non-audit work out to tender would slow-down company decision making. The system would also be hard to police, with one institutional investor arguing that companies may go through the motions of putting work out to tender, only to choose their own audit firm anyway. Most of the respondents agreed that companies should be allowed to use their own audit firm for non-audit service contracts, as long as the non-audit services are provided independently of the audit.

Giving shareholders greater power in the governance of companies was also unpopular. This is perhaps surprising given the audience of the questionnaire. Perhaps institutional investors do not want the added responsibility and liability which would

come from greater involvement in companies. Mallin (2004) describes an unwillingness by institutional investors to act as owners of companies. For example, if something went wrong it could be very harmful to the investor's reputation. The respondents of the current survey argued that greater involvement for shareholders in companies would cause *'the roles of ownership and stewardship to become unacceptably intertwined'*. In terms of agency theory, a bigger role for shareholders in corporate governance would result in the principals becoming involved in the running of the company, which is the responsibility of the agents. Many of the respondents argued that, *'directors should be responsible for the governance of the company, not the shareholders'*, *'shareholders should remain divorced from the management of the company'*, *'shareholders should put their faith in management of the company and not interfere other than to remove [them] in extreme circumstances'* and finally, *'company directors are in a better position to make decisions about the governance of the company'*. Many of the institutional investors also argued that shareholders are too remote from companies to make informed day to day decisions and that the system would cost too much money and waste resources. One investor argued that greater shareholder power would *'lead to economic stagnation which we have seen in Germany for the last 10 years through workers councils'*.

The most popular safeguard on non-audit service provision was strengthened audit committees, which was also found to be the case in the pilot study. However, a number of institutional investors did not agree that strengthened audit committees were the solution, stating that it would increase costs to the client and that the policy *'wouldn't make a difference'*.

As with the pilot survey, better justification in company annual reports about non-audit services was also a popular safeguard. More information would help to justify and explain agents' decisions to the principals. However, some respondents argued that company accounts are already too long and are becoming meaningless.

#### *Private Investors*

Table 6.6 shows the results of questions posed under Research Question 7. The findings support the conclusions of the institutional investor survey, the pilot survey

and other studies such as Pany and Reckers (1984). The results show that the majority of respondents would be in favour of a total ban on non-audit services, if audit personnel provided these services. However, private investor confidence increases if different personnel provide non-audit services. Of those who would be in favour of an outright ban on non-audit services, the majority would prefer the ban to take the form of professional rules. However, unlike the institutional investor survey, a large percentage of private investors (41%) indicated that they would prefer the ban to be law. The finding could mean that fewer private investors have confidence in the accounting profession to self-regulate (perhaps in light of the high profile accounting scandals), or that given their lack of accounting background, the private investors are unfamiliar with how the accounting profession is currently regulated.

In conclusion, of the four auditor-client relationships examined, the provision of non-audit services by auditors causes the most independence concerns. The reason for the large amount of concern associated with non-audit service provision could be that this potentially independence-impairing relationship is the most well known and has currently received a large amount of media attention.

### *The Hypothesis*

**H2:** The provision of non-audit services will have no effect on investors' perceptions of auditor independence.

The results to the question asking both sets of investors whether they perceived non-audit service provision as a threat to auditor independence were aggregated. The aggregated figure highlighted that the majority of investors who expressed an opinion (42%) perceived joint provision of audit and non-audit services as a threat to auditor independence.

**In light of the results, H2 is rejected, as it is clear that the provision of non-audit services *does* have an effect on the majority of investors' perceptions of auditor independence.**

## Long Association

Table 6.7 reports investor perceptions of long association:

**Table 6.7 Institutional Investors' Perceptions of Long Association**

	Institutional Investors			Private Investors		
	Yes	Neutral	No	Yes	Neutral	No
Do investors consider the length of association between auditor and client before investing in a company?	15%	31%	53%	20.5%	48%	31%
Would a long relationship affect the investor's decision to invest?	13.5%	19%	66%	N/A	N/A	N/A
Do investors perceive long association as a threat to auditor independence?	18%	33%	48%	26%	35%	37.5%

### *Institutional Investors*

Table 6.7 shows responses to questions posed under Research Question 8 which examines whether investors perceive long association as a threat to auditor independence. Table 6.7 shows that institutional investors generally do not consider the length of relationship between client and auditor before investing. Furthermore, only 13.5% of the respondents stated that a long relationship would affect their decision to invest in a company. 48% of all respondents stated that they did not perceive lengthy association as a threat to auditor independence. It appears that the current results support the conclusions of Shockley (1981), who found that the length of audit tenure did not have a significant impact on perceptions of auditor independence.

### *Private Investors*

In answering Research Question 8 it appears that the majority of private investors do not consider the length of relationship between auditor and client before investing. Moreover, in contrast to Knapp (1991) the majority of private investors indicated that they did not perceive a long association between auditor and client as a threat to auditor independence. These results support the conclusions of Shockley (1981). However, although the majority of respondents indicated that long association between monitor and agent did not damage perceptions of auditor independence, the

majority was fairly small (only 37.5%). 26% of respondents indicated that they would be concerned about auditor independence when the auditors had audited their clients for over five years. These split results suggest that there is some concern among private investors about the length of relationship between auditor and client, even if this is not the opinion of the majority.

Table 6.8 shows the point at which institutional investors become concerned about the length of auditor-client relationship, this question was not included in the private investor questionnaire:

**Table 6.8 The Point at which Institutional Investors Become Concerned about the Length of Auditor-Client Relationship**

<b>Years</b>	<b>%</b>
< 1	0
1-2	0
3-5	3
6-10	35
11-20	24
> 20	3
Never	33

The data contained in Table 6.8, provides the material to answer Research Question 9 relating to investors' perceptions of the length of auditor-client relationship. In contrast to Knapp's (1991) finding, the respondents were most likely to become concerned about auditor independence when the auditor-client relationship was between six to twenty years long. However, a large percentage (33% of respondents) indicated that they would never become concerned about auditor independence, no matter the length of auditor-client relationship. These findings suggest that many institutional investors do not perceive length of audit tenure as a threat to auditor independence.

Table 6.9 reports investor perceptions of safeguards of auditor independence:

**Table 6.9 Long Association: Safeguards of Auditor Independence**

	Institutional Investors		Private Investors	
	Is Audit Partner Rotation a Sufficient Safeguard?	Should Audit Firm Rotation be Introduced?	Is Audit Partner Rotation a Sufficient Safeguard?	Should Audit Firm Rotation be Introduced?
<b>Yes</b>	70%	35%	68%	49%
<b>Unsure</b>	3%	8%	8%	14%
<b>No</b>	20%	57%	15%	36%
<b>Not Needed</b>	6%	N/A	8%	N/A

### *Institutional Investors*

Research Question 10 asks for investor perceptions of audit partner rotation. Table 6.9 shows that the institutional investors are satisfied with the current legislation to protect auditor independence against the risk of long association (partner rotation), with 70% of respondents indicating that they perceive the current system of partner rotation to be a sufficient safeguard for auditor independence.

In response to Research Question 11, which asks for investor perceptions of mandatory audit firm rotation, only 35% of respondents were proponents of mandatory audit firm rotation. It appears that the majority of institutional investors took an ‘economic view’ (Geiger and Raghunandan, 2002:69) that audit quality is threatened most in the early years of a relationship.

### *Private Investors*

The results in Table 6.9 appear rather contradictory. Whilst responses to the question of partner rotation suggest that private investors are content with the current safeguards (68% of respondents indicated that partner rotation was sufficient), unlike the institutional investors, 49% of the respondents were proponents of mandatory audit firm rotation. These results seem to suggest that although private investors are satisfied with the APB’s current regulations, the majority would like to see more measures introduced in order further to safeguard auditor independence. These findings are similar to those of Vanstraelen (2000), who argued that a system of mandatory audit firm rotation would increase the value of the audit for those who depend on its independence.

Whilst the private investors indicated similar opinions of lengthy association between auditor and client to those of the institutional investors, the institutional investors were predominantly opponents of the mandatory audit firm rotation scheme. One possibility for the difference in opinion could be that as large shareholders, the institutional investors are worried that they would eventually pay for the added costs involved with the introduction of mandatory audit firm rotation.

Table 6.10 shows how often the proponents of mandatory audit firm rotation would like to see audit firms rotate, this question was directed only at the institutional investors:

**Table 6.10 Institutional Investors' Perceptions of How Often Audit Firms Should Rotate**

1 year	0%
2 years	2%
3 years	6%
4 years	4%
5 years	29%
6-10 years	44%
11-20 years	10%
> 20 years	4%

Of those respondents who indicated that they would be in favour of mandatory audit firm rotation, the majority indicated that the rotation should take place every six to ten years with only 6% of respondents in favour of an Italian style system of rotating audit firms every three years.

Unlike previous studies in the area of long association, the opponents of mandatory audit firm rotation, those who do not believe that lengthy audit tenure will damage an effective agency relationship, were asked their reasons for the position they took. The most important reasons cited were that a long relationship could increase audit quality as the auditor becomes more familiar with the client and its business environment (Firth, 1981), that there is a greater audit risk in the early years of a relationship as argued by Berton (1991), that the process would cause too much disruption to the continuity of audits as suggested by Taub (2004), that the start-up costs for the client and the auditor would be too great (as argued by Petty and Cuganesan, 1996) and that in the current business environment, there are not enough audit firms in the market place to support such a system.

The descriptive statistics above indicate that in general, investors do not consider audit tenure as a threat to auditor independence and are happy with the current safeguards to prevent agents and monitors becoming too close, (i.e. partner rotation).

*The Hypothesis*

**H3:** Client employment of the same auditor for over five years has no influence on investors’ perceptions of auditor independence.

The responses of both sets of investors to the question asking whether a long auditor-client relationship damaged perceptions of auditor independence were aggregated. The results showed that the majority of investors who expressed an opinion (42%) did not perceive a long relationship between auditor and client as a threat to auditor independence.

**H3 cannot be rejected, as client employment of the same auditor for over five years has no influence on *the majority* of investors’ perceptions of auditor independence.**

**Ex-Auditor Employment**

Table 6.11 reports investors’ perceptions of ex-auditor employment:

**Table 6.11 Investors' Perceptions of Ex-Auditor Employment**

	Institutional Investors			Private Investors		
	Yes	Neutral	No	Yes	Neutral	No
Before investing, do investors consider whether any of the senior employees are alumni of the company’s current auditor?	11.5%	31%	57%	N/A	N/A	N/A
Would investors invest in that company had a senior personnel transfer taken place?	72%	21%	4%	36%	37%	27%
Do investors perceive such senior personnel transfers as a threat to auditor independence?	22%	28%	48%	N/A	N/A	N/A
Are investors concerned about the independence of the last audit that the auditor conducted?	17%	31%	50%	52%	20%	25%
Are investors concerned about the independence of future audits conducted by the remaining audit engagement team?	19%	19.5%	60%	44%	24%	30%

### *Institutional Investors*

In response to Research Question 12, which asks whether investors perceive ex-auditor employment as a threat to auditor independence, it appears that the majority of chief executives do not consider the issue of ex-auditor employment before investing in a company. Furthermore, 72% of the respondents would still invest in a company even if ex-auditor employment had taken place, only 22% of the respondents perceived that this kind of employment would damage auditor independence. These results contradict the majority of perceptual studies examined, which conclude that ex-auditor employment damages auditor independence perceptions. Such damaged perceptions were found to be the case by Imhoff (1978) and Koh and Mahathevan (1993). However, Firth (1980) found that users of financial statements did not consider ex-auditor employment as a threat to auditor independence. In terms of Research Question 12, the majority of institutional investors do not perceive ex-auditor employment as a threat to auditor independence.

Research Question 13 asks whether investors would be concerned about the independence of past audits (when the auditor was considering employment with the client company) or future audits after such a personnel transfer had taken place. The results suggest that the respondents are not concerned about past audits conducted by the (now) ex-auditor or future audits conducted by the remaining audit team. Respondents were slightly less concerned about the independence of future audits than they were about the last audit conducted before the auditor joined the client company.

### *Private Investors*

In response to research question 12, the results of the private investor survey show that only 27% of private investors would not invest in a company should an ex-auditor be employed there. 37% of respondents remained neutral commenting that they had no way of knowing whether ex-auditor employment was taking place. However, with regard to Research Question 13 (had ex-auditor employment taken place, would investors be concerned about the independence of past/future audits?), the majority of respondents appeared concerned about the independence of the last audit conducted

by the departing auditor and future audits conducted once the auditor had departed, reflecting the findings of Koh and Mahathevan (1993). Private investor concern for the independence of past and future audits suggests that were the private investors to have more information about ex-auditor employment, it may affect their decision to invest.

Table 6.12 reports the investors' perceptions of various cooling-off periods for audit firm alumni who are joining ex-client companies:

**Table 6.12 Investors' Perceptions of Various Cooling-Off Periods**

	0	6 mths	1 yr	1.5 yrs	2 yrs	3 yrs	> 3 yrs
<b>INSTITUTIONAL INVESTORS:</b>							
Previously an audit engagement partner	19.5%	15%	30%	2%	23%	4%	5%
Previously a member of the engagement team	44%	24%	15%	4%	7%	2%	2%
New job involving preparation of company accounts	42%	19.5 %	19.5 %	2%	10%	3%	3%
New job not involving preparation of company accounts	62%	15%	8%	3%	8%	1%	1%
<b>PRIVATE INVESTORS:</b>							
Previously an audit engagement partner	23%	9%	20%	4%	16.5%	11%	15%
Previously a member of the engagement team	35%	17%	19%	2%	15%	7%	2%
New job involving preparation of company accounts	25%	12%	20%	3.5%	15%	10%	12%
New job not involving preparation of company accounts	46.5%	15%	20.5 %	2%	7%	4%	2%

*Institutional Investors*

The data in Table 6.12 responds to Research Question 14 which asks for investor perceptions of the current two year cooling-off period for ex-auditors. Table 6.12 shows that while 30% of respondents stated that an audit engagement partner should have a cooling-off period of one year before joining the client company, 15% indicated that six months was long enough. Furthermore, 19.5% of the sample thought that it would be acceptable for the audit engagement partner to start straight away. Only 32% of the sample believed that the ex-auditor should wait the two years (or more) cooling-off time (suggested by the Auditing Practices Board) before joining the client.

When the ex-auditor had previously been a member of the audit engagement team, 44% of respondents believed that the auditor could start a new position at the client company straight away and 24% believed that the auditor should wait six months. In the situation where the ex-auditor's new job would involve preparation of company accounts, 42% still believed it would be acceptable to start work at the client company straight away with 19.5% believing the auditor should wait six months. A further 19.5% of respondents believed that the ex-auditor should wait a year. The greatest confidence in auditor independence was displayed where the ex-auditor's new job would not involve preparation of the client company's accounts. In this situation, 62% of respondents were confident in the ex-auditor taking up a new position straight away, with 15% believing that there should be a time lapse of six months. These results are consistent with earlier conclusions that chief executives do not seem particularly concerned with ex-auditor employment. These results are in contrast to Imhoff's (1978) study where users of financial statements believed that auditor independence could be damaged if the cooling-off period was less than 18 months for engagement partners and less than six months for engagement team members. However, Imhoff's (1978) research was conducted over 20 years ago.

As the perceptions of cooling-off periods appear to be dependent upon past and future position of the ex-auditor, policy-makers should consider replacing the 'one size fits all' two year cooling-off period with a cooling-off period based upon the ex-auditors past position in the audit firm and future position at the client company.

### *Private Investors*

In each of the situations given, the majority of private investors indicated that the ex-auditors should be allowed to start their new job in the client company immediately. In the case of the ex-auditors previously having been audit engagement partners, only 42.5% (less than half) of the respondents believed that the ex-auditors should not start their new employment until the currently advised two year cooling-off period (or longer) was observed. The percentage of respondents indicating that the ex-auditor should wait the two year cooling-off period (or longer) was even lower for the other three situations. However, as little information appears to be available to private

investors about ex-auditor employment, perhaps private investors have little understanding of the independence risks which ex-auditor employment could have.

As with the institutional investor survey, the above results contradict the findings of previous studies, such as Imhoff (1978) and Koh and Mahathevan (1993), where respondents were cautious about the practice of ex-auditor employment.

Table 6.13 reports institutional investors' perceptions of a number of suggested safeguards to protect auditor independence against ex-auditor employment. This question was not included in the private investor questionnaire:

**Table 6.13 Ex-Auditor Employment: Safeguards of Auditor Independence**

	<b>In favour</b>	<b>Unsure</b>	<b>Not in Favour</b>
Longer cooling-off period	7%	23%	68%
Total ban on ex-auditor employment	1%	8%	90%
Staff rotation	75%	13%	11%
Changes to audit firm methodology	32%	33%	34%
Review of last audit conducted by departing member of staff	53%	21%	25%

In response to Research Question 15, which relates to investors' perceptions of suggested safeguards of auditor independence, Table 6.13 highlights that institutional investors would not be in favour of longer cooling-off periods or of a ban on ex-auditor employment. The most popular safeguards for auditor independence appear to be systematic staff rotation within the audit firm (already in place), and a review of the last audit conducted by the departing auditor by an impartial member of the audit firm. Opinions were split over whether audit firms should change their audit methodology on a regular basis, with 32% in favour of such a scheme, 33% impartial and 34% not in favour. However, regular changes to audit firm methodology are unlikely to be implemented due to the costs and disruption which would be incurred.

It appears clear that institutional investors are in favour of measures to prevent damaged auditor independence after personnel transfers have taken place, rather than an outright ban on the practice. Institutional investors are generally satisfied with the

safeguards which are already in place (staff rotation) and are not in favour of introducing further regulations. It appears that institutional investors want to protect their investment by safeguarding auditor independence, but recognise that the employment of well-trained, knowledgeable employees from the accounting firm could make the company in which they invest perform better.

### *The Hypothesis*

**H4:** Employment of a former auditor in a senior management role has no influence on investors' perceptions of auditor independence.

The results show that *the majority* of investors *do not* perceive ex-auditor employment as a threat to auditor independence or to an effective agency relationship. The finding of the current study is in contrast to previous studies in the field, such as Imhoff (1978) and Koh and Mahathevan (1993).

Both groups of investors' responses to the question of whether they would not invest had a senior personnel transfer taken place, were aggregated. 47% of all investors who expressed an opinion indicated that they would still invest in a company had a senior personnel transfer taken place which indicated that ex-auditor employment does not damage these investors' perceptions of auditor independence. Only 21% of the aggregated sample indicated that ex-auditor employment would deter the investors from investing, the rest of the aggregated sample remained neutral.

**H4 cannot be rejected, as employment of a former auditor in a senior management role has no influence on *the majority* of investor's perceptions of auditor independence.**

### *Summary of Descriptive Analysis*

After descriptively analysing the data received, it appears that the perceptions of the private investors are very similar to those of the institutional investors. As with the institutional investors, very few private investors admitted to examining these four auditor-client relationships in detail before investing. This lack of consideration for

auditor independence issues before investing could be due to the lack of available information for private investors, which was suggested by a number of respondents.

The survey for the private investors was very much shortened and simplified from the institutional investor survey and did not provide a point of comparison for every question (safeguards to auditor independence were not generally given to the private investors). However, the main questions in each section (as outlined in the previous chapter) were included in both surveys to retain a basis for comparison.

The main findings of the descriptive analysis are that investors appear to display more concern about the consequences of economic dependence and non-audit service provision than they do for long association and ex-auditor employment. These findings reflect those uncovered by the skewness of the data in the tests for normality (see Chapter Five).

## **6.5 Exploring Relationships: Univariate Analysis**

The second section of this chapter explores relationships between investor perceptions of auditor independence and the background variables employed in the study. The combination of univariate and multivariate analysis responds to Research Question 16, which asks whether the background variables affect investor perceptions of the four potentially independence-impairing auditor-client relationships.

### **Respondents' Accounting Qualifications**

The first background variable to be tested was whether accounting qualifications had any effect on perceptions of the four potentially independence-impairing auditor-client relationships. Reckers and Stagliano (1981) who argued that having accounting qualifications was related to less concern over auditor independence risks first tested accounting qualifications. However, Pany and Reckers (1983, 1984) and Bartlett (1993) have since rejected Reckers and Stagliano's (1981) arguments.

Mann-Whitney tests were conducted to identify whether there is a statistically significant difference in the perceptions of the four auditor-client relationships

between respondents with and without accounting qualifications. The test was conducted upon the institutional and private investor datasets separately and then the test was repeated upon a combined dataset of both the institutional and private investor perceptions. Results of the tests are displayed in Table 6.14:

**Table 6.14 Effect of Accounting Qualifications on Investor Perceptions of the Four Relationships**

	INSTITUTIONAL INVESTORS			PRIVATE INVESTORS			COMBINED		
	Mann-Whitney	Sig.	Phi**	Mann-Whitney	Sig.	Phi**	Mann-Whitney	Sig.	Phi**
<b>Ex-Auditor Employment</b>	1333.000	.329	N/A	1644.000	.000*	.367	7053.000	.000*	.289
<b>Long Association</b>	1369.000	.474	N/A	2843.000	.007*	.126	10790.500	.005*	.156
<b>Economic Dependence</b>	1072.000	.012*	.039	2988.500	.013*	.129	11368.000	.016*	.173
<b>Non-Audit Services</b>	1342.500	.290	N/A	3434.500	.114	.102	12145.000	.109	N/A

\* Significant at Alpha level of 0.05

\*\* For each significant result a Phi Statistic was determined to show the direction of the relationship by using a 2X2 Chi-Squared test.

In this test the four main variables (outlined in the methods chapter) were tested against the ‘qualifications’ variable (whether the respondents had accounting qualifications).

#### *Institutional Investors*

The results of the Mann-Whitney tests displayed in Table 6.14 show that institutional investors’ perceptions of the auditor-client relationships do not appear to be affected by whether or not the respondent has accounting qualifications, which supports the findings of Pany and Reckers (1983, 1984) and Bartlett (1993). However, a significant relationship was detected between institutional investors’ perceptions of economic dependence and whether or not the investor had accounting qualifications. As the Mann-Whitney test detected that the relationship between the two variables was significant, perceptions of economic dependence were then collapsed into two categories and used in a 2x2 Chi-Square test. The Chi-Square test also indicated that the relationship was significant and with the Phi statistic it was possible to determine that the relationship was positive. As was first argued by Reckers and Stagliano (1981), those institutional investors without accounting qualifications appear to be

more concerned about the potential consequences of economic dependence than institutional investors with accounting qualifications.

### *Private Investors*

In contrast to the results of the institutional investors, Mann-Whitney tests revealed a statistically significant relationship between private investors' perceptions of client employment of a former auditor, long association and economic dependence and respondents' possession of accounting qualifications.

The significant results of the private investor tests appear to confirm the earlier findings of Reckers and Stagliano (1981). It appears that those investors without accounting qualifications are the ones most concerned about ex-auditor employment, long association and economic dependence because they have the least understanding of these relationships and of how the accounting process works. It could also be argued that those with accounting qualifications (who were mainly chartered accountants) might be over confident in their colleagues' ability to remain independent. The positive direction of the relationship was confirmed by conducting a Chi-Square test, which also revealed the relationships to be significant. The Phi statistic proved that the relationships were all positive in nature, with the strongest relationship being between perceptions of ex-auditor employment and accounting qualifications (the Phi statistic can range from -1 to +1). It could be argued that ex-auditor employment is the least well known of the four auditor-client relationships and so might be the most dependent upon whether the respondent has accounting qualifications (which would help them understand the nature of the relationship).

In contrast to Reckers and Stagliano (1981), no significant difference was found in the perceptions of non-audit services and those investors with or without accounting qualifications. It is suggested that as the current research has been conducted in the wake of the (highly publicised) Enron scandal, a general awareness of how non-audit services could impair auditor independence now exists. This argument is further confirmed by the earlier descriptive analysis which revealed a high level of concern for the provision of non-audit services from both the private and institutional investors.

The institutional investors' perceptions were not as affected by accounting qualifications as the private investors' perceptions, this is perhaps because even the institutional investors who indicated that they had no accounting qualifications may still have a basic understanding of accounting in their positions as chief executives.

Finally, the combined dataset mirrors the results of the private investor tests. It appears that when the data from the institutional and private investors is combined, only perceptions of non-audit services are not affected by accounting qualifications. The general findings of the tests into the background variable, 'accounting knowledge', is that those without accounting qualifications appear to be more concerned about the independence issues which auditor-client relationships create than those with accounting qualifications. However, as the threat of non-audit service provision is more widely understood than the other auditor-client relationships, perceptions of non-audit service provision are not affected by whether the investor understands the accounting process.

### **Respondents' Employment History**

The respondents' employment history only relates to ex-auditor employment and is intended to test whether there is a relationship between those who have undertaken a personnel transfer themselves and perceptions of the process. Logical argument assumes that those who have undertaken a personnel transfer themselves would be less worried about the risks that ex-auditor employment causes for auditor independence than someone who has not experienced the process first hand. A Mann-Whitney test was used to identify a relationship between employment history (whether the respondent has moved from audit firm to client company) and perceptions of ex-auditor employment. As the minimum expected cell counts (5) of the Chi-Square test could not be met, a Mann-Whitney test was more appropriate for the investigation. Once again, the 'alumni threat' variable was used, but this time it was tested against whether or not the respondents had indicated that they had undertaken a personnel transfer.

Table 6.15 outlines the results to the Mann-Whitney test which focused on the relationship between perceptions of ex-auditor employment and employment history,

as with the accounting knowledge section, the tests were run separately first (on institutional investor perceptions and then on private investor perceptions) and then on the combined dataset:

**Table 6.15 Employment History**

	<b>Mann-Whitney</b>	<b>Sig.</b>
<b>Institutional Investors</b>	490.000	.023*
<b>Private Investors</b>	1644.000	.000*
<b>Combined</b>	2017.500	.002*

\* Significant at the 0.05 level

Table 6.15 shows that in all cases there is a significant relationship between the investors having personal experience of moving from audit firm to client company and their perceptions of the independence effects of such a transfer.

It was decided that the above relationships were worthy of further investigation. In order further to analyse the relationship, variables from the combined dataset were collapsed into two categories and a Chi-Square test was conducted upon the new data. The Phi-Statistic was positive, indicating that those who have not moved from audit firm to client company are more worried about the consequences of ex-auditor employment than those who have moved from audit firm to client company. This finding could suggest that those respondents who have undertaken the process of ex-auditor employment and who have seen how it works believe that personnel transfers do not impair auditor independence. However, the finding could also be the result of those who have undertaken the process of ex-auditor employment trying to defend their actions and not wanting to admit that the process undertaken could impair auditor independence in any way. Further analysis is conducted using t-tests and regression later in the chapter.

### **Respondents' Gender**

The gender variable was included to examine whether respondents' gender had any effect on perceptions of the four relationships. A number of studies have suggested that women are more risk-adverse than men (Hudgens and Fatkin, 1984 and Levin and Lauriola, 2001), in which case women ought to view ex-auditor employment, long tenure, economic dependence and non-audit service provision as a greater threat

to auditor independence than men. However, it should be noted that there is little consensus in the gender literature, with Masters (1989) arguing that there is no difference between men and women in their risk-taking and decision-making.

The main variables discussed in the previous chapter were used for this test; these were tested against whether the respondent was male or female. A Mann-Whitney test was used for the investigation. The results of the tests are detailed in Table 6.16:

**Table 6.16 Gender**

	INSTITUTIONAL INVESTOR		PRIVATE INVESTOR		COMBINED	
	Mann-Whitney	Sig.	Mann-Whitney	Sig.	Mann-Whitney	Sig.
<b>Ex-Auditor Employment</b>	257.000	.171	4858.000	.836	7588.000	.124
<b>Long Association</b>	267.000	.215	5142.000	.989	8319.000	.400
<b>Economic Dependence</b>	200.000	.112	4966.000	.380	8623.500	.497
<b>Non-Audit Service Threat</b>	272.000	.529	5091.000	.493	9083.000	.891

Table 6.16 shows that for both sets of investors (and the combined dataset), there was no statistically significant relationship between the respondents' gender and their perceptions of the four independence-impairing relationships. The significance levels were above the alpha level of .05 in every case. This finding suggests that as Masters (1989) uncovered, there is no difference between men and women in their perceptions of risk.

### **The Respondents' Age**

The age of the respondent was also identified as a factor which could affect investors' perceptions of the four auditor-client relationships. As with gender, the literature on age is vast and beyond this research project but Estes and Hosseini (1988) argued that as life experience grows, people become more confident. Estes and Hosseini's (1988) arguments could mean that the older respondents would be less concerned about the relationships than the younger ones. However, Lauriola and Levin (2001) found that young adults are less risk-adverse than older ones, suggesting that the younger respondents would be less concerned about the four relationships.

The four main variables were used in this test and were tested against the age category of the respondent. A Kruskal-Wallis test was used as it allows the use of more than two categorical groups. The results for the institutional investors, private investors and the combined dataset are detailed in Table 6.17:

**Table 6.17 Age**

	Chi-Square	Sig.	Highest Mean Rank
<b>INSTITUTIONAL INVESTORS:</b>			
Ex-Auditor Employment	2.329	.676	Over 60 yrs
Long Association	2.562	.633	Over 60 yrs
Economic Dependence	2.946	.567	41-50 yrs
Non-Audit Service Threat	1.289	.863	Over 60 yrs
<b>PRIVATE INVESTORS:</b>			
Ex-Auditor Employment	4.727	.316	Under 30 yrs
Long Association	4.777	.311	Over 60 yrs
Economic Dependence	9.745	.045	Over 60 yrs*
Non-Audit Service Threat	1.816	.770	Under 30 yrs
<b>COMBINED:</b>			
Ex-Auditor Employment	4.832	.305	Over 60yrs
Long Association	7.301	.121	Over 60 yrs
Economic Dependence	18.253	.001	Over 60 yrs*
Non-Audit Service Threat	.287	.991	Over 60 yrs

\* Significant relationship at .05 significance level

Table 6.17 shows that in general there was no significant relationship between the age of respondents and their perceptions of the four potentially independence-impairing auditor-client relationships. However, the table shows that there was a significant relationship for private investors between the age of the respondents and their perceptions of economic dependence. In this instance, the significance level was found to be below the alpha level of .05. Pallant (2005) argues that the highest mean rank corresponds to the highest score on the ordinal variable, in this case '3' which indicated agreement with the phrase *'I would not invest in a company if I perceived its auditors to be economically dependent upon it'*. As the group with the highest mean rank was over 60 years old, the result suggests that the older respondents are the most concerned about the risk that economic dependence poses for auditor independence. This finding appears to support Lauriola and Levin's (2001) findings.

In the case of the institutional investors, it is the older age groups that have the highest mean rank, suggesting that (although not significant), it was the older investors who

were most concerned about damaged auditor independence. In general more older people than younger people replied to the questionnaire aimed at institutional investors which could have affected the rankings.

Furthermore, the combined dataset shows that in the case of economic dependence it was the older age groups that displayed the most concern about auditor independence. It could be argued that the results are affected by the amount of older people who responded to the questionnaire in comparison to younger people. Returning to Table 6.2 shows that for both samples the majority of the respondents were in the older age groups.

### **The Respondents' Size of Investment Portfolio**

The respondent's size of investment portfolio was included in order to examine whether the size of the investors' shareholdings had any effect on their perceptions of the four main relationships. Pany and Reckers (1983) suggest that larger institutional investors may be more concerned about auditor independence than smaller ones and private investors, because those with larger investments have more to lose and are in the public eye.

To test for a relationship between portfolio size and perceptions of auditor independence, the four main variables were tested against the number of companies that the respondent invested in. A Spearman's Rank Order Correlation test was used to test the strength of relationship. Table 6.18 outlines the results of the test:

**Table 6.18 Size of Investment Portfolio**

	<b>Correlation Coefficient</b>	<b>Sig.</b>
<b>INSTITUTIONAL INVESTORS:</b>		
Ex-Auditor Employment	-.096	.428
Long Association	-.010	.933
Economic Dependence	-.091	.456
Non-Audit Service Threat	.043	.726
<b>PRIVATE INVESTORS:</b>		
Ex-Auditor Employment	-.042	.526
Long Association	-.006	.922
Economic Dependence	-.083	.198
Non-Audit Service Threat	-.055	.391

The results in Table 6.18 show that, despite Pany and Reckers' (1983) contentions, there is no relationship between the size of the investment portfolio and investor perceptions of the four relationships, as none of the significance levels were below the alpha level of .05. A possible reason for this insignificant finding could be that the recent accounting scandals (since Pany and Recker's research in 1983) have brought about an increased awareness of the problems produced by these independence-impairing relationships. It is not just the larger (and more experienced) investors who are now concerned about auditor independence issues, but investors of all sizes.

### **The Size of Institutional Investor**

The pilot survey suggested that the size of the institutional investor might affect perceptions of independence-impairing auditor-client relationships. There is no prior literature upon which to base this claim making it an experimental variable.

The four main variables were tested against the number of people that the institutional investor employs (this was taken as a surrogate variable for size of company using Needle's (2000) size classifications). A Mann-Whitney test was used. The results are outlined in Table 6.19:

**Table 6.19 Size of Institutional Investor**

	<b>Mann-Whitney</b>	<b>Sig.</b>
Ex-Auditor Employment	753.500	.877
Long Association	701.000	.381
Economic Dependence	739.500	.760
Non-Audit Service Threat	589.000	.043*

\* Significant at the 0.05 level

The results of the Mann-Whitney test in Table 6.19 show that in general there is no statistically significant relationship between the size of the institutional investors and their perceptions of auditor independence. However, this is not the case for institutional investors' perceptions of non-audit service provision, where the significance level is below .05. This relationship between size of institutional investor and perceptions of non-audit services was not identified by the pilot survey. As this area is previously unexplored in the literature, it is difficult to suggest a possible explanation for the result. However, it could be argued that larger institutional investors might perceive non-audit services as enhancing company performance. Perhaps larger institutional investors are more likely to employ non-audit services from their auditors than smaller institutional investors are.

### **6.6 Correlations between the Four Main Questions**

In the previous sections, each of the four potentially independence-impairing auditor-client relationships were examined in isolation. However, it is important to examine whether there is any correlation between the respondents' perceptions of all four of the relationships. For example, if a respondent was concerned about one of the auditor-client relationships, would it also be the case that he or she would show concern for the other three auditor-client relationships? A Spearman's Rank Order Correlation test was chosen to test for correlation between investors' perceptions of all four of the auditor-client relationships. Table 6.20 shows the results of the test for both the institutional and the private investors respectively:

**Table 6.20 Correlations between Themes**

<b>Spearman's Correlation (Sig. Level)</b>	<b>Institutional Non-Audit Services</b>	<b>Institutional Long Association</b>	<b>Institutional Ex-Auditor Employment</b>	<b>Private Economic Dependence</b>	<b>Private Non-audit Services</b>	<b>Private Long Association</b>	<b>Private Ex-Auditor Employment</b>
<b>Institutional Economic Dependence</b>	.042 (.663)	.030 (.756)	.061 (.529)	-.126 (.188)	-.046 (.630)	.096 (.321)	.036 (.708)
<b>Institutional Non-Audit Services</b>		.275* (.004)	.271* (.004)	.042 (.663)	-.058 (.544)	.014 (.889)	.053 (.581)
<b>Institutional Long Association</b>			.284* (.003)	.030 (.756)	-.034 (.725)	.063 (.515)	.094 (.330)
<b>Institutional Ex-Auditor Employment</b>				-.059 (.538)	.100 (.296)	-.035 (.718)	.031 (.751)
<b>Private Economic Dependence</b>					.316* (.000)	.266* (.000)	.280* (.000)
<b>Private Non-audit Services</b>						.260* (.000)	.321* (.000)
<b>Private Long Association</b>							.353* (.000)

\* Significant Correlation at 0.01 level

Table 6.20 shows that there is some degree of correlation, of perceptions of the four relationships within samples, but no correlation between samples (e.g. between institutional and private investor perceptions). The Spearman's Rank Order Correlation test also indicates the strength and direction of the relationships, as the size of correlation can range from between -1 to 1. The correlation's in Table 6.20 range from between .260 and .353, which Pallant (2005) describes as small to medium strength relationships. The correlation coefficients in Table 6.20 are positive, which suggests that investors who show concern for one of the relationships also show concern for the other auditor-client relationships (or vice versa).

As the Spearman's Rank Order Correlation test indicated that investor concern about the four relationships was correlated, each respondent's scores (from the four main questions) were added together in order to produce an overall 'auditor independence' score for each individual. As each of the variables had already been collapsed into three categories instead of five, each respondent would end up with a total 'auditor

independence score' out of 12, (four questions each rated out of 3). Respondents most concerned about the independence-impairing effects of the four relationships would receive a high score (having answered mostly three) whilst those who were least concerned about the relationships would have a low score (having answered mostly 1). The process of aggregating scores was undertaken for the results of both the institutional and the private investors separately. In adding up individual scores to create overall auditor independence scores, an (approximate) interval variable was created which meant that parametric t-tests could be conducted, using the auditor independence variable and re-testing it against the background variables (those which had two categories). As it is argued that parametric tests are more powerful than non-parametric tests, the parametric tests give greater confidence in the earlier results and ensure that no relationships are overlooked. Table 6.21 shows mean auditor independence scores for the institutional and the private investors:

**Table 6.21 'Mean' Level of Concern**

	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Standard Deviation</b>
Auditor Independence: <b>Institutional</b>	4	12	7.89	1.992
Auditor Independence: <b>Private</b>	4	12	8.66	2.68

The mean of the 'auditor independence' variable implies that (on average) private investors have a slightly higher level of concern than the institutional investors. Titard (1971) argues that institutional investors might be more concerned about auditor independence issues than private investors as the decisions they make affect many people, on the other hand private investors are the only ones affected by their decisions. However, private investors may have a reason to be more concerned about auditor independence issues because they have more personally at stake through making a bad investment.

Finally, it is worth noting that the difference in the means of the 'auditor independence' variable between the institutional and the private investors is very small, there is only a small difference in levels of concern for auditor independence between the two groups sampled.

## 6.7 T-Testing

An independent samples t-test was employed to examine whether there was any relationship between auditor independence perceptions and gender, accounting qualifications and personnel transfer (those background variables which have two categories). The objective of this t-test was to determine whether the mean scores of the two categories were significantly different. The results of the t-tests on auditor independence scores and the background variables are displayed in Table 6.22:

**Table 6.22 T-Testing Auditor Independence Variable**

	<b>T</b>	<b>Sig.</b>
<b>INSTITUTIONAL INVESTORS:</b>		
Gender	-.561	.576
Accounting Qualifications	-.766	.445
Personnel Transfer	-.572	.568
<b>PRIVATE INVESTORS:</b>		
Gender	.158	.875
Accounting Qualifications	3.235	.001*
Personnel Transfer	.073	.942

\* Significant Relationship at 0.05 level

### *Institutional Investors*

In the case of the institutional investors, there is no difference between men and women in their perceptions of auditor independence. Table 6.22 also shows that there is no difference between those with and those without accounting qualifications in their perceptions of auditor independence. Furthermore, there is no difference in auditor independence perceptions between those who have moved from audit firm to client company and those who have not.

### *Private Investors*

For private investors a statistically significant relationship was found between the auditor independence variable and whether or not the respondent has accounting qualifications. This result provides further support for the results of the earlier Mann-Whitney test which found a significant relationship between private investors' perceptions of ex-auditor employment, long association and economic dependence.

For further analysis of the relationship between auditor independence perceptions and accounting qualifications, an Eta Squared statistic was manually calculated. The Eta Squared statistic ‘represents the proportion of variance in the dependent variable [auditor independence] that is explained by the independent variable [accounting qualifications]’ (Pallant, 2005:208).

Equation 6.1 shows how the Eta Squared test was calculated:

**Equation 6.1 Eta Squared Calculation**

**Eta Squared Formula =** 
$$\frac{T2}{T2 + (N1+N2-2)}$$

**Relationship between auditor independence perceptions and accounting qualifications =**

$$\frac{10.465225}{10.465225 + (36+204-2)} = 0.042 * 100 = 4\%$$

As the Eta Squared statistic can range from 0 to 1, the result shows that the independent variable is having a relatively small effect on the dependent variable. In other words, 4% of the variance in auditor independence is explained by accounting qualifications, so having (or not having accounting qualifications) could be one factor which explains perceptions of auditor independence.

Finally, a Pearson Product-Moment Correlation test was employed to determine whether there was a correlation between the auditor independence perceptions of institutional investors and those of private investors. A parametric test was chosen, as both variables were (approximately) interval. The results of the Pearson Product-Moment Correlation test are shown in Table 6.23:

**Table 6.23 Correlation between Investor Perceptions**

<b>Pearson Correlation (Significance Level)</b>	<b>Private Auditor Independence Perceptions</b>
<b>Institutional Auditor Independence Perceptions</b>	.031 (.756)

As the significance of the correlation coefficient is .756 and higher than the alpha level of .05, there is no statistically significant relationship between institutional and private investor perceptions of auditor independence, confirming the results of the previous Spearman's Rank Order Correlation Test in Table 6.20.

### **6.8 Correlations within Themes**

Spearman's Rank Order Correlation tests were used to determine relationships within themes rather than relationships between themes which had previously been analysed. The beginning of each section in the questionnaire had a group of questions which were asking the respondent different questions around the same particular relationship. For example, the first part of each section asked whether the respondent considered that particular relationship before investing and whether, on discovering this auditor-client relationship, it would prevent them from investing in that company. Logically, if the respondents indicated that they did consider the particular relationship before investing then the respondents must be concerned about that relationship and their following answers would reflect this concern. It is thought that there will be a high degree of correlation within themes (as long as negatively worded questions were reversed). If correlation is present, then as with the previous section, scores within themes can be added together in order to produce a total score for each relationship. An approximate interval variable would be created which would allow for more powerful parametric testing.

#### *Ex-Auditor Employment*

Tables 6.24 and 6.25 show the results of the Spearman's Rank Order Correlation tests for the ex-auditor employment theme for both the institutional and private investors:

**Table 6.24 Institutional Investors: Ex-Auditor Employment**

<b>Spearman's Correlation (Significance Level)</b>	<b>Would not invest due to ex-auditor employment</b>	<b>Ex-auditor employment threatens auditor independence</b>	<b>Concerns about last audit conducted</b>	<b>Concerns about future audits conducted</b>
<b>Consideration of ex-auditor employment before investing</b>	.681** (.000)	.269** (.004)	.211* (.026)	.225* (.017)
<b>Would not invest due to ex-auditor employment</b>		.430** (.000)	.332** (.000)	.290** (.002)
<b>Ex-auditor employment threatens auditor independence</b>			.542** (.000)	.617** (.000)
<b>Concerns about last audit conducted</b>				.593** (.000)

\*\* Significant correlation at 0.01 level

\* Significant correlation at 0.05 level

**Table 6.25 Private Investors: Ex-Auditor Employment**

<b>Spearman's Correlation (Significance Level)</b>	<b>Concerns about last audit conducted</b>	<b>Concerns about future audits conducted</b>
<b>Would not invest due to ex-auditor employment</b>	.662** (.000)	.596** (.000)
<b>Concerns about last audit conducted</b>		.741** (.000)

\*\* Significant correlation at 0.01 level

The results in Tables 6.24 and 6.25 show that there is a strong positive correlation within themes for both the private and the institutional investors' responses to the ex-auditor employment questions. This positive correlation means that if investors agreed with one of the questions then they agreed with the others (or if they disagreed with one then they disagreed with the other questions). In terms of the institutional investors (Table 6.24) it appears that the highest correlations referred to the investors' responses to the question asking whether they considered ex-auditor employment before investing and whether they would not invest due to such a personnel transfer

having taken place. The two variables had a correlation coefficient of .681; Pallant (2005) argues that anything from .50 to 1 is a large correlation. By calculating the coefficient of determination, which gives an idea of how much variance the two variables share, it was found that the two variables shared 46% of their variance. This strong relationship is not surprising, as it is logical to assume that those who check for ex-auditor employment before investing are the ones most likely to be concerned about ex-auditor employment and would not invest should such a relationship be present.

The results of the private investor test (Table 6.25) show that the variables are highly positively correlated. The highest correlation is between concern for the last audit the ex-auditor conducted and concern for those audits conducted in the future. The correlation coefficient for these two variables is .741, with a coefficient of determination of 55%. This is a high correlation.

These positive correlations also confirm that the participants were consistent in their responses in the ex-auditor employment section of the questionnaire.

*Long Association*

Table 6.26 shows the results for the institutional investors of the Spearman’s Rank Order Correlation test for the questions in the long association section:

**Table 6.26 Institutional Investors: Long Association**

<b>Spearman’s Correlation (Significance Level)</b>	<b>Long association threatens auditor independence</b>
<b>Consideration of long association before investing</b>	.251** (.008)

\*\* Significant correlation at 0.01 level

Table 6.27 shows the results for the private investors of the Spearman’s Rank Order Correlation test for the questions in the long association section:

**Table 6.27 Private Investors: Long Association**

<b>Spearman's Correlation (Significance Level)</b>	<b>Long association threatens auditor independence</b>
<b>Consideration of long association before investing</b>	.454** (.000)

\*\* Significant correlation at 0.01 level

The results in Tables 6.26 and 6.27 show that the responses for both sets of investors are positively correlated. This positive correlation means that those who consider the length of the auditor-client relationship before investing also perceive a lengthy association as a threat to auditor independence (or vice versa). However, the results of the institutional investor test show a small correlation with the variables sharing only 6% of their variance. The private investors' responses have a medium correlation and share 21% of their variance. The private investors were slightly more consistent in their responses than the institutional investors were in the long association section.

### *Economic Dependence*

Table 6.28 outlines the results of the Spearman's Rank Order Correlation test for the institutional investors to the questions in the economic dependence section:

**Table 6.28 Institutional Investors: Economic Dependence**

<b>Spearman's Correlation (Significance Level)</b>	<b>Would not invest due to economic dependence</b>	<b>Economic dependence threatens auditor independence</b>	<b>Audit fees alone cause economic dependence</b>
<b>Consideration of economic dependence before investing</b>	.253** (.007)	.041 (.667)	-.027 (.777)
<b>Would not invest due to economic dependence</b>		.306** (.001)	-.007 (.942)
<b>Economic dependence threatens auditor independence</b>			.327** (.000)

\*\* Significant correlation at 0.01 level

Table 6.29 outlines the results of the Spearman's Rank Order Correlation test for the private investors to the questions in the economic dependence section:

**Table 6.29 Private Investors: Economic Dependence**

<b>Spearman's Correlation (Significance Level)</b>	<b>Would not invest due to economic dependence</b>	<b>Economic dependence threatens auditor independence</b>
<b>Consideration of economic dependence before investing</b>	.332** (.000)	.017 (.784)
<b>Would not invest due to economic dependence</b>		.262** (.000)

\*\* Significant correlation at 0.01 level

As with the other relationships, there is a positive correlation between both the private and institutional investors' responses to the questions within the economic dependence section. However, unlike the ex-auditor employment theme, these correlations tend to be small to medium. The results show that those who consider an auditors economic dependence before investing are also likely not to invest if economic dependence is present and believe that audit fees alone can cause economic

dependence. The respondents were consistent in their answers for the economic dependence section.

*The Threat of Non-audit Service Provision*

Table 6.30 outlines the results of the Spearman’s Rank Order Correlation test for the institutional investors to the questions in the non-audit service section:

**Table 6.30 Institutional Investors: Non-Audit Service Provision**

<b>Spearman’s Correlation (Significance Level)</b>	<b>Non-audit services impair auditor independence</b>
<b>Consideration of non-audit services before investing</b>	<b>.369** (.000)</b>

\*\* Significant correlation at 0.01 level

Table 6.31 outlines the results of the Spearman’s Rank Order Correlation test for the private investors to the questions in the non-audit service section:

**Table 6.31 Private Investors: Non-Audit Service Provision**

<b>Spearman’s Correlation (Significance Level)</b>	<b>Non-audit services impair auditor independence</b>
<b>Consideration of non-audit services before investing</b>	<b>.385** (.000)</b>

\*\* Significant correlation at 0.01 level

In both cases the variable concerning an investor considering levels of non-audit service provision before investing and the variable concerning whether non-audit service provision damages respondents’ perceptions of independence are positively correlated. The correlation coefficients for both sets of investors indicate a medium correlation between variables. Again, the participants have been proved consistent in their responses in the non-audit service section.

Whilst helping to give an overall picture of investor perceptions of each auditor-client relationship, these ‘bunches’ of similar questions at the beginning of each section in the questionnaire were also used as a test for reliability (as discussed in Chapter Five). ‘The reliability of your questionnaire is concerned with the consistency of responses to your questions’ (Saunders et al., 2000:307). As the Spearman’s Rank Order Correlation tests showed positive correlations between responses in each section, these positive correlations give some indication that the scales used to measure perceptions within the questionnaire were internally consistent.

The following section aggregates the questions within themes to create approximate interval variables which allow parametric testing to be conducted.

### **6.9 Parametric Testing Across Samples**

After reviewing the correlations of related questions within themes, in the majority of cases there was a positive correlation between the variables. Because positive relationships have been found within themes, a meaningful overall variable of investors’ perceptions could be created for each theme. Respondents’ scores for each of the questions answered within the themes were added to give an average level of investor concern for each theme. The scoring system created (approximate) interval variables which allowed for parametric testing.

In order to determine whether there was any correlation between the responses of the institutional investors and the responses of the private investors, a Pearson Product-Moment Correlation was conducted with the total variables from each theme. Since the variables were computed into an interval form, it was possible to use a parametric test rather than the Spearman’s Rank Order Correlation.

The results of the Pearson’s Product-Moment Correlation test are contained in Table 6.32:

**Table 6.32 Correlations between the two groups**

<b>Spearman's Correlation (Sig. Level)</b>	<b>Institutional Total Non-Audit Services</b>	<b>Institutional Total Long Association</b>	<b>Institutional Total Ex-Auditor Employment</b>	<b>Private Total Economic Dependence</b>	<b>Private Total Non-audit Services</b>	<b>Private Total Long Association</b>	<b>Private Total Ex-Auditor Employment</b>
<b>Institutional Total Economic Dependence</b>	.290** (.002)	.144 (.134)	.117 (.226)	-.004 (.968)	-.046 (.630)	-.066 (.495)	-.031 (.747)
<b>Institutional Total Non-Audit Services</b>		.251** (.008)	.161** (.093)	.031 (.749)	-.059 (.539)	.014 (.884)	.073 (.446)
<b>Institutional Total Long Association</b>			.385** (.000)	.121 (.212)	.067 (.486)	.122 (.207)	.138 (.151)
<b>Institutional Total Ex-Auditor Employment</b>				-.057 (.556)	.175 (.067)	.009 (.925)	.031 (.746)
<b>Private Total Economic Dependence</b>					.496** (.000)	.558** (.000)	.398** (.000)
<b>Private Total Non-audit Services</b>						.538** (.000)	.476** (.000)
<b>Private Total Long Association</b>							.550** (.000)

\*\* Significant correlation at 0.01 level

The results of the test suggest that there is some positive correlation within the samples, but there is no correlation in perceptions between the samples. In other words, there is no correlation between the perceptions of institutional investors and private investors. The strongest correlations were those of the private investors. For example, the long association variable and the economic dependence variable had a correlation coefficient of .558 and a shared variance of 31%. According to Pallant (2005) this is a large correlation. Furthermore, the long association variable and the non-audit service variable had a correlation coefficient of .538 with a shared variance of 29%; again, this is a large correlation.

The results of the Pearson Product-Moment Correlation in Table 6.32 show that the participants have been consistent in their responses. The results highlight that if a respondent was concerned (or not concerned) about one of the four auditor-client

relationships then that respondent was also likely to be concerned (or not concerned) about the other four relationships.

### 6.10 T-Testing

The overall variables created within themes were tested against the background variables with two categories. Results to the following tests are important because the results represent investor perceptions from a range of questions within themes rather than just the responses to one question. As the variables are now in an approximate interval form it was possible to use t-testing.

Results of the t-tests on institutional investor perceptions of the four auditor-client relationships are outlined in Table 6.33:

**Table 6.33 Institutional Investors: T-Test Results**

	T	Sig.
<b>Ex-Auditor Employment:</b>		
Accounting Qualifications	-.936	.352
Gender	-1.150	.253
Personnel Transfer	2.289	.024*
<b>Long Association:</b>		
Accounting Qualifications	-.876	.383
Gender	-.676	.500
<b>Economic Dependence:</b>		
Accounting Qualifications	2.348	.021*
Gender	.423	.673
<b>Non-Audit Service Threat:</b>		
Accounting Qualifications	-1.163	.247
Gender	.543	.563

\* Significant Relationship at 0.05 level

The results displayed in Table 6.33 show that there was no statistically significant relationship between ex-auditor employment and accounting qualifications or ex-auditor employment and gender. However, a statistically significant relationship was uncovered between institutional investors' perceptions of ex-auditor employment and whether or not they had, themselves, undertaken such a personnel transfer. There is a

positive relationship between the variables, which gives greater confidence in the results of the earlier Mann-Whitney test, and Chi-Square tests.

Further analysis of the relationship between employment history and ex-auditor employment perceptions was conducted using an Eta-Squared test. The results revealed an Eta-Squared value of 0.05, which means that only 5% of the variance in perceptions of ex-auditor employment can be explained by whether or not the respondent has undertaken such a personnel transfer. Pallant (2005) describes 0.05 as personal experience having a small effect upon perceptions of ex-auditor employment. However, the finding should still prove useful to policy-makers.

As with the earlier non-parametric tests conducted, the more powerful t-tests also highlight that there is no statistically significant relationship between institutional investors' perceptions of long association and gender or levels of accounting education. Further analysis revealed what a small effect gender and accounting qualifications had on perceptions of long association finding that the Eta-Squared value for accounting qualifications was 0.007. Accounting qualifications are responsible for just 0.7% of the variance in institutional investors' perceptions of long association. Gender is responsible for just 0.4% of the variance in perceptions of long association.

In terms of economic dependence, the results in Table 6.33 show that although no relationship was found between institutional investors' perceptions of economic dependence and gender a statistically significant relationship was found between perceptions of economic dependence and whether or not the respondent had accounting qualifications. In this case the t score is positive which indicates that those with no accounting qualifications are more concerned about the effects that economic dependence could have on auditor independence than those with accounting qualifications. The relationship between economic dependence and accounting qualifications confirms earlier non-parametric findings. The results of the Eta-Squared test suggest that accounting qualifications have a small to medium effect on perceptions of economic dependence with 5% of the variance in perceptions of economic dependence being explained by whether respondents' hold accounting qualifications. The result provides some support for Reckers and Stagliano's (1981)

work, which argued that those with the least knowledge of the audit function would express the greatest apprehension about auditor independence.

The results of the t-tests on perceptions of non-audit service provision in Table 6.33 support the results of the non-parametric tests which found no statistically significant relationship between institutional investors' perceptions of non-audit services and accounting qualifications or gender.

In summary, as with the non-parametric tests, the majority of the relationships tested were insignificant. However, parametric testing helped to uncover the positive relationship between ex-auditor employment and perceptions of personnel transfer. The same analysis will now be conducted upon private investor perceptions.

Results of the t-tests on private investor perceptions of the four auditor-client relationships are outlined in Table 6.34:

**Table 6.34 Private Investors: T-Test Results**

	t	Sig.
<b>Ex-Auditor Employment:</b>		
Accounting Qualifications	6.482	.000*
Gender	-.149	.881
Personnel Transfer	-.165	.869
<b>Long Association:</b>		
Accounting Qualifications	2.848	.007*
Gender	.415	.678
<b>Economic Dependence:</b>		
Accounting Qualifications	2.322	.021*
Gender	.004	.997
<b>Non-Audit Service Threat:</b>		
Accounting Qualifications	2.203	.029*
Gender	.039	.969

\* Significant Relationship at 0.05 level

As with the earlier non-parametric testing, the results of the t-testing in Table 6.34 showed that there is no relationship between private investors' gender and perceptions of ex-auditor employment. However, the t-test did not pick up the earlier non-

parametric finding that personal experience of ex-auditor employment affects perceptions of ex-auditor employment, this is perhaps due to the small number of private investors who indicated that they had experience of such a personnel transfer. As with the non-parametric test, a statistically significant relationship was found between private investors' perceptions of ex-auditor employment and accounting qualifications. The results confirm those of the Mann-Whitney tests.

Further analysis found that accounting qualifications have what Pallant (2005) describes as a large effect upon perceptions of ex-auditor employment, with the Eta-Squared value indicating that accounting qualifications are responsible for 15% of the variance in perceptions of ex-auditor employment.

As with the non-parametric tests, there was no relationship between private investor's perceptions of long association and gender. However, the results of the t-tests do highlight a statistically significant relationship between the private investors' perceptions of long association and accounting qualifications, confirming earlier findings. The Eta-Squared test showed that the effect of accounting qualifications upon perceptions of long association was small, around 3%.

As with the non-parametric tests, no relationship was found between the respondents' gender and perceptions of economic dependence. However, as picked up by the non-parametric test, a statistically significant relationship was found between private investors' perceptions of economic dependence and accounting qualifications. The Eta-Squared result highlights that accounting qualifications have only a small effect (2%) on perceptions of economic dependence.

No relationship was found between private investors' perceptions of non-audit service provision and investors' gender. However, along with the other three relationships, there was a statistically significant relationship between private investors' perceptions of non-audit service provision and accounting qualifications. The relationship was not uncovered by the non-parametric tests and should be treated with caution due to the very approximate nature of the interval variable created. The Eta-Squared value shows that accounting qualifications are only responsible for around 2% of the variance in perceptions of non-audit service provision.

The overwhelming finding of the private investors' section is that those with accounting qualifications are the ones who are least worried about the independence-impairing consequences of the four potentially independence-impairing auditor-client relationships.

The parametric tests supported the findings of the earlier non-parametric tests but also helped to uncover relationships which were not previously found.

### **6.11 Other Analyses**

A number of other analyses were conducted upon the data received from the surveys. The results of these analyses will be discussed in the following section.

#### **Ex-Auditor Employment**

A Spearman's Rank Order Correlation test was employed to analyse the suggested cooling-off periods in relation to the ex-auditor's previous and future positions. The objective of the test was to discover whether there was any correlation between responses in each of the situations given. For example, if the respondent indicates that it would be acceptable for the ex-auditors (having previously been engagement partners) to start their new job immediately would that also be the case in the other situations?

Results of the Spearman's Rank-Order Correlation test for institutional investors are contained in Table 6.35:

**Table 6.35 Institutional Investors: Cooling-Off Periods**

Spearman's Correlation (Significance Level)	Old position: Engagement team	New position: Preparation of company accounts	New position: Non-preparation of company accounts
Old position: Engagement partner	.650** (.000)	.543** (.000)	.486** (.000)
Old position: Engagement team		.778** (.000)	.750** (.000)
New position: Preparation of company accounts			.762** (.000)

\*\* Significant correlation at 0.01 level

Results of the Spearman's Rank-Order Correlation test for private investors are contained in Table 6.36:

**Table 6.36 Private Investors: Cooling-Off Periods**

Spearman's Correlation (Significance Level)	Old position: Engagement team	New position: Preparation of company accounts	New position: Non-preparation of company accounts
Old position: Engagement partner	.888** (.000)	.886** (.000)	.750** (.000)
Old position: Engagement team		.849** (.000)	.848** (.000)
New position: Preparation of company accounts			.797** (.000)

\*\* Significant correlation at 0.01 level

The results for institutional investors in Table 6.35 show that there is a large positive correlation between all four of the variables. The coefficient of determination for each of the relationships shows that the variables share between 24% and 60% of their variance. As the previous descriptive statistics showed that the institutional investors tended to opt for short cooling-off periods, it is likely that those who indicated a short

cooling-off period in one situation also indicated a short cooling-off period for the other situations.

The results for private investors in Table 6.36 also show that there is a large positive correlation between the four variables but that the strength of these relationships is greater than those of the institutional investors. The coefficients of determination ranged from around 56% shared variance to 79%. As with the institutional investors, the descriptive statistics showed that private investors often opted for the shorter cooling-off periods, which is likely to mean that those who opted for a short cooling-off period in one situation indicated the same in the other three situations.

As the Spearman's Rank-Order Correlation test indicates a strong relationship between the four variables for both the private and institutional investors, an approximate interval variable was created from adding up each individual's scores for the four situations, giving each respondent a score out of 28. Those respondents most worried about the effects of ex-auditor employment on auditor independence would have high scores and those least worried about its effects on auditor independence would have lower scores. These scores could then be tested against the background variables using a parametric rather than a non-parametric test. T-testing was used.

However, in the case of the institutional investors, no relationship was found between the respondent's total score for time lapse and gender, level of accounting qualifications and whether or not the respondent had undertaken a personnel transfer. Therefore, having undertaken a personnel transfer does not necessarily mean that the respondent would be in favour of ex-auditors leaving their firm and joining the client company immediately.

Unlike the institutional investors, there was a statistically significant relationship between private investors' total time lapse scores and their level of accounting qualifications. No relationship was found between total time lapse scores and the gender of the respondent or whether or not they had undertaken a personnel transfer themselves.

The results of the independent t-test for total time lapse and the respondent's accounting qualifications gave a t-score of -6.821 with a significance level of .000. The result shows that there is a statistically significant difference between the total time lapse scores for those with accounting qualifications and those without them. The result of the Eta-Squared calculation shows that 16% of the variance in total time lapse (the independent variable) is explained by accounting qualifications (the dependent variable), described by Pallant (2005) as a large effect. The relationship uncovered is a negative one, meaning that those with no accounting qualifications tended to be the ones to opt for the shorter cooling-off periods (before the ex-auditor could join the client company). These results are interesting as earlier tests implied that those without accounting qualifications tended to be the most worried about ex-auditor employment. One possible explanation for the negative relationship could be that those investors who do not understand the accounting process well (those without accounting qualifications) do not understand the reasons for enforcing a cooling-off period.

However, this argument does not seem to apply to the institutional investors, whose perceptions do not appear to be affected by accounting qualifications. As stated earlier, those institutional investors who do not have accounting qualifications are still more likely to have a greater understanding of auditor independence, due to their position than are private investors without accounting qualifications. Not having an understanding of accounting is not likely to affect institutional investor perceptions of auditor independence in the same way that it affects private investors who do not have accounting qualifications.

#### *Safeguards against the Threat of Ex-Auditor Employment*

As above a Spearman's Rank Order Correlation test was run on the results to the question which examined the suggested safeguards against the threat of ex-auditor employment. This question was only included in the institutional investors' survey, and was omitted from the private investor survey in order to shorten and simplify it. Earlier descriptive analysis identified that the most popular safeguards against the threat of ex-auditor employment were systematic staff rotation within audit firms and subsequent reviews of the last audit conducted by the departing member of staff. The

Spearman's Rank Order Correlation test was employed to identify whether there was any correlation between perceptions of the five suggested safeguards against ex-auditor employment. For example, if a respondent was in favour of one safeguard, were they in favour of all of the safeguards?

The results found that there was a medium positive correlation of .420, significant at the 0.01 level, between an extended 'cooling-off' period and a total ban on such transfers; this is a shared variance of 18% (Eta-Squared). This is an unexpected result, as if there was a total ban on ex-auditor employment there would be no need for an extended cooling-off period. It is possible that this result suggests that those respondents who are not in favour of a total ban are also not in favour of an extended cooling-off period. This suggestion is supported by the earlier descriptive analysis which suggested that institutional investors are satisfied with current safeguards and would not be in favour of further regulations.

The only other correlation found by this Spearman's Rank Order Correlation test was between systematic changes to the audit firm's methodology and a subsequent review of the ex-auditor's last audit. This was a small positive correlation of .203, significant at the 0.05 level. The Eta-Squared result indicates that these two variables have 4% shared variance.

The results of this Spearman's Rank Order Correlation test on safeguards against the threat of ex-auditor employment show that a respondent who is in favour (or not in favour) of one of the safeguards may also be in favour (or not in favour) of the rest of the safeguards. There is divided opinion over the safeguards against ex-auditor employment. This finding supports the results of the descriptive analysis which found that the institutional investors were mostly satisfied with the safeguards which were already implemented (ones which do not increase the burden of regulation upon companies) and not in favour of those which would increase regulations upon companies. It appears that although the institutional investors would not want their investment risked by impaired auditor independence, the institutional investors are unlikely to want to burden the companies which they invest in with further regulations which may hinder company performance.

## Non-Audit Service Threat

A Spearman's Rank Order Correlation test was conducted upon the individual non-audit services which had been presented to the institutional investors with the intention of the investors indicating whether they perceived each service to detract from auditor independence. The objective of the test was to determine whether those who perceived one non-audit service as independence-impairing also perceived the others as independence-impairing. The results are presented in Table 6.37 and show a high correlation between the individual services. These correlations tended to be positive and weak to medium. There were no negative correlations between services. The results show that institutional investors are consistent in their opinions of non-audit services and that generally if they perceive one non-audit service to detract from independence then they perceive the other non-audit services to detract from independence also.

**Table 6.37 Institutional Investors: Individual Non-Audit Services**

Spearman's Correlation (Significance Level)	Info Systems Design	Valuation of Assests/Libs	Actuarial	Internal Audit	HR	Investment Advice	Legal Advice	Expert Advice	Tax
Bookkeeping	.398* (.000)	.309** (.001)	.185 (.054)	.232* (.015)	.039 (.691)	.100 (.300)	.023 .815	.054 .574	.085 .380
Info Systems Design		.249** (.009)	.287** (.002)	.120 (.212)	.240* (.012)	.207 (.030)	.217* (.023)	.236* (.013)	.160 (.095)
Valuation of Assests/Libs			.565** (.000)	.077 (.422)	.062 (.523)	.256** (.007)	.216* (.023)	.135 (.159)	.130 (.177)
Actuarial				.181 (.059)	.220* (.021)	.279* (.003)	.318** (.001)	.080 (.403)	.123 (.199)
Internal Audit					.153 (.111)	.110 (.253)	.130 (.176)	.167 (.081)	.240* (.012)
HR						.441** (.000)	.567** (.000)	.233* (.014)	.173 (.071)
Investment Advice							.576** (.000)	.330** (.000)	.207* (.030)
Legal Advice								.451** (.000)	.273* * (.004)
Expert Advice									.538* * (.000)

\* Significant correlation at 0.05 level

\*\* Significant correlation at 0.01 level

Finally, as with ex-auditor employment, the safeguards against the non-audit service threat were examined. This was done using a Spearman's Rank Order Correlation test

and the purpose was to uncover whether those who were in favour of one safeguard were in favour of the others. The descriptive statistics revealed strengthened audit committees and better justification in the annual report of the need for non-audit services as the most popular safeguards. However, as with ex-auditor employment those, which were perceived to burden companies too much, were the least popular with institutional investors. The question on safeguards against non-audit services was only included in the institutional investor survey. Results to the Spearman's Rank order Correlation test are displayed in Table 6.38:

**Table 6.38 Institutional Investors: Safeguards against Non-Audit Services**

<b>Spearman's Correlation (Significance Level)</b>	<b>More Powerful Audit Committees</b>	<b>Non-audit work to tender</b>	<b>Better justification in annual report of need for non-audit services</b>	<b>Greater shareholder power</b>
<b>Prescribed ratio of audit fee:non-audit</b>	.202* (.033)	.190* (.046)	-.002 (.980)	.013 (.889)
<b>More Powerful Audit Committees</b>		.079 (.412)	.312** (.001)	-.004 (.971)
<b>Non-audit work to tender</b>			.396** (.000)	.146 (.128)
<b>Better justification in annual report of need for non-audit services</b>				-.023 (.810)

\*Significant correlation at 0.05 level

\*\* Significant correlation at 0.01 level

The results in Table 6.38 show that most of the suggested safeguards are positively but weakly correlated. In general, those in favour of one safeguard were in favour of the others (or vice versa). However, although significant these correlations were weak.

### **Levels of Accounting Information Consulted Before Investing**

The respondents were asked which sources of accounting information they consulted before investing in their chosen companies. From the list that was given the investors

had to indicate whether they consulted each source thoroughly, briefly or if they did not consult it at all. This question was included to uncover whether there was a relationship between perceptions of the four independence-impairing relationships and how much information was consulted before the respondent invested. Those who consult a large amount of information before investing might be the ones who are most concerned about auditor independence and want as much information as possible before they invest.

The sources of accounting that investors consult are reported in Table 6.39, (some of the following results were subject to missing values):

**Table 6.39 Sources of Accounting Information Read before Investing**

	Institutional Investors			Private Investors		
	Thoroughly	Briefly	Not at all	Thoroughly	Briefly	Not at all
<b>Company Report</b>	67%	25%	6%	34%	56%	7%
<b>Financial Press</b>	60%	34.5%	3%	43%	48%	6%
<b>Summary Financial statement</b>	50%	25%	20%	N/A	N/A	N/A
<b>Preliminary Announcements</b>	57%	28%	10%	N/A	N/A	N/A
<b>Interim financial statements</b>	54%	34.5%	7%	N/A	N/A	N/A
<b>Stockbrokers reports</b>	57%	32%	8%	24%	40%	32%
<b>TV Media</b>	11.5%	29%	54%	14%	42%	39%
<b>Computer software</b>	30%	26.5%	38%	N/A	N/A	N/A
<b>Share Prices</b>	69%	22%	5%	N/A	N/A	N/A
<b>Friends</b>	4%	19.5%	70%	5%	29%	61%
<b>Merger Reports</b>	18%	28%	49%	N/A	N/A	N/A

*Institutional Investors*

Table 6.39 shows that the company report and the financial press were the sources of information consulted most thoroughly by institutional investors before making investment decisions. Friends and relatives were the least frequently consulted. Table 6.39 shows that institutional investors tend to consult a large amount of accounting literature thoroughly before making investment decisions.

*Private Investors*

Private investors were presented with a shorter list of accounting information. Table 6.39 shows that the company report, financial press and stockbrokers' reports are the sources of accounting information most often consulted by private investors. However, in each case the investors admitted to reading these sources 'briefly' rather than 'thoroughly'. Consultation with friends before investing was found to be the least likely method resorted to before investing. In contrast to institutional investors, private investors do not thoroughly consult vast amounts of information before making investment decisions, with one investor admitting that she made her decisions based upon whether the letter headed paper which each company used to communicate with her was of good quality! This supports Lee and Tweedie's (1976) finding that those without a good understanding of accounting do not read or understand sources of accounting information as well as those with an accounting background (the institutional investors).

A Spearman's Rank Order Correlation test was employed to test the strength of the relationships between the sources of information. Results are detailed in Tables 6.40 and 6.41.

**Table 6.40 Institutional Investors: Sources of Accounting Information**

Spearman's Correlation (Significance Level)	Press	Summary Financial Statements	Preliminary Reports	Interim Reports	Stockbroker	Media	Computer	Share Prices	Friends	Merger Reports
Company Report	.340** (.000)	.203* (.036)	.268** (.005)	.405** (.000)	.110 (.255)	-.037 (.705)	-.077 (.432)	.124 (.200)	-.137 (.160)	.305** (.001)
Press		.260** (.007)	.391** (.000)	.449* (.000)	.245* (.010)	.245* (.011)	.277** (.004)	.247** (.004)	.071 (.470)	.317** (.001)
Summary Financial Statements			.300** (.002)	.269** (.005)	-.065 (.503)	.155 (.110)	.209* (.030)	.250** (.010)	.106 (.279)	.207* (.033)
Preliminary Reports				.692* (.000)	.477** (.000)	.019 (.844)	.246* (.011)	-.059 (.549)	-.059 (.549)	.246* (.011)
Interim Reports					.492** (.000)	.062 (.527)	.300** (.002)	.207* (.032)	-.085 (.388)	.286** (.003)
Stockbroker						.065 (.506)	.268** (.005)	.327** (.001)	.001 (.992)	.107 (.274)
Media							.187 (.054)	.149 (.128)	.089 (.366)	.104 (.287)
Computer								.338** (.000)	-.014 (.889)	.146 (.133)
Share Prices									-.042 (.671)	.224* (.021)
Friends										.199* (.041)

\*Significant correlation at 0.05 level

\*\*Significant correlation at 0.01 level

Table 6.40 shows that many of the sources of accounting information have small positive correlations between them. This could mean that institutional investors who consult the company report before investing also consult the financial press, summary financial statements, preliminary announcements, interim financial statements and merger reports. These results highlight the wide range of sources of information which institutional investors consult before investing. Consultation of friends and TV media appeared to show the least correlation with the other sources of accounting information, this finding was also highlighted by the descriptive statistics which found these two sources to be the least consulted. Table 6.41 displays the results for the private investors:

**Table 6.41 Private Investors: Sources of Accounting Information**

<b>Spearman's Correlation (Significance Level)</b>	<b>Press</b>	<b>Stockbroker</b>	<b>Media</b>	<b>Friends</b>
<b>Company Report</b>	.337** (.000)	.302** (.000)	.128* (.047)	.065 (.318)
<b>Press</b>		.302** (.000)	.264** (.000)	.072 (.264)
<b>Stockbroker</b>			.239** (.000)	.104 (.108)
<b>Media</b>				.276** (.000)

\* Significant correlation at 0.05 level

\*\*Significant correlation at 0.01 level

Table 6.41 highlights small positive correlations between the sources of accounting information consulted before investing. As the descriptive statistics showed that the majority of private shareholders consulted most of the sources briefly before investing, it is likely that these correlations show that those investors who consult one of the sources of information are also likely to consult the others before investing. Again, as with the institutional investors, consultation with friends/family before investing was the least popular source of information.

As the Spearman's Rank Order Correlation test showed that the majority of the sources of accounting information were correlated, it was decided that the respondent's results for each source of information could be added up (as previously

explained) in order to get an approximate interval variable. Those who read many items thoroughly would have a high score, whilst those who did not read much before investing would have a low score. This new variable created, called 'total accounting info', was tested against the results to the four main questions in each section in order to test whether the levels of accounting information consulted before investing were related to perceptions of auditor independence. A Kruskal-Wallis test was used.

The results of the Kruskal-Wallis test for the institutional investors showed no significant relationships between perceptions of the four auditor-client relationships and the levels of accounting information consulted before investing. The Kruskal-Wallis test provides a mean rank for each of the groups included in the test, in this case, the groups were those who agreed, disagreed and were neutral to the four main questions on independence concerns. Pallant (2005) explains that the Kruskal-Wallis test highlights which group had the highest overall ranking and this highest ranking will refer to the highest score on the interval variable. In each case, the group who disagreed to the questions had the lowest score on the interval variable. For example, in terms of ex-auditor employment, those who disagreed that this practice impairs auditor independence had the lowest score for total accounting information (this means that they were the ones who read the least before investing). This was also the case for the other three relationships and would suggest that those who read the least before investing are the ones least concerned about the four potentially independence-impairing relationships. However, caution must be expressed in these results, as none of the relationships were significant.

The results of the private investors were similar to those of the institutional investors. However, the relationship between levels of accounting information consulted and the threat of non-audit services was found to be significant. This significant relationship means that the private investors who read the least before investing are the ones who are least concerned about the threat which non-audit service provision could have on auditor independence (the Kruskal-Wallis test indicated that the 'strongly disagree' group had the highest mean rank of 214.38 with a significance level of .003). This finding supports the argument that those who are most worried about the independence-impairing relationships are the ones who will read most widely before

investing. Those who do not consult sources of accounting information thoroughly before investing are the ones least concerned about auditor independence issues.

A number of other relationships were also explored with the 'total accounting info' variable. For example, Lee and Tweedie (1976) suggest that those without accounting qualifications do not read and understand accounting information as well as those who do have accounting qualifications (Bartlett and Chandler, 1997, also addressed the issue of respondents' accounting experience). This relationship was tested using a Mann-Whitney test on the combined data of the institutional and private investors (the two data sets were put together combining only those sources of accounting information included in both questionnaires). The results of the test revealed a Mann-Whitney statistic of 9412.500 and a significance level of .001. As the significance level is less than .05 it is reported that there is a significant difference in readership of accounting information between those with and those without accounting qualifications.

Using the combined data set of institutional and private investor information it was also possible to test whether being an institutional investor or being a private investor had an affect on readership of accounting information. A Mann-Whitney test was employed to investigate the relationship and produced a Mann-Whitney statistic of 8905.500 and a significance level of .000. As the significance level was below .05, it is possible to conclude that there is a significant difference between institutional and private investors in their readership of accounting information. This difference in readership was highlighted by the descriptive statistics which showed that private investors tended to read sources of accounting information briefly compared to the institutional investors who claimed to read accounting information thoroughly.

Lee and Tweedie (1975) and Bartlett and Chandler (1997) both argue that males tend to read accounting information more thoroughly than females do. Again, this relationship was tested using a Mann-Whitney test, but no significant difference was found (at the 0.05 level) in the readership of accounting information between males and females for either private or institutional investors (using the combined data set of institutional and private investors the test gave a Mann-Whitney statistic of 6921.500 and a significance level of .058).

The combined data set of institutional and private investor information was also used to determine whether having undergone a personnel transfer of the type outlined in the current study affected readership levels of accounting information. The Mann-Whitney test produced a Mann-Whitney score of 2261.500 with a significance level of .094. These results indicate that there is no difference between those who have undertaken a personnel transfer and those who have not undertaken a personnel transfer in their readership of accounting information.

Finally, Bartlett and Chandler (1997) suggest that the size of an investor's portfolio does not appear to impact on the degree to which accounting information is read. This suggestion was re-tested in the current study using a Pearson's Product-Moment Correlation test in order to determine whether there was a relationship between portfolio size and the extent of accounting information consulted. It would be expected that a higher readership of financial statements would be associated with increased portfolio size. In both the case of the institutional investors and the private investors, no significant correlation was found between the two variables, confirming Bartlett and Chandler's (1997) suggestions.

## **6.12 Comparison of Institutional and Private Investors**

The focus of the current research was on two different groups of UK investors, institutional and private investors. Unlike previous studies in the field of auditor independence, the current study recognises that the two groups of investors have very different demographics and objectives/motives for investing. These differences could cause institutional and private investors to view the threat of economic dependence, non-audit service provision, long association and ex-auditor employment in different ways. The current study recognises that it could be wrong to classify investors into one group, assuming their perceptions to be identical and explores the similarities and differences that the two groups of investors displayed in their responses to the survey. The results of the comparison between institutional and private investors (not previously focused on by similar UK studies) will be outlined in the following section.

In general, both groups of investors agreed that ex-auditor employment and long association did not affect their perceptions of auditor independence as much as the threat of economic dependence and non-audit service provision did. Further analysis of the differences between institutional and private investor perceptions was made possible through the creation of a combined dataset of both surveys containing just the questions (and responses) which were included in both versions of the questionnaire. Mann-Whitney tests (one of the most powerful non-parametric tests) were then employed to determine whether there was a statistically significant difference between institutional investors' perceptions and private investors' perceptions of the four auditor-client relationships. Some differences were observed between the two groups' responses. Table 6.42 shows the results of these tests:

**Table 6.42 Comparison of Institutional and Private Investor Perceptions**

	<b>Mann-Whitney</b>	<b>Sig.</b>	<b>Phi</b>
Ex-Auditor Employment	11719.000	.026*	-.127
Long Association	12112.000	.039*	-.132
Economic Dependence	11552.000	.002*	-.199
Non-Audit Service Provision	13333.000	.305	-.110

\* Significant at Alpha level of 0.05

Table 6.42 shows that there was a statistically significant difference between the perceptions of the private and institutional investors concerning ex-auditor employment, long association and economic dependence. In order to determine the strength and direction of these statistically significant relationships, the dependent variables employed were appropriately collapsed and entered into a 2X2 Chi-Squared test. The Phi Statistic revealed a negative relationship in all cases, which confirms the earlier suggestion (from the overall 'auditor independence scores') that the institutional investors are less concerned about the independence-impairing nature of the relationships than the private investors (fewer of whom had accounting qualifications and so may have displayed more concern due to their lack of understanding of the auditor-client relationships).

The current study suggests that private investors are more concerned about auditor independence issues than institutional investors (not only due to their general lack of understanding of the accounting process) but because the investors themselves stand

to lose personally through a breach in independence (such as an Enron style collapse), which is not the case for the institutional investors (even though they deal with far more money than private investors). Furthermore, a private investor's income could depend upon the investments they make. Differences in perceptions between institutional and private investors could be explained by the different objectives which the two groups have for investing and the differences in the standard of individuals' accounting education. In addition, it is likely that institutional investors have access to inside information and contact with the auditors which private investors would not have. The institutional investors would also have more advice from a variety of sources before making investment decisions. However, private investors might have to make investment decisions themselves with less available information.

The results outlined in Table 6.42 show that there is no statistically significant difference in the perceptions of non-audit service provision between institutional and private investors. This finding supports earlier arguments that high-profile accounting scandals have created a general concern about the effects of non-audit service provision on auditor independence which no longer depends on the type of investor or the qualifications which the individual investor possesses.

Another such difference between institutional and private investors concerns accounting qualifications. Whilst accounting qualifications had only a slight effect on institutional investors' perceptions of the four variables, it was found significantly to affect private investors' perceptions of the potentially independence-impairing auditor-client relationships. As explained earlier, this difference between institutional and private investors could be due to the differing audiences of the two questionnaires. Whilst the institutional investors surveyed were all chief executives, the private investors were not targeted in such a specific way and the demographics of the private investors are likely to be much broader than those of the institutional investors. Whilst chief executives are likely to confront accounting issues on a regular basis as part of their job, regardless of whether they have accounting qualifications or not, private investors might not confront accounting issues in their daily lives. The difference in demographics between the two groups of respondents could have affected the results because those institutional investors who indicated that they did not have accounting qualifications are still likely to have a better understanding of the

four auditor-client relationships than private investors without accounting qualifications. The differing demographics of institutional and private investors could explain why accounting qualifications had a much greater effect on private investors' perceptions than they did on institutional investors' perceptions.

The parametric testing across samples highlights that there is no correlation between the perceptions of the institutional investors and the perceptions of private investors of the four potentially independence-impairing auditor-client relationships.

Furthermore, analysis focusing on the level and types of accounting information read before making investment decisions showed that institutional investors read more widely before investing than private investors do. It is possible that institutional investors may have better access to accounting information than private investors or that institutional investors have a greater understanding/interest in these sources of information.

The evidence discussed in this section shows that in general the two sets of investors are in agreement about which types of auditor-client relationships they perceive to impair auditor independence. However, in-depth analysis shows that private investors in general display more concern for each of the relationships than institutional investors do, with the exception of the more widely understood threat of non-audit service provision.

### **6.13 Further Analysis of Relationships: Regression Analysis**

As discussed in the previous chapter, the data analysis thus far has been univariate in nature, meaning that the effects of the independent variables on the dependent variable have been examined one at a time, rather than altogether. Multivariate regression analysis allows the examination of all the independent variables within one model, and helps to determine which independent variable accounts for the greatest variance in the dependent variable. For the current study, various regression techniques were employed to further the study and examine the interrelationships among the given set of independent variables. The main advantages of employing regression analysis in the current study was to help to determine how well the

background variables can predict perceptions of the four auditor-client relationships and the contribution which each of the background variables makes to the regression model.

Three different types of regression analysis were appropriate for use in the current research, ordinal regression, multiple regression and logistic regression. The applicability of these different regression techniques to the current data were discussed in the previous chapter. In practice, multiple regression was found to be the most useful of the three regression techniques even though the current data does not meet all of the assumptions upon which multiple regression is based. For example, multiple regression assumes that the data is normally distributed. However, the current data has been proved to be not normal in nature but the large sample size created through the combined data set of the two surveys means that the tests should have been robust to this modest violation of normality. Furthermore, it should be noted that some information may have been lost as the multiple regression model would have treated the ordinal dependent variables as interval level data. It is important that these limitations of the multiple regression technique are acknowledged from the outset.

Despite these limitations, the multiple regression technique was more applicable to the data than ordinal regression, as in many cases the assumption of parallel lines was not met by the current data. Multiple regression was also more applicable to the current data than the logistic regression model which involves reducing the dependent variable into only two categories and involves the loss of a large amount of information (most of the current dependent variables have five categories).

Throughout the following section on multivariate analysis, the three different regression models will be referred to and their limitations and the violations of assumptions will be acknowledged.

#### *Effects of the Background Variables upon Perceptions of the Four Relationships*

Six of the current study hypotheses relate to background variables. So far the background variables have been treated in isolation, but the following multiple

regression model was able to incorporate all six independent variables into one model. The six independent background variables were, the type of investor (private/institutional), whether the investor had accounting qualifications, the gender of the investor, the age of the investor, whether or not the investor had undertaken a personnel transfer and the size of the investor's portfolio. Each of these six independent variables were included in both questionnaires and meant that the combined data set, which contained a larger amount of data, could be used for the regression analysis. Four different regression models were developed using the six independent variables. Table 6.43 shows the results of the Multiple Regression analysis on the four different dependent variables (the auditor-client relationships):

**Table 6.43 Multiple Regression on the Four Auditor-Client Relationships**

	Economic Dependence		Non-Audit Services		Long Tenure		Ex-Auditor Employment	
	S.C-Beta*	Sig.	S.C-Beta*	Sig.	S.C-Beta*	Sig.	S.C-Beta*	Sig.
Type of Investor	-.112	.108	-.021	.752	-.025	.724	-.258	.000**
Qualifications	.089	.139	.102	.090	.167	.006**	.287	.000**
Gender	-.066	.237	-.012	.823	-.009	.870	-.025	.632
Age	.111	.068	-.018	.757	.065	.295	.073	.194
Personnel Transfer	-.010	.868	.013	.808	.029	.623	.006	.912
Size of Portfolio	-.088	.152	-.083	.186	-.064	.303	.023	.689

\*Standardised Coefficients

\*\*Significant at the 0.05 level

### *Evaluating the Multiple Regression Models*

Before discussing the findings of the multiple regression models it is important to acknowledge some of the assumptions which Multiple Regression is based upon. Firstly, a check for multicollinearity was run. The purpose of the check was to make sure that the independent variables displayed at least some relationship with the dependent variable but not too much of a relationship with each other. In all four of the models, none of the independent variables were too highly correlated and each of the independent variables were related (mainly very weakly) to the dependent variables. The Tolerance and Variance Inflation Factors which SPSS also gives confirmed that no multicollinearity was present in the tests as none of the Tolerance figures were below .10 (the recommended level) and none of the Variance Inflation

Factors were above 10, (it is recommended that the Variance Inflation Factor does not exceed 10). These findings give some reassurance that multicollinearity is not present in the models.

For each model an R-Square value was also given. R-Square indicates how much of the variance in the dependent variables (the four auditor-client relationships) is being explained by the model of independent variables. The results showed that the economic dependence model explains 8% of the variance in perceptions of economic dependence, the non-audit services model explains 2% of the variance in perceptions of non-audit services, the long tenure model explains 6% of the variance in perceptions of long tenure and the ex-auditor employment model explains 22% of the variance in perceptions of ex-auditor employment. As the R-Square results appear to be quite low, it is concluded that other factors (apart from the six background variables) are having an influence on perceptions of the four auditor-client relationships. The ex-auditor employment model is the model which best predicts the factors which influence perceptions of this auditor-client relationship.

Finally, the models were tested for statistical significance, each of the models were found to be statistically significant except for the non-audit services model. The non-audit services model may not have reached statistical significance because the R-Square value shows that it can only predict 2% of the variances in perceptions of non-audit services. It is clear that many other factors affect how non-audit service provision is perceived (which has also been suggested by the results of the univariate analyses).

#### *Evaluation of the Independent Variables*

The results from the multiple regression models confirm the findings of the earlier univariate analysis in terms of the direction of each of the relationships. Each of the four models shows that type of investor has a negative effect on the four auditor-client relationships, which means that institutional investors are the least concerned about the relationships. The multiple regression models also show that qualifications has a positive relationship with the dependent variables, which means that those without accounting qualifications are the ones most concerned about the auditor-client

relationships. The only other constant relationship across the four dependent variables was the negative relationship with gender, which implies that men are more concerned about auditor independence than women are.

In taking each of the four multiple regression models in turn, the standardised coefficients can be used to show which of the six independent variables makes the strongest unique contribution to the dependent variable. In terms of the economic dependence model, type of investor appears to make the strongest unique contribution to predicting perceptions of economic dependence, with age and qualifications making the second and third strongest unique contributions. However, unlike the univariate analysis, it appears that they do not make statistically significant unique contributions (this could be due to the loss of information caused by treating an ordinal variable as interval). The same information was also entered into an ordinal regression model and as with the multiple regression model, the Pseudo R-Square figure showed that the model explained approximately 8% of the variances in economic dependence (an R-Square measure cannot be calculated for an ordinal regression model so a 'pseudo' R-Square measure, serving the same function as an R-Square measure but calculated differently, is used instead). The model also found type of investor to be making the strongest unique contribution to the model, but found that none of the independent variables were statistically significant. The ordinal regression model was constructed using a Logit link function and fulfilled the assumption of parallel lines. Agreement between these two regression models gives greater faith in the results. Finally, a logistic regression model was also constructed, and despite the loss of information associated with collapsing the dependent variable into two categories, the Hosmer and Lemeshow test (Pallant, 2005) showed the model to be statistically significant. The results of the logistic regression model were in agreement with those of the other two models, with the exception of the age variable. This model indicates that age has a statistically significant positive relationship with economic dependence ( $\beta = .368$ ,  $\text{sig.} = .046$ ). The older the respondent the more concerned they become about auditor independence. This finding confirms the earlier institutional investor results reported in Table 6.17.

In terms of the non-audit services model, the multiple regression model provides a similar story to the earlier univariate results, as none of the independent variables

make a statistically significant contribution to predicting the dependent variable. The standardised coefficients show that qualifications, size of portfolio and type of investor make the biggest unique contributions to explaining perceptions of non-audit-service provision, but the results must be treated with caution as the model itself did not reach statistical significance. The results for the multiple regression model confirm earlier arguments, that high-profile accounting scandals have publicised the threat of non-audit service provision so widely that one does not need to have accounting qualifications or be an institutional investor to understand the threat which non-audit services pose to auditor independence. The results of the ordinal regression model agreed with the results of the multiple regression model, as the Pseudo R-Square showed that the model only explained around 2% of the variance in the dependent variable. Although the assumption of Parallel lines was not met, the model also showed that none of the dependent variables made a statistically significant contribution to predicting variances in perceptions of non-audit service provision. A statistically significant logistic regression model further confirmed these findings.

The standardised coefficients relating to the long tenure model show that qualifications make the biggest unique contribution to explaining variances in perceptions of long tenure. This result is statistically significant and proves that those without accounting qualifications are the most concerned about the effects of long association between auditor and client. The part correlation given by SPSS in the multiple regression output can be used to explain how much of the total variance in the dependent variable is explained by qualifications and how much the R-Square figure would be reduced by without qualifications in the model. To calculate this, the part correlation of .156 for qualifications must be squared, the result shows that qualifications explain 2.4% of the total variance in perceptions of long association. The ordinal regression model (with a Logit link function) gives even greater faith in the results of the multiple regression model, as the Pseudo R-Square is also found to be 6% and qualifications was found to be the only independent variable to make a statistically significant contribution to the variance in perceptions of long association. In the case of the long tenure model, the assumption of parallel lines was met, meaning that the ordinal regression model was significant. The results are further confirmed by a statistically significant logistic regression model, which also found

qualifications to be making the only significant unique contribution to predicting perceptions of long association.

Finally, the ex-auditor employment model is examined. The standardised coefficients show that qualifications and type of investor make the biggest statistically significant unique contributions to the variance in perceptions of ex-auditor employment. This means that private investors are more concerned about ex-auditor employment than institutional investors and that those without accounting qualifications are more concerned about the threat of ex-auditor employment than those with accounting qualifications. These findings confirm those of earlier univariate analysis. Although not significant, the relationship between ex-auditor employment and personal experience is positive, which gives further confidence in earlier findings. The part correlations were squared to determine the contribution which qualifications and type of investor make to the total R-Square. The results show that, type of investor explains 4.2% of the variance in perceptions of ex-auditor employment and accounting qualifications explains 7% of the variance in perceptions. Similar to the multiple regression model, the ordinal regression model produced a Pseudo R-Square of 24% and also found qualifications and type of investor to be making a statistically significant contribution to the variance in the dependent variable. However, it must be noted that the current model did not meet the assumption of parallel lines, upon which ordinal regression is based. For even greater confidence in the results, a logistic regression model was created. The model had a Hosmer and Lemeshow result of greater than .05 and so was statistically significant. The result of the test also found qualifications to be having a statistically significant effect on the dependent variable, but although it found type of investor to be making the second largest contribution, this independent variable was not found to be statistically significant (perhaps due to the resultant loss of information from collapsing the dependent variable).

After conducting a series of regression analyses, it appears that the multivariate tests are in agreement with the results of the earlier univariate tests. However, it also appears that the less widely known the threat to auditor independence (ex-auditor employment and long association) the more important personal characteristics become in predicting variances in the perceptions of the threat. One possible explanation for this finding could be that the more widely known the threats are to auditor

independence (economic dependence and non-audit service provision), the more likely these threats are to be understood by people regardless of what type of investor that person is or their gender, age or whether they have accounting qualifications. The greater awareness of these threats is even more likely in the wake of the high-profile accounting scandals in the USA which brought matters of economic dependence and non-audit service provision to the attention of the general public.

#### **6.14 Further Analysis of Relationships: Multivariate Analysis of Variance**

As outlined in the previous chapter, Multivariate Analysis of Variance (MANOVA) examines one independent variable in relation to a group of dependent variables (which are related in some way). Undertaking MANOVA will indicate whether there is a difference between the groups of the independent variable (males/females) and overall perceptions of the four auditor-client relationships.

MANOVA is based upon a number of assumptions which need to be met before embarking on the statistical test. Firstly, MANOVA is based upon the assumption that the sample size is large, it is advised that there should be more cases in each cell than there are dependent variables employed in the test. Secondly, MANOVA assumes that the data employed in the test is normal. The current data is not normal, but the large sample size created by the combined dataset (institutional and private investors) helped the test to be robust to this violation. Thirdly, MANOVA is very sensitive to outliers, although tests on the combined dataset showed that no outliers are present in the current data. Finally, MANOVA performs best when the dependent variables display moderate correlation with one another. If the dependent variables are too highly correlated (around 0.8 or 0.9), it could be a sign that the data is subject to multicollinearity. A correlation test was run on the four dependent variables to be employed in the MANOVA test (perceptions of economic dependence, non-audit service provision, long tenure and ex-auditor employment), which showed that the dependent variables were related, but the correlations only ranged from .231 to .343, which was no cause for concern.

The results of the separate MANOVA tests for the five independent variables are displayed in Table 6.44:

**Table 6.44 MANOVA Results**

	Wilk's Lambda	Tests of Between-Subjects Effects (Sig.)			
		Ex-Auditor Employment	Long Tenure	Economic Dependence	Non-Audit Services
Type of Investor	.000	.000*	.027*	.002*	.216
Gender	.525	.133	.519	.749	.607
Qualifications	.000	.000*	.002*	.029*	.085
Age	.001	.000*	.201	.002*	.986
Personnel Transfer	.024	.002*	.325	.964	.362

\* Significant at the 0.05 level

The first of the MANOVA tests examined whether there was a difference between institutional and private investors in their overall perceptions of auditor independence. Initial descriptive statistics showed that there were at least 108 cases in each cell which showed that the sample was large enough not to violate the MANOVA assumption of sample size. The result of the Box's test for equality of covariance was greater than 0.001 (at 0.004) and thus the assumption of homogeneity of variance-covariance matrices was also not violated. Table 6.44 shows that the Wilk's Lambda result was significant. Wilk's Lambda tests whether there are statistically significant differences among private and institutional investors in their perceptions of overall auditor independence. As the result is significant, it is revealed that similar to previous tests there is a statistically significant difference between institutional and private investor perceptions of auditor independence. As the result of Wilk's Lambda is significant, it is worth investigating the dependent variables further. Further investigation is made possible through the tests of between-subjects effects which indicate that there is a statistically significant difference between institutional investors and private investors in their perceptions of ex-auditor employment, long association and economic dependence. These results give greater confidence in previous findings. Once again the results appear to indicate that there is no difference between institutional and private investors in their perceptions of non-audit service provision. The mean scores for institutional and private investors were also provided by the MANOVA test, the results showed that for each of the auditor-client relationships (even non-audit services); the private investors had higher scores than the institutional investors. Higher scores indicate that the private investors agreed more often than the institutional investors that the auditor-client relationships

damaged their perceptions of auditor independence. The finding is consistent with all the previous univariate and multivariate findings.

The second MANOVA test examined whether the gender of the respondent had any affect on overall perceptions of auditor independence. As with the previous test, there was enough cases in each cell and the Box's test for equality of covariance matrices was greater than 0.001. However, the Wilk's Lambda, the multivariate test for significance, was not significant, indicating that there is no difference between men and women in their overall perceptions of auditor independence and confirming the findings of previous statistical tests. As the Wilk's Lambda test was not significant there was no point in further investigating the dependent variables separately.

The third MANOVA test concerned whether or not the respondent had accounting qualifications and whether accounting qualifications affect perceptions of auditor independence. Previous analyses indicate that those with accounting qualifications are less concerned about ex-auditor employment, long tenure and economic dependence than those without accounting qualifications. Initial tests showed that there were at least 101 cases in each cell, which meant that the non-normality of the data would not have affected the test a great deal. The result of the Box's test of equality of covariance matrices was .019 and thus greater than .001, so the assumption was not violated. The multivariate test of significance, Wilk's Lambda, was statistically significant, indicating that there is a statistically significant difference between those with and without accounting qualifications in their overall perceptions of auditor independence. As the result was significant, further investigation of the individual dependent variables was worthwhile and showed that there was a statistically significant difference in perceptions of ex-auditor employment, long association and economic dependence between those with and those without accounting qualifications. Examining the means provided by the MANOVA test indicated that those without accounting qualifications had the highest scores and thus agreed more often than those with qualifications that the four relationships impaired perceptions of auditor independence. The current results confirm the previous findings.

The fourth MANOVA test examined whether the age of the respondent affected that respondent's overall perceptions of auditor independence. The initial test results

showed that although the assumption of homogeneity of variance-covariance matrices was not violated (indicated by the .579 score for Box's test of equality of covariance matrices), there were less than 30 cases in some of the cells which Pallant (2005) argues causes violations to the assumption of normality and the assumption of sample size. The results of the MANOVA test for age should be treated with caution due to these violations of assumptions. Despite the violation of certain assumptions, the Wilk's Lambda was significant and so it was decided that the dependent variables should be further investigated anyway. As previous tests had indicated, the results of the between-subjects effects showed that age had a statistically significant effect on ex-auditor employment perceptions and on perceptions of economic dependence. The means provided by the MANOVA test indicated that the older age groups had the higher mean scores and would thus have agreed more often than the younger respondents that the four auditor-client relationships impair auditor independence perceptions. This result confirms the earlier univariate results and the findings of the multiple regression with regard to economic dependence.

The final MANOVA test examined whether having undertaken a personnel transfer like those described in the questionnaire affected overall perceptions of auditor independence. However, as only a minority of the respondents have undertaken a personnel transfer, some of the cells had less than 30 cases and so the results should be treated with caution. Despite this violation of assumptions, the Box's test of equality of covariance matrices was greater than .001 and the Wilk's Lambda suggested that there was a statistically significant difference in overall auditor independence perceptions between those who had undertaken a personnel transfer and those who had not. Further analysis of the separate dependent variables showed that there was only a statistically significant difference of opinion between those who have undertaken a personnel transfer and those who have not in their perceptions of ex-auditor employment, this was also the finding of previous univariate and multivariate statistical tests. The results of the means highlighted that it was those who had not undertaken a personnel transfer who agreed most often that ex-auditor employment impaired perceptions of auditor independence, again confirming previous findings.

In summary, the MANOVA tests have proved a useful tool for comparing the four auditor-client relationships within one model. The results further confirm the findings

of the previous univariate and multivariate tests which have been outlined throughout the current chapter. The consistency of the results which has been displayed using many different tests shows that the results are robust and not dependent upon the type of statistical test employed for analysis. This is an important finding and adds credibility to the research results.

### *The Hypotheses*

After a series of univariate and multivariate tests, it is possible to return to the research hypotheses and examine whether any should be rejected.

**H5: There is no difference between investors with different sized investment portfolios in their perceptions of the four potentially independence-impairing auditor-client relationships.**

H5 is not rejected, as both univariate and multivariate analysis have not found any evidence that the investor's size of investment portfolio has any effect on how the investor perceives the four auditor-client relationships.

**H6: There is no difference between institutional investors from small, medium and large companies in their perceptions of the four potentially independence-impairing auditor-client relationships.**

H6 is rejected on the basis of the results of univariate tests which found that there was a statistically significant relationship between size of institutional investor and the threat of non-audit service provision.

**H7: There is no difference between investors with and investors without accounting qualifications in their perceptions of the four potentially independence-impairing auditor-client relationships.**

H7 is rejected because the results of univariate testing found that there was a statistically significant difference in private investor perceptions of ex-auditor employment, long tenure and economic dependence between those with and those

without accounting qualifications. It was also found that there was a statistically significant difference between those institutional investors with accounting qualifications and those without and their perceptions of economic dependence. However, in general the results show that accounting qualifications have a greater effect on private investor perceptions than on institutional investors' perceptions of auditor independence.

**H8: There is no difference between those who have undertaken ex-auditor employment with the client company and those who have not, in their perceptions of the four potentially independence-impairing auditor-client relationships.**

H8 is rejected because the results of t-tests showed that those who have undertaken personnel transfers are less concerned about the effects of ex-auditor employment on auditor independence than those who have not undertaken a personnel transfer.

**H9: There is no difference between men and women in their perceptions of the four potentially independence-impairing auditor-client relationships.**

H9 is not rejected because it appears that the gender of the respondent does not affect perceptions of the four auditor-client relationships. However, multivariate tests showed that although not significant, it appeared that men displayed more concern than women about the four relationships. Furthermore, men appear to read sources of accounting literature more widely before making investment decisions than women do.

**H10: There is no difference between respondents of different ages in their perceptions of the four potentially independence-impairing auditor-client relationships.**

H10 is rejected, it appears that age does have an effect upon investor perceptions of economic dependence.

**H11: There is no difference between institutional and private investors in their perceptions of the four potentially independence-impairing auditor-client relationships.**

H11 is rejected as it appears that private investors are more concerned about ex-auditor employment, long tenure and economic dependence than the institutional investors. The current research argues that private investors might have more at stake personally when making investments and so might be more concerned about factors that could put their investments at risk. Furthermore, in general the institutional investors have a better understanding of the accounting process than private investors and as a result the institutional investors might have less fear of the unknown.

*Sources of Accounting Information: Further Analysis*

As the sources of accounting information variable (total accounting info) had already been transformed into approximate 'interval' level data for earlier analyses, to further the investigation various regression techniques were employed. As the dependent variable 'total accounting info' is only a proxy 'interval' variable, ordinal regression was the first technique used to further the investigation. Six independent variables were included in the ordinal regression model, these were the type of investor (institutional/private) the gender of the respondent, whether the respondent had accounting qualifications, the age of the respondent, whether the respondent had undertaken a personnel transfer and the size of the respondent's investment portfolio. The ordinal regression model produced pseudo R-Square statistics of around .05 (Cox and Snell .054, Nagelkerke .055 and McFadden .014), which indicates that the model (the independent variables) at best only explain around 5.5% of the variance in the dependent variable. The regression model itself only found the independent variable 'type of investor' to have a significant effect on the dependent variable (sources of accounting information consulted). However, the results of the ordinal regression model must be treated with caution because the assumption of parallel lines was violated.

In some cases the violation of the assumption of parallel lines can indicate that the wrong link function has been employed in the model. The regression model was re-

modelled using all of the different link functions (Logit, Complementary log-log, Negative log-log, Probit and Cauchit). None of these models helped to meet the assumption of parallel lines.

As the assumptions of ordinal regression could not be met using the current model, a linear multiple regression model was employed to give greater faith in the results. The assumptions of multiple regression could be met. For example, each of the independent variables showed at least some relationship with the dependent variable and none of the independent variables displayed a correlation with any of the other independent variables above .7, so no multicollinearity was present in the data. Collinearity Diagnostics were also performed on the data, Pallant (2005) warns that a Tolerance figure of less than .10 and a Variance Inflation Factor of over 10 would be causes for concern. However, the lowest Tolerance level of the current model was .665 and the highest Variance Inflation Factor was 1.5, thus confirming the applicability of the model. Similar to the ordinal regression model, the R-Square figure given by the multiple regression model indicates that 7% of the variance in total accounting information is explained by the independent variables. This is a fairly low R-Square and indicates that other factors apart from the chosen independent variables affect the dependent variable. However, the current model reaches statistical significance.

Table 6.45 shows the results of the Multiple Regression:

**Table 6.45 Total Accounting Information: Multiple Regression Model**

	Standardised Coefficients- Beta	Sig.
<b>Type of Investor</b>	.201	.004*
<b>Gender</b>	-.053	.360
<b>Qualifications</b>	-.100	.114
<b>Personnel Transfer</b>	-.032	.584
<b>Age</b>	.051	.412.
<b>Size of Portfolio</b>	-.069	.267

\* Statistically significant

The standardised coefficients displayed in Table 6.45 show which of the independent variables makes the strongest unique contribution to explaining the dependent variable (when variances in the other variables are controlled). In terms of the current

model, as the univariate tests suggested, the type of the investor makes the strongest contribution to explaining the dependent variable, followed by whether or not the respondent has accounting qualifications. Size of investment portfolio (as Bartlett and Chandler, 1997 predicted), age, personnel transfer and the gender of the respondent make the weakest contributions to explaining the dependent variable. The results displayed in the significance column show that, as was found through ordinal regression, only the type of investor makes a statistically significant contribution to explaining the variances in accounting information consulted. The positive direction of the relationship shows that institutional investors are the ones who read accounting information most widely and most thoroughly before investing (perhaps because institutional investors have more access to information than private investors do). In terms of accounting qualifications, the negative relationship confirms Lee and Tweedie's (1976) finding, that those without accounting qualifications read accounting information less widely. Although not significant, the negative relationship between gender and total accounting information, tentatively agrees with Lee and Tweedie (1975) and Bartlett and Chandler (1997), that males read accounting information more thoroughly than females. Finally, the direction of the relationship indicated between the size of investment portfolio and the total accounting information variable, indicates that those with larger investment portfolios tend to read accounting information less widely (perhaps due to their increased investment experience) than those with smaller portfolios.

### *The Hypothesis*

**H12: The respondents' demographics will have no effect on the level of accounting information consulted before investing.**

The null hypothesis is rejected because the results of the univariate and multivariate statistics found that institutional investors and investors with accounting qualifications read accounting information more widely than private investors and investors without accounting qualifications. Different respondent demographics *do* have an affect on the levels of accounting information consulted before making investment decisions.

To summarise the univariate and multivariate statistical analysis section and to respond to Research Question 16, (which asks whether there was a relationship between investor perceptions of the four auditor-client relationships and the background variables), the most significant findings are that accounting qualifications affect private investor perceptions of auditor independence to a greater extent than institutional investors and that employment history affects institutional investor perceptions of ex-auditor-employment. Furthermore, it has been found that private investors display more concern for auditor independence issues than the institutional investors do.

### 6.15 The Difference between Early and Late Responses

Many researchers have suggested that surveys could be subject to non-response bias. In the current study, the ‘surrogate method’ (Wallace and Mellor, 1988:134), of comparing early and late responses, was used to test for non-response bias, this method is discussed in detail in Chapter Five.

For the purpose of the current study, early responders were taken to be those who responded to the original questionnaire and late responders were taken to be those who responded to the follow-up questionnaires. The test for non-response bias was conducted using a Chi-Square test to compare early and late responders against their answers to the four main questions used throughout the study. The results are shown in Table 6.46:

**Table 6.46 Test for Non-Response Bias**

	<b>Pearson Chi-Square</b>	<b>Sig. (2-sided)</b>
<b>INSTITUTIONAL INVESTORS:</b>		
Ex-Auditor Employment	.248	.883
Long Association	1.263	.532
Economic Dependence	2.592	.274
Non-Audit Service Threat	.282	.869
<b>PRIVATE INVESTORS:</b>		
Ex-Auditor Employment	1.421	.492
Long Association	.507	.776
Economic Dependence	4.995	.082
Non-Audit Service Threat	2.267	.322

None of the relationships tested were significant (as all the significance levels were above .05). There was no significant difference in perceptions between those who replied early and those who replied late. Those who responded to the questionnaire shared similar opinions to those who did not respond to the questionnaire at all.

In order to have greater confidence in the above results a similar parametric test was conducted. The test used was an independent-samples t-test comparing the auditor independence variable (the sum of the investors' responses to the four main questions) and whether the respondent had replied early or late. For the institutional investors there was no significant difference in the perceptions of the early and late responders with a t-score of 1.178 and a significance level of .242 (greater than .05). This was also the case for the private investors who had a t-score of -.481 with a significance level of .631 (greater than .05). The results of this t-test give greater confidence that the current study was not subject to non-response bias. As no non-response bias was detected, it appears that the perceptions of the responders and the non-responders are similar and that the results are representative of the population as a whole.

Non-response bias is similar to self-selection bias. Self-selection bias occurs when those with a pre-interest in the subject area are the ones to respond to the questionnaire. There does not appear to be a clear approach for dealing with or identifying self-selection bias. However, in the case of the current research it could be argued that those with a pre-interest (most likely to respond) would be the ones who have accounting qualifications and an interest in accounting issues. If this is the case then the current study was not subject to self-selection bias as approximately half of the institutional investors did not have accounting qualifications. Moreover, of the private investors, only 15% of the population had accounting qualifications.

## **6.16 Chapter Summary**

This chapter has examined the results of the two questionnaires which were sent to institutional and private investors. This analysis included a combination of descriptive statistics, parametric and non-parametric testing. In general economic dependence and the provision of non-audit services were found to be the biggest threats to investor perceptions of auditor independence (see also Beattie et al.,1999).

The following chapter discusses the research findings, including a summary of the contributions and implications of the research. The results of the current study are also compared to those of previous UK studies.

## **Chapter Seven: Discussion and Implications of the Results**

### **7.1 Introduction**

The current research was motivated by the recent high profile accounting scandals in the USA and the resultant interest in auditor independence. The study has centred on the agency relationship between investors, managers and auditors. As the investors are the owners of organisations, it is important that they perceive managers and auditors to be working in the investors' best interests and not colluding for personal gain. However, the review of the auditor independence literature in Chapter Three highlighted four auditor-client relationships which could destroy an effective agency relationship and damage perceptions of auditor independence. Investor perceptions of these four auditor-client relationships were determined through a postal questionnaire. The results of the survey were reported in the previous chapter.

This chapter will review those findings reported in Chapter Six and consider their implications and contributions. The chapter will focus around each of the research hypotheses which were outlined in Chapter Four. The current findings will also be compared to those of previous studies to identify whether perceptions of auditor independence have changed.

### **7.2 Economic Dependence**

Research Hypothesis 1, examined the issue of economic dependence:

**H1: A situation where an individual audit partner is dependent upon one client for 10% of the income he or she generates will have no influence on investors' perceptions of auditor independence.**

The results of the descriptive statistics reported in Chapter Six indicated that the majority of both the institutional and the private investors would not invest in an organisation if they perceived the audit firm to be dependent upon that organisation for over 10% of the audit firm's income. The majority of both sets of investors agreed that an audit firm could not be economically dependent upon a client company and

retain independence from that company. These findings support the previous perceptual studies evaluated in the literature chapter, which concluded that implied economic dependence was a threat to perceptions of auditor independence, even if economic dependence does not affect an auditor's independent state of mind in reality (e.g. Firth, 1980,1981 and Lindsay et al., 1987).

In terms of safeguards against economic dependence, the results from the current study imply that although institutional investors acknowledge that there is a risk of impaired independence from economic dependence, the investors are satisfied that the current income limit should minimise this threat. However, of those who were not satisfied with the current 10% income limit, the majority believed that it should be reduced for further protection of auditor independence. Beattie and Fearnley (2002) have also suggested that a reduction in the 10% income limit is needed.

In light of these findings concerning investor perceptions of economic dependence, H1 is rejected. Economic dependence does influence the majority of investors' perceptions of auditor independence.

### **7.3 Non-Audit Service Provision**

Research Hypothesis 2 related to an auditor's provision of non-audit services:

**H2: The provision of non-audit services will have no effect on investors' perceptions of auditor independence.**

The results outlined in Chapter Six highlight that the majority of investors perceive the joint provision of audit and non-audit services as a threat to auditor independence, which is in line with many other studies in the area of non-audit service provision, e.g. Pany and Reckers (1983), Bartlett (1993), Beattie et al. (1999) and Canning and Gwilliam (1999). The majority of both private and institutional investors also agreed that auditors co-contracting non-audit service work with their audit clients would also damage perceptions of auditor independence. Furthermore, the institutional investors indicated that they would have more faith in the independence of a Big Four auditor providing non-audit services than they would in a small auditor providing non-audit

services. However, a study conducted by Gendron et al. (2006) suggests that current investors' confidence in the independence of the Big Four accounting firms could be misplaced. Gendron et al's (2006) survey of Canadian auditors suggested that Big Four auditors' independence commitment was much lower than that of accountants from medium and small sized accounting firms.

In terms of safeguards against the threat of non-audit service provision, the majority of both sets of investors indicated that they would like to see a ban (by professional rules) on audit personnel providing non-audit services. However, this was the only situation in which the majority of institutional investors indicated that they would like to see further regulation. When presented with a list of alternative safeguards against non-audit service provision, institutional investors appeared reluctant to introduce further regulation upon companies and opted for the regulations which would cost the least money and be the least burden upon companies. Furthermore, the institutional investors indicated that they did not want more power in the governance of companies, appearing reluctant to take more responsibility.

It appears that there is a conflict of interest for institutional investors. On the one hand, they recognise the risks which non-audit service provision can have for auditor independence and as principals wish to safeguard their investment through auditor independence. On the other hand, institutional investors do not want companies to be burdened with inflexible regulations which will ultimately cost them (as the principals of the organisation) more money. The above findings are in stark contrast to the arguments of Imhoff (2003) who argued that shareholders would be willing to pay higher costs in return for a greater assurance of a high quality, independent audit. The current empirical research has suggested that institutional investors do not wish to pay increased costs.

H2 was also rejected as the majority of both sets of investors indicated that they perceived the provision of non-audit services as a threat to auditor independence.

#### **7.4 Long Association**

Research Hypothesis 3 related to long association between the auditor and the client:

### **H3: Client employment of the same auditor for over five years has no influence on investors' perceptions of auditor independence.**

Investor perceptions of long association were detailed in Chapter Six. The results indicate that the majority of investors do not consider the length of the relationship between auditors and client companies before making their investment decisions. Furthermore, the majority of the institutional investors indicated that a long relationship between auditor and client would not effect their decision to invest in a company. The results highlight that the vast majority of both private and institutional investors do not consider long association between auditor and client as a threat to auditor independence, which is in contrast to a perceptual study conducted by Knapp (1991), who found that audit committee members became concerned about audit quality once the auditor-client relationship went beyond five years. However, Knapp (1991) was focusing on the perceptions of audit committee members rather than those of investors.

In terms of safeguards against the threat of long association, the institutional investors indicated that were satisfied with the current regulation of partner rotation. Once again, as with non-audit service provision, the majority of institutional investors indicated that they would not like to see the introduction of further regulation in the form of mandatory audit firm rotation, which was argued to be costly and disruptive. However, whilst the private investors indicated that partner rotation was a satisfactory safeguard against long association, the majority indicated that they would like to see the introduction of mandatory audit firm rotation.

H3 could not be rejected because neither group of investors indicated a great deal of concern for a lengthy relationship between auditor and client company.

## **7.5 Client Employment of a Former Auditor**

Research Hypothesis 4 related to ex-auditor employment by the client company:

**H4: Employment of a former auditor in a senior management role has no influence on investors' perceptions of auditor independence.**

In terms of the perceptions of ex-auditor employment reported in the previous chapter, it appears that the majority of both private and institutional investors would still invest in a company even if they were aware that ex-auditor employment had taken place. The majority of the institutional investors indicated that they did not perceive client employment of a former auditor as a threat to auditor independence, which was also the finding of Firth (1980). The investors further demonstrated their lack of concern regarding ex-auditor employment when indicating their perceptions of various cooling-off periods for the ex-auditor. In the majority of cases the investors did not perceive a cooling-off period to be necessary. Only when the ex-auditor had previously been an audit engagement partner did the majority of investors indicate that the ex-auditor should wait the advised two year cooling-off period (or longer) before joining the client company.

In terms of safeguards against ex-auditor employment, the institutional investors indicated that they would not like to see a ban on the process.

H4 could not be rejected as only a minority of each set of investors perceived ex-auditor employment to be a threat to auditor independence.

## **7.6 Size of Investment Portfolio**

Research Hypothesis 5 related to differences in investor perceptions due to size of investment portfolio:

**H5: There is no difference between investors with different sized investment portfolios in their perceptions of the four potentially independence-impairing auditor-client relationships.**

H5 could not be rejected as statistical tests did not reveal any difference in perceptions of auditor independence between investors with differently sized investment portfolios.

Research Hypothesis 6 is related to the size of the institutional investment company:

**H6: There is no difference between institutional investors from small, medium and large companies in their perceptions of the four potentially independence-impairing auditor-client relationships.**

H6 is rejected as univariate statistical tests suggested that larger investment companies were less concerned about the provision of non-audit services than smaller ones.

### **7.7 Respondents' Level of Accounting Education**

Research Hypothesis 7 is related to differences in perceptions of auditor independence caused by accounting qualifications:

**H7: There is no difference between investors with and investors without accounting qualifications in their perceptions of the four potentially independence-impairing auditor-client relationships.**

H7 is rejected. The results of both univariate and multivariate statistical tests have shown that accounting qualifications have an influence on private investors' perceptions of economic dependence, long tenure and ex-auditor employment. However, perceptions of non-audit service provision were not effected by accounting qualifications. As the descriptive statistics revealed that there is widespread concern for joint provision, it is argued that non-audit service provision damages auditor independence perceptions whether the respondent has accounting qualifications or not. It was also found that accounting qualifications affect institutional investors' perceptions of economic dependence.

It should also be noted that those who have accounting qualifications might indicate less concern about the auditor-client relationships because they belong to the accounting profession and so might be over confident in their colleagues' ability to remain independent. This was reflected in previous studies which compared the

perceptions of users and preparers of financial statements. The preparers of the statements seem confident in their ability to remain independent whilst the users seem less confident of the preparers' ability to remain independent (see Firth 1980, Beattie et al. 1999, Quick and Warming-Rasmussen, 2005).

### **7.8 Respondents' Employment History**

Research Hypothesis 8 relates to the perceptions of ex-auditor employment belonging to investors who themselves were auditors and now work in a senior position at the client company:

**H8: There is no difference between those who have undertaken ex-auditor employment with the client company and those who have not, in their perceptions of the four potentially independence-impairing auditor-client relationships.**

The study rejects H8, as results of the t-tests conducted imply that those ex-auditors who have taken employment with the client company are the ones least concerned about the independence-impairing nature of ex-auditor employment. Further research into this finding is required as it is uncertain whether those who have seen how the process of ex-auditor employment works honestly believe that it does not impair auditor independence or that those who have undertaken ex-auditor employment are simply trying to defend their actions.

### **7.9 Biographical Data**

Research Hypothesis 9 was intended to determine whether the gender of the investor affects perceptions of auditor independence:

**H9: There is no difference between men and women in their perceptions of the four potentially independence-impairing auditor-client relationships.**

H9 could not be rejected as univariate and multivariate analyses did not reveal any differences in auditor independence perceptions between men and women.

Research Hypothesis 10 was intended to determine whether the age of the investor affects perceptions of auditor independence:

**H10: There is no difference between respondents of different ages in their perceptions of the four potentially independence-impairing auditor-client relationships.**

H10 is rejected; univariate and multivariate tests showed that age did have an effect on investor perceptions of the four auditor-client relationships. MANOVA tests tentatively suggested that older respondents appeared to be more concerned about auditor independence than younger respondents. The finding supports the arguments of Lauriola and Levin (2001).

#### **7.10 Institutional/Private Investors**

Research Hypothesis 11 was intended to investigate whether there is a difference between private and institutional investors in their perceptions of the four auditor-client relationships:

**H11: There is no difference between institutional and private investors in their perceptions of the four potentially independence-impairing auditor-client relationships.**

H11 is rejected, as whilst some agreement was detected between the two samples in their perceptions of the four relationships, there were also differences in opinions between institutional and private investors. In general, the private investors appeared more concerned about economic dependence, long association and ex-auditor employment than the institutional investors did. Again, it is noteworthy that the type of investor did not effect perceptions of non-audit service provision. The study argues (in line with the findings of the descriptive analysis), that both private and institutional investors are concerned about non-audit service provision.

It appears that the investors' differing objectives for investing and their differing levels of accounting education could effect their perceptions of auditor independence.

Private investors invest their own money and so would stand to lose personally through a corporate collapse such as Enron, this might mean that private investors are more concerned about auditor independence issues. In comparison, institutional investors are investing other peoples' money and have access to internal company information and contact with the auditors, this could reduce their auditor independence concerns.

The comparison of institutional and private investor perceptions provided in the current research provides an original account of how the perceptions of one user group of audited financial statements can differ and shows how studies which broadly classify 'investors' into one group can prove inaccurate in their conclusions by overlooking the divisions within the sample.

### **7.11 Level of Accounting Information Consulted Before Investing**

Research Hypothesis 12 relates to the sources of accounting information which the respondents refer to before making investment decisions:

**H12: The respondents' demographics will have no effect on the level of accounting information consulted before investing.**

The null hypothesis, H12, is rejected because statistical testing showed that institutional investors read more widely than private investors when making investment choices. It was also found that those respondents with accounting qualifications read accounting information more widely than those without accounting qualifications. Respondent demographics *do* affect levels of accounting information consulted before investing.

### **7.12 Comparisons with Similar Previous UK Studies**

It is important to compare the current study's findings with those of similar previous studies. As most of the main UK perceptual studies were conducted before the recent wave of high-profile accounting scandals and interest in auditor independence, it is interesting to determine whether perceptions have changed over time.

Two of Firth's studies conducted over 20 years ago provided the framework for the current research. In 1980, Firth conducted a questionnaire into users and preparers' perceptions of 29 auditor-client relationships. These 29 relationships were based around fees, financial involvement in the client, personal relationships and conflicts of interest. In 1981 Firth built upon this study using similar relationships to those of the previous study but focusing on the independence perceptions of bank loan officers. Both studies received similar results. Like the current study, both of Firth's studies (1980, 1981) found a general concern that fee dependence could impair auditor independence (although the fee levels used were higher than in the current study at the 15 and 20% level). Both studies also found a general concern that the provision of non-audit services to audit clients impaired auditor independence. In comparison to the current study Firth (1980, 1981) found that, there was less concern over the independence-impairing effects of a long auditor-client relationship (tested at the 10-year level). Firth (1981) argued that the expertise which the auditor would gain in auditing the client for such a long period, outweighed the possible independence-impairing effects of a long relationship. Finally, similar to the current study, Firth (1980) found that the employment of an ex-auditor in the client company, did not significantly damage perceptions of auditor independence. However, in contrast to the current study, the bankers surveyed in Firth's (1981) study were concerned about the knowledge of the audit firm's practices which the ex-auditor would bring to the client company.

In general, although Firth (1980, 1981) often used different scales and measures to the current study, it appears that perceptions of auditor independence in the four main areas have gone relatively unchanged over the past 20 years. It appears that prior to the most recent wave of concern over auditor independence there was already widespread concern over fee dependence and non-audit service provision. Comparing the work of Firth (1980, 1981) with the current study also highlights that the recent high-profile corporate collapses have not increased concern for long association or ex-auditor employment.

More recently, in 1999, Beattie et al. conducted a similar study to the current research. In the study, Beattie et al. (1999) examined 45 economic and regulatory factors

affecting auditor independence. Two of these factors were economic dependence and non-audit service provision. However, whilst more recent than the studies conducted by Firth (1980, 1981), much has changed in the business environment since the publication of Beattie et al.'s (1999) research.

Despite these changes in the business environment, a number of parallels appear between the findings of the current study and those of Beattie et al. (1999). In comparison to the current study, Beattie et al. (1999) found that finance directors, company audit partners and financial journalists perceived economic dependence and the provision of non-audit services as principal threat factors to auditor independence. Beattie et al. (1999) found that the greatest concern for auditor independence was expressed where an individual audit partner's income was dependent upon retaining a specific audit client.

Comparing the similar UK studies with the current study has proved that the current results are consistent with those of earlier research. The overwhelming finding appears to be that even before the high profile accounting scandals and corporate collapses in the U.S.A, economic dependence and non-audit service provision damaged perceptions of auditor independence more than any other auditor-client relationship. The results prove that even if, as interested parties argue, non-audit service provision and audit fee size do not damage an auditor's independent mental attitude, more visible steps need to be taken to assure third parties that auditors are in an independent position.

### **7.13 Policy Implications and Contributions of the Current Research**

After analysing the data received from the institutional and private investor surveys, it was revealed that the research had made a number of important contributions to the auditor independence debate which should be taken seriously by both academics and policy-makers:

1. Most importantly, the study has made a unique contribution to the existing literature on auditor independence by examining the differences between two groups of investors. The current study argues that it is incorrect to treat

investors as one group, as it appears that the investors' background and motivations for investing may seriously influence their perceptions of auditor independence. The current study is the only known UK study to have compared the perceptions of institutional and private investors of the four auditor-client relationships.

2. The research is of direct benefit to policy-makers. The Auditing Practices Board will use the investor perceptions of auditor independence recorded in this study to inform their latest revision of the Ethical Standards for Auditors.
3. Statistical tests have shown that the less widely understood the threat to auditor independence, the greater impact accounting education and type of investor have on predicting perceptions of that threat to auditor independence. In the wake of the Enron scandal, the threat of non-audit service provision has been so widely publicised that qualifications and type of investor no longer predict how that investor will view joint provision.
4. In addition to examining factors which impair auditor independence perceptions, the research also focused on the often over-looked area of enhancement strategies for auditor independence (Beattie et al., 1999 and Alleyne and Devonish, 2006). Generally, the majority of investors are satisfied with the current system of safeguards. This finding is in line with the 2004 survey undertaken by the ICAEW which found that the majority of UK fund managers expressed a 'great deal' or a 'fair amount' of confidence in audited financial statements. Those surveyed indicated their confidence in audited financial statements was due to the regulatory structure of the UK accounting profession (Anonymous, 2004a).
5. The only area of major concern is a situation where the same personnel provide audit and non-audit services. When a situation of joint provision occurs, the majority of investors believe that non-audit service provision should be banned. The ban should take the form of professional rules.

6. The results implied that the 'one size fits all' two year cooling-off period between leaving the audit firm and joining the client company might be more effective if the term of the cooling-off period were varied depending on the seniority of the staff involved in the transfer.
7. Policy-makers should consider a ban on audit firms working with audit clients to co-contract non-audit services to other companies. The majority of investors were concerned about the independence-impairing effects of such a relationship.
8. Should policy-makers introduce a 'Sarbanes-Oxley Style' system of a ban on certain non-audit services in the future, investors indicated that internal audit services, valuation of assets and liabilities, investment advice, bookkeeping and actuarial services caused them the most concern.
9. Policy-makers should consider making more information on auditor independence issues available to private investors in order to foster more informed investment decision-making, should further research show that private investors would utilise the information.
10. In general, investors do not perceive a system of mandatory audit firm rotation to be necessary.
11. The major accounting scandals in the USA do not seem to have affected investor confidence in the independence of the Big Four accounting firms, or it has taken a relatively short time for investor perceptions to recover.
12. The reluctance of institutional investors to act as the owners of companies could be viewed as grounds to question the applicability of agency theory to the modern business environment. Agency theory states that the investors, as owners of organisations, want to put in place safeguards to protect their investments. However, this was not the case for the majority of investors who took part in the current research. The findings indicate that as investors become even more remote from organisations, it might be more appropriate

to move away from the simple agency relationship which acknowledges investors as having the 'principal' interest in organisations towards a relationship which acknowledges that a number of other parties (such as creditors, employees and the public) have an interest in the best performance of organisations as well, a theory closer to the stakeholder approach outlined in Chapter Two.

#### **7.14 Chapter Summary**

In this chapter the results of the hypotheses testing have been summarised and compared to previous similar studies. The implications and contributions of the research have also been outlined.

The following chapter outlines the conclusions of the study and is the final chapter in the thesis.

## **Chapter Eight: Summary and Conclusions**

### **8.1 Overview of the Thesis**

The purpose of the current research was to investigate investor perceptions of four potentially independence-impairing auditor-client relationships. The research provides a timely response to the recent interest in auditor independence which has been sparked by the high-profile accounting scandals in the USA. However, concern over auditor independence has been a point of controversy for many years. The intention of the current study was to determine how key users of audited financial statements perceive auditor independence in light of recent damage to the image of professional integrity. There are eight chapters in this thesis. Chapter One provides an overview of the current research, emphasising the motives of the research and outlining the research objectives.

Agency theory, which provided the basis of the current research, was reviewed in Chapter Two to outline the important relationship between investors and managers and the vital role which independent auditors play in the agency relationship. Agency theory outlines how, if the auditor and the client become too close, the two parties could collude and stop working in the best interests of the owners. The four auditor-client relationships examined in Chapter Three, the critical evaluation of the literature, could cause the auditor and the client to become too close which could damage a functional agency relationship.

The critical evaluation of the literature assisted in guiding the research project by identifying the main issues worthy of further research. Chapter Three highlighted the small amount of literature existing in the area of ex-auditor employment, with the two main studies dating back to Imhoff (1978) and Koh and Mahathevan (1993). There was also only a small amount of literature relating to economic dependence. Many studies in the area of non-audit service provision were identified. However, no meaningful conclusions can be drawn about the effect of these services upon auditor independence. Opinions appear divided on the subject. Finally, critically analysing the literature in the area of long association highlighted that the introduction of mandatory

audit firm rotation is an important and controversial debate that has yet to be agreed upon. The review of the literature in Chapter Three assisted in developing the hypotheses and research questions which drove the current study and which are outlined in Chapter Four.

The perceptions of investors, one of the main users of audited financial statements, were elicited through postal surveys. The research methodology was outlined in Chapter Five. Positivism was the guiding philosophy behind the research. Outlined in Chapter Five was the research strategy, which included a discussion of postal questionnaires and their strengths and weaknesses, and the selection of the two samples, institutional and private investors. The data analysis stage was also discussed in the methodology chapter.

The results received from the postal questionnaires were discussed in Chapter Six of the thesis. The initial descriptive statistics highlighted that for both sets of investors, concerns for auditor independence were higher in relation to economic dependence and non-audit service provision than the concerns were in relation to ex-auditor employment and long association. Chapter Seven discussed the main findings of the research and examined its implications and contributions.

Chapter Eight reports the conclusions. The final chapter in the thesis provides an overview of the main findings of the study. The limitations of the current study and suggestions for further research are also acknowledged.

## **8.2 Main Findings of the Research**

### *The Institutional Investors*

After three mailings, the final usable response rate of the institutional survey was 16%. The data analysis showed that, in general, the majority of institutional investors were relatively unconcerned about the effect which client employment of a former auditor or long association between auditor and client could have on auditor independence. However, an auditor's economic dependence upon a client and the

provision of non-audit services appeared to concern institutional investors.

The results of a Mann-Whitney test, (later confirmed using t-tests), found that those respondents who had transferred from audit firm to client company were the ones less concerned about ex-auditor employment.

In terms of safeguards against threats to auditor independence, the majority of institutional investors appeared satisfied with the safeguards already in place and were reluctant to introduce further regulatory burden upon companies. Interestingly, most of the institutional investors indicated that they would not be in favour of greater shareholder power within the companies in which they invest. Furthermore, only a small minority of institutional investors were in favour of the introduction of a system of mandatory audit firm rotation. It seems that institutional investors are unwilling to bear the costs of further regulation in the form of reduced dividends. This finding is in contrast to Imhoff's (2003) sentiments, that institutional investors would be satisfied to bear the costs of more stringent safeguards.

The only case where the majority of institutional investors were in favour of further regulation was the provision of non-audit services. The institutional investors indicated that they would like to see a ban on audit personnel providing non-audit services.

### *The Private Investors*

After two mailings, the final usable response rate for the private investor survey was 28%. As with the institutional investors, private investors also indicated that they were far less concerned about the potential independence-impairing effects of ex-auditor employment and long association than they were about the effects of economic dependence and non-audit service provision.

Results from parametric and non-parametric tests highlighted that those private investors who had no accounting qualifications were the most concerned about the independence-impairing effects of economic dependence, long tenure and ex-auditor

employment. Accounting qualifications did not appear to affect perceptions of non-audit service provision. It is argued that the corporate collapses in America may have publicised the threat of non-audit services to such a degree that the general public are now aware of the threat that such provision causes, not just accounting specialists.

Only limited questions over safeguards for auditor independence were presented to the private investors. However, in terms of long association, half the private investors indicated that they would be in favour of a system of mandatory audit firm rotation. This was in contrast to the institutional investors. However, in comparison to the institutional investors, the private investors agreed that there should be a ban put in place upon audit personnel providing non-audit services.

Finally, it appears that in general, the private investors were more concerned about the four potentially independence-impairing auditor-client relationships than the institutional investors were. The current study argues that private investors might be more concerned about the auditor-client relationships due to their general lack of accounting qualifications and their relative lack of understanding of the accounting process and also because private investors invest their own money and a loss would have an effect personally on the investors' income. The only auditor-client relationship where perceptions were not affected by the type of investor was non-audit service provision. Again, it is argued that after the high-profile corporate collapses, all investors might be concerned/informed about the consequences of joint provision.

### **8.3 Policy Implications Stemming from the Research**

It should be noted that the current study was based upon investor *perceptions* of auditor independence and therefore, it cannot be advised whether the four auditor-client relationships actually *impair* auditor independence in reality. However, it is important that investor perceptions are seriously considered when discussing accounting standards, in order for the professional integrity of auditors to be preserved. In light of the importance of investor perceptions (as one of the main users of audited financial statements and as the 'principals' of organisations) the APB has expressed interest in using the current findings in their review of the Ethical Standards

for Auditors. The APB and the professional accounting bodies (such as ICAEW) may be interested in the following suggestions for accounting policy in the UK:

1. Whilst commentators cannot agree on whether economic dependence and the provision of non-audit services actually impair auditor independence in reality, it appears that the investors sampled in the current study perceive these two auditor-client relationships as independence-impairing. Regulators should consider taking more visible steps to reassure investors of the measures put in place to prevent economic dependence and joint provision impairing auditor independence. This should take the form of **increased communication** (especially with private investors) and wider **availability of information** on the accounting standards concerning auditor independence.
  
2. The main area of concern for investors was joint provision of audit and non-audit services. It is suggested that **those who provide the company audit should be prohibited from providing non-audit services** to the same company. This ban should take the form of professional rules. It is also suggested that the provision of the following non-audit services should be banned:
  - **Internal audit services**
  - **Valuation of assets and liabilities**
  - **Investment advice**
  - **Bookkeeping and actuarial services.**

It is also advised that companies should be *required* to justify their need for non-audit services (provided by their audit firm) in annual reports.

3. In terms of ex-auditor employment, the investors indicated different appropriate cooling-off periods (between the auditor leaving the audit firm and joining the client company) depending on the previous position of the auditor and future position at the client company. It is suggested that policy-makers consider **replacing the two year cooling-off period with one dependent upon past and future position of the ex-auditor**, in some cases the investors did not perceive a need for a full two year cooling-off period.

4. In all other areas the investors indicated that they perceived the **APB's Ethical Standards for Auditors to be sufficient safeguards of auditor independence**. It is advised that mandatory audit firm rotation does not need to be introduced, a reduction in the 10% income limit and a ban on ex-auditor employment are not necessary and that there is no need for an increased cooling-off period. It is also noted that investors do not want more involvement (and responsibility) in the governance of companies.

It is hoped that these suggestions will help better to protect investors and enhance investor perceptions of auditor independence thus protecting the professional integrity of auditors.

#### **8.4 Limitations of the Current Study**

A number of limitations of the current study need acknowledging:

Firstly, the use of a 'Likert type' scale throughout the questionnaire meant that the data extracted from the completed questionnaires were in either nominal or ordinal form, which prevented extensive use of more powerful parametric testing in the data analysis stage. It is possible that with the emphasis on less powerful non-parametric testing and only the use of 'approximate' interval variables for parametric testing that some relationships may have been overlooked. However, it is difficult to know how the questions could have been re-worded in order to enable a higher level of data collection.

Furthermore, Bartlett (1997:266) argues that with the emphasis of the questionnaire being on the Likert scale, the respondents may not have been given enough scope truly to express their perceptions.

Secondly, using accounting qualifications as a surrogate for the respondents' level of understanding of accounting may not have been an accurate measure. The results showed that private investors without accounting qualifications were the most concerned about auditor independence, but accounting qualifications did not appear to

have a large effect on the perceptions of institutional investors. It is suggested that the institutional investors, as chief executives, would have had an understanding of accounting issues whether or not they had an accounting qualification. Accounting qualifications may not have been an accurate representation of the respondents' understanding of accounting.

Thirdly, private investors' experience of investing was measured by portfolio size. The objective of the test was to measure whether more experienced investors (with larger investment portfolios) had a greater awareness of auditor independence issues than smaller investors. However, the number of companies invested in is a rather crude measure of investment experience. Investors who only invest in one company would have been classified as small/inexperienced investors, even if they had just sold shares in another 50 companies and had bought and sold shares for the last 50 years. On reflection, a question asking investors to indicate the length in years that they had been investing would have been a more accurate measure of investment experience.

Fourthly, the study is limited by the low response rate to the institutional investor survey. Tests for non-response bias proved negative, but a higher response rate would have provided a greater breadth of institutional investor perceptions. If the study were to be replicated, the institutional investor survey should be altered to create a survey similar to that used for the private investors which elicited a higher response rate.

The current study is also limited by its focus on quantitative research methods. Canning and Gwilliam (1999:401) argue that the use of a multi-method research approach allows 'breadth and coverage', with the opportunity to probe deeper into perceptions than is possible with the use of a questionnaire. The nature of the research method employed meant that assumptions had to be made about why the investors had answered in particular ways, had interviews been employed it might have been possible to receive further clarification and make fewer assumptions. Canning and Gwilliam (1999) argue that when two different research methods are used, the methods can enrich and validate one another, ultimately giving greater confidence in the results. However, the process of conducting a meaningful sample of interviews as

well as the questionnaire would have increased the time and money involved in the study. Furthermore, the resistance to the survey from the chief executives, highlighted by the low response rate compared to the private investor survey, gives some indication of the difficulty of getting access to chief executives for a large sample of interviews.

A further limitation of the current study is that the perceptions of the private investors who responded may not be typical of private investors in general. The shareholder lists from Jarvis PLC and Amstrad PLC were chosen as both companies have been in the media spotlight in recent times, which could mean that these private shareholders have a greater awareness of the companies' corporate governance issues than private investors in a stable company. It was necessary to choose companies whose shareholders might be more aware of the issues addressed in the questionnaire in order to increase response rates. However, a future study could compare the perceptions of investors in Jarvis and Amstrad with those of private investors from more stable companies. Furthermore, as no single list of institutional investor names exists, it is a possibility that a major institutional investor may have been missed out of the sample.

The generalisability of the perceptions of private Amstrad shareholders is further questioned in light of the 'special circumstances' surrounding Amstrad shareholdings. Sir Alan Sugar, who was the chairman and CEO of Amstrad, owned around 27.9% of shares in Amstrad and was both a principal and an agent (at the time when the study was conducted). These 'special circumstances' in the corporate governance structure of Amstrad may have attracted a certain type of investor whose perceptions may not be typical of other private investors. For example, having the same person as a chairman and as a CEO is sometimes considered a risky strategy, therefore, perhaps those who invested in Amstrad were bigger risk takers than other private investors. This should be remembered when considering the responses of the private investors recorded in this study.

Resource constraints involved in the current study meant that only private shareholder lists from medium-sized companies could be purchased. It is possible that the

perceptions of private investors who invest in large or small companies will be different to the perceptions of those who invest in medium-sized companies. Future studies with fewer resource constraints could attempt to compare the perceptions of private investors in medium sized companies with private investor perceptions from larger (or smaller) companies. It should also be noted that as the descriptive statistics highlighted that the majority of the institutional investor participants were from small companies, the results might not be generalisable to large institutional investor perceptions of auditor independence.

In retrospect, the term 'auditor' used in the questionnaire was too general, because it did not specify whether the 'auditor' referred to the individual partner, the local audit office or the national audit firm. Future research should use clearer definitions for the term 'auditor'.

The questionnaire was restricted to the four main auditor-client relationships discovered in the literature. This restriction helped to keep the questionnaire to a reasonable length in an attempt to increase response rates. However, in only including four auditor-client relationships, a relationship may have been overlooked which was important to the respondent. Should the current study be replicated in the future, a free response question should be added which would give the respondents the option to list any other auditor-client relationships which they perceive to be independence-impairing.

It should also be acknowledged that although the threat of non-audit services appears to have the largest effect on investor perceptions of auditor independence, this result might have been effected partially by the large amount of recent publicity surrounding the provision of non-audit services. It is possible that respondents indicated concern about non-audit service provision due to the fact that they had heard of this threat and thought that they *ought* to acknowledge provision of non-audit services as a threat to auditor independence, rather than out of actual concern. However, it is impossible to identify whether such bias has occurred.

Finally, it should be remembered that the investor perceptions reported in the current

study only represent investor perceptions of auditor independence at one moment in time; it is possible that investor perceptions of auditor independence will be subject to change. Solomon (2002) argues that investors' perceptions of auditor independence are constantly evolving. For example, the International Auditing and Assurance Standards Board might enhance perceptions of auditor independence with the current revision of their standards relating to auditor independence. However, should other audit failures and corporate collapses occur in the future then investor confidence in auditor independence may decrease.

Whilst the current study was subject to a number of limitations, the research was successful in addressing all four of the original objectives of the study (outlined in Chapter One).

### **8.5 Suggested Future Research**

Four areas which would benefit from future research have become apparent:

1. As private shareholders with no accounting qualifications are the most concerned about the auditor-client relationships, the current study suggests that private investors may require further accounting education to help them make informed investment decisions and cure their fear of the 'unknown' (as was previously suggested by Reckers and Stagliano,1981). It is suggested that further 'post-Enron' research is needed into whether private investors should have access to further information when investing and whether private investors would utilise this information. Greater accounting education should also be considered as a way to raise general awareness over auditor independence issues.
2. Further objective research into ex-auditor employment should be conducted which considers the effects of replacing the 'one size fits all' cooling-off period with one related to the seniority of the ex-auditor. Perceptions of ex-auditor employment might be better researched through a series of qualitative interviews, rather than a survey so that issues can be explored in depth.

3. An interesting avenue for further research would be to compare the perceptions of the financial accountants who responded to the current survey with a sample of management accountants (few of whom responded to the current survey). Differences in the areas that the two groups of accountants are trained in may be reflected in the responses which are given. The current study found that generally, the qualified respondents were less concerned about the risks that the auditor-client relationships posed to auditor independence than those without accounting qualifications. However, financial accountants (who were the main qualified respondents) have an audit-based qualification which could have affected their perceptions. Management accountants (CIMA qualified) focus more on the forward-looking business management aspect of accounting and may have a different view of how certain auditor-client relationships affect auditor independence.
  
4. The current study suggests either that the recent high-profile accounting scandals in the USA have not increased UK investors' concern for auditor independence or that it has taken a relatively short time for UK investors to regain faith in auditor independence. The current research could be replicated in the USA to determine whether investor perceptions have followed the same pattern as UK investors or whether American investors' concerns about auditor independence have been heightened since the accounting scandals. It is possible that American investor perceptions of auditor independence will have been affected more by the collapses than UK investor perceptions.

## **8.6 Concluding Remarks**

The current research has provided a timely investigation into institutional and private investor perceptions of auditor independence. Recent high profile accounting scandals in the USA have done little to reassure investors of the professional integrity of auditors although auditor independence concerns date back over 40 years. During this time, academics and the accounting profession have yet to agree on how best to regulate auditors and prevent future losses of independence. It appears that in the modern, ever-changing business environment, issues of auditor independence will

remain a point of controversy as new evidence and research are uncovered.

It may never be confirmed whether economic dependence, non-audit service provision, long tenure and ex-auditor employment actually affect an auditor's independent mental attitude in reality, but as the current study has shown that important users of audited financial information perceive some auditor-client relationships in a negative light, auditors must seriously consider taking further visible steps to be *seen* as independent in order to restore faith in the professional integrity of auditors.

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## **APPENDICES**

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**Covering Letter for the Institutional and Private Investor Questionnaires**

2005

Dear Sir/Madam,

**Shareholders' Perceptions of Auditor Independence in the UK.**

I am currently conducting postgraduate research, under the supervision of Professor Roy Chandler at Cardiff University, into the issues surrounding auditors' independence. There has recently been a good deal of discussion about this and other aspects of corporate governance. My concern is to gauge the opinions of those who invest in companies. The findings of this independent survey will help to inform the current debate on corporate governance.

I would therefore be very grateful if you could take a few minutes to complete this short questionnaire and return it in the attached reply-paid envelope. I guarantee you that the information which you give will be kept completely confidential.

Your co-operation is very much appreciated.

Thank you.

Yours faithfully,

ELEANOR DART

E-mail: **DARTE@CARDIFF.AC.UK**

Phone: **07714324857**

## Survey of Investors' Perceptions of Auditor Independence in the UK

*This questionnaire consists of five sections. Please answer all of the questions in all sections.*

### SECTION 1: EX-AUDITOR EMPLOYMENT WITHIN THE CLIENT COMPANY.

1. Please indicate the extent of your agreement with each of the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Before investing in a company, I consider whether any of the senior employees are alumni of the company's current auditor.					
I would <b>not</b> invest in a company where such a senior personnel transfer has taken place.					
Such senior personnel transfers are a threat to auditor independence.					
After a senior personnel transfer has taken place, I would be concerned about the independence of the last audit that the auditor conducted prior to joining the client company.					
After a senior personnel transfer has taken place, I would be concerned about the independence of future audits conducted by the remaining audit engagement team.					

2. Mr Smith left his job at one of the major accounting firms. In your opinion how much time should elapse before it would be acceptable for Mr Smith to join his former client company? (Please tick the appropriate box for each scenario).

	None -Start Straight Away	6 Mths	1 yr	1 ½ yrs	2 yrs	3 yrs	> 3 years
If Mr Smith had been an audit engagement partner.							
If Mr Smith had been a member of the engagement team, but not an audit partner.							
If Mr Smith's new job involved preparation of company financial statements.							
If Mr Smith's new job did not involve preparation of company financial statements.							

3. Would you be in favour or against any of the following safeguards to auditor independence?  
(Please tick an appropriate box for each safeguard).

	Not in Favour	Unsure	In Favour
A 'cooling off' period longer than the existing 2 years.			
A total ban on such personnel transfers.			
Systematic staff rotation within audit firms.			
Systematic changes to the audit firm's methodology.			
A subsequent review of the last audit conducted by the departing member of staff, by a current senior member of staff.			

Others: (Please Specify).

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**SECTION 2: LONG ASSOCIATION BETWEEN THE AUDIT FIRM AND THE CLIENT COMPANY.**

4. Please indicate the extent of your agreement with each of the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Before investing in a company I consider the length of the relationship between the company and its auditors.					
A lengthy relationship (over 5 years) between the company and its auditors would not affect my decision to invest.					
A long relationship (over 5 years) between an auditor and a client company is a threat to auditor independence.					

5. After what length of auditor-client company relationship would you start to become concerned about auditor independence?

<input type="checkbox"/> < 1 year	<input type="checkbox"/> 1 – 2 years	<input type="checkbox"/> Never
<input type="checkbox"/> 3 – 5 years	<input type="checkbox"/> 6 – 10 years	
<input type="checkbox"/> 11 – 20 years	<input type="checkbox"/> > 20 years	

6. How would you rate the UK's current system of **partner** rotation every five to seven years as a means of protecting auditor independence? (Please tick one box only).

Sufficient	<input type="checkbox"/>	Not Sufficient	<input type="checkbox"/>	Not Needed	<input type="checkbox"/>	Unsure	<input type="checkbox"/>
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7. Would the introduction of a system of mandatory audit **firm** rotation in the UK give you greater confidence in the independence of auditors? (Please tick one box only).

Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Unsure	<input type="checkbox"/>
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**If you have answered 'no' please go to question 9.**

8. After how many years would you like to see audit **firms** in the UK rotate? (Please tick one box only).

Never	<input type="checkbox"/>	1 year	<input type="checkbox"/>	2 years	<input type="checkbox"/>
3 years	<input type="checkbox"/>	4 years	<input type="checkbox"/>	5 years	<input type="checkbox"/>
6 – 10 years	<input type="checkbox"/>	11 - 20 years	<input type="checkbox"/>	> 20 years	<input type="checkbox"/>

**Please continue to section 3.**

9. The following arguments have been put forward **against** mandatory audit **firm** rotation. Please indicate, by ticking in column A, which you feel are valid arguments. In column B, please rank the **three** most important arguments, in your opinion, against mandatory firm rotation (1 = most important, 2 = second most important, 3 = third most important)

	A	B
A lengthy relationship could benefit auditor independence, as the auditor would be more familiar with the client company and its business environment.	<input type="checkbox"/>	<input type="checkbox"/>
There are not enough audit firms in the market to support the system.	<input type="checkbox"/>	<input type="checkbox"/>
It has been argued that there is greater audit risk in the early years of a relationship.	<input type="checkbox"/>	<input type="checkbox"/>
The continuous start-up costs for the auditor and the client would be too great.	<input type="checkbox"/>	<input type="checkbox"/>
The auditors could be more susceptible to client management pressure in the early years.	<input type="checkbox"/>	<input type="checkbox"/>
There will be too much disruption to the continuity of the audits.	<input type="checkbox"/>	<input type="checkbox"/>
There will be a loss of vital market signals, which occur when auditors voluntarily resign/are fired.	<input type="checkbox"/>	<input type="checkbox"/>
The scheme has been introduced in other countries, such as Spain, only to be dropped.	<input type="checkbox"/>	<input type="checkbox"/>
Auditors may lose interest in their client as their contract with them draws to an end, not concentrating on audit quality any longer.	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION 3: AN AUDITOR'S ECONOMIC DEPENDENCE UPON A CLIENT COMPANY.**

10. Please indicate the extent of your agreement with each of the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Before investing in a company I consider the amount of audit fees the company pays to its auditor.					
I would not invest in a company if I perceived its auditors to be economically dependent upon it.					
It is possible for an audit firm to be economically dependent upon a client and still maintain its independence from that client.					
Audit fees alone (excluding non-audit fees) could not cause an audit firm to become economically dependent upon a client company.					

11. The Auditing Practices Board (APB) has imposed a 10% limit on income (audit and non-audit) from any one client as a safeguard to auditor independence. Do you believe this limit is:

Adequate     
  Not Adequate     
  Unsure

If you perceive this limit to be not adequate, please state what you believe this limit should be:

< 10%     
  11% - 20%     
  21% - 30%     
  31% - 40%

41% - 50%     
  51% - 60%     
  61% - 70%     
  > 70%

**SECTION 4: THE PROVISION OF NON-AUDIT SERVICES.**

12. Please indicate the extent of your agreement with each of the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
When investing in a company I consider the amount of non-audit services the company employs from its auditor.					
The provision of non-audit services to an existing audit client affects my confidence in an auditor's ability to remain independent.					
When one of the Big Four accounting firms provides non-audit services to an audit client, I am confident in its independence.					
When one of the smaller (non-Big Four) accounting firms provides non-audit services to an audit client, I am confident in its independence.					
When an audit firm co-contracts with a client company to provide non-audit services to other companies, this does not damage auditor independence towards that client.					

13. In your opinion, at what point would the percentage of non-audit fees out of the total fees paid by a particular client, become a threat to an auditor's independence?

Less than 10%	<input type="checkbox"/>	11% - 20%	<input type="checkbox"/>	21% - 30%	<input type="checkbox"/>
31% - 40%	<input type="checkbox"/>	41% - 50%	<input type="checkbox"/>	51% - 60%	<input type="checkbox"/>
61% - 70%	<input type="checkbox"/>	> 70%	<input type="checkbox"/>	Never a threat	<input type="checkbox"/>

14. It has been argued that only certain aspects of auditors' activities will detract from their independence. Please indicate the extent to which you feel the following detract from an auditor's independence. (Please tick the appropriate box for each service).

	DOES NOT detract from an auditor's independence	Unsure whether this detracts from independence	DOES detract from an auditor's independence
Bookkeeping and other accounting services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Information systems design and implementation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Valuation of assets/liabilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Actuarial services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internal audit services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Human resources, such as recruitment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Investment advice.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Legal services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expert services e.g. providing expert opinions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tax services, e.g. tax compliance and tax planning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. Do you think that audit firms should be prohibited from providing their audit clients with non-audit services? (Please tick the appropriate box for each case).

	Yes	No	Unsure
Assuming that non-audit services and audit are conducted by the <b>same</b> personnel.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assuming that non-audit services and audit are conducted by <b>different</b> personnel.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you have answered yes to any of the above, should this prohibition be:

By Law	<input type="checkbox"/>	By Professional Rules	<input type="checkbox"/>	Unsure	<input type="checkbox"/>
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16. As an alternative to an outright ban on the provision of non-audit services, some other solutions have been suggested. Please indicate, in each case, whether you would be in favour, or otherwise, of these solutions.

	Not in Favour	Unsure	In Favour
A prescribed maximum ratio of non-audit fee: audit fee			
Strengthened audit committees, with greater disclosures in the annual report.			
Making it mandatory for companies to put non-audit service work out to tender.			
Better justification (by the company) in company annual reports of the need for the non-audit services supplied by their auditors.			
Giving shareholders greater power to be involved in the governance of a company.			

If you indicated that you would **NOT** be in favour of some of the above solutions, please use the space beneath to give any reasons for your views.

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**SECTION 5: SOME INFORMATION ABOUT YOU AND YOUR ORGANISATION.**

The answers you give to these questions will help in making statistical comparisons; at no point will we try to identify you.

17. Are you:

Male

Female

18. What age bracket do you fall into?

Under 30 yrs

30-40 yrs

41-50 yrs

51-60 yrs

Over 60 yrs

19. Do you have any recognised (UK or foreign equivalent) accounting qualifications? (Please tick appropriate answer).

Yes

No

If 'YES' Please specify which: \_\_\_\_\_

20. Please indicate the extent of your work experience in accounting firms: (Please tick appropriate answer).

One of the Big Four (or predecessor) accounting firms.	<input type="checkbox"/>
A medium sized accounting firm.	<input type="checkbox"/>
A small accounting firm.	<input type="checkbox"/>
None.	<input type="checkbox"/>

21. If an accounting firm has employed you, have you ever left that accounting firm to take employment with an audit client?

Yes        No

22. Before investing in a company, how thoroughly would you consult the following sources of accounting information? (Please tick the appropriate box for each source).

	Read thoroughly	Read briefly	Do not read at all
The Company Annual Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Financial Press Reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Summary Annual Financial Statements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preliminary Announcements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interim Financial Statements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stockbrokers' Reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teletext or other TV Media	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Datastream/other Computer Software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Share Prices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friends and Relatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Occasional Merger Reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Others: (Please Specify).

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

23. Approximately how many listed companies does your company currently invest in?

24. Approximately how many people does your company currently employ? (Please tick one box as appropriate).

< 100       100 - 250       251 - 500       > 500

**THANK YOU FOR YOUR TIME AND EFFORT IN COMPLETING THIS QUESTIONNAIRE.**

**First Follow-up Letter for the Institutional Investor Questionnaire**

**The Chief Executive**

2005

Dear Sir/Madam,

**Shareholders' Perceptions of Auditor Independence in the UK**

I recently sent you a questionnaire which was designed to ascertain institutional investors' perceptions of certain issues surrounding auditor independence.

If you have already returned my questionnaire, I would like to thank you for doing so. If you have not had a chance to complete the questionnaire, could I urge you to do so? The responses to my questionnaire will enable me to assess the perceptions of top institutional investors concerning auditor independence, a crucial issue in today's financial environment.

I would like to remind you that any views which you express in this survey will be kept completely confidential.

Your co-operation is very much appreciated.

Thank you.

ELEANOR DART

**E-mail:**        **DARTE@CARDIFF.AC.UK**

**Phone:**        **07714324857**

**Second Follow-up Letter for the Institutional Investor questionnaire**

**The Chief Executive**

2005

Dear Sir/Madam,

**Shareholder's Perceptions of Auditor Independence in the UK**

I am writing in reference to a questionnaire which was sent to you dated May 13<sup>th</sup> 2005. This questionnaire forms part of my postgraduate research, under the supervision of Professor Roy Chandler at Cardiff University and is designed to ascertain institutional investors' perceptions of certain issues surrounding auditor independence.

If you have already returned my questionnaire, I would like to thank you for doing so. If you have not had a chance to complete the questionnaire, please could I urge you to do so? The short questionnaire and reply-paid envelope are included. I guarantee you that the information which you give will be kept completely confidential.

Your co-operation is very much appreciated.

Thank you.

ELEANOR DART

**E-mail:** DARTE@CARDIFF.AC.UK

**Phone:** 07714324857

## Survey of Investors' Perceptions of Auditor Independence in the UK

*Please answer all of the questions in all sections.*

### SECTION 1: A COMPANY EMPLOYS A FORMER AUDITOR.

1. Please indicate the extent of your agreement with each of the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I would <b>not</b> invest in a company which employed at a senior level a former member of the audit team.					
If a company had recently recruited a senior employee from its audit firm, I would be concerned about the independence of the <i>last</i> audit.					
If a company had recently recruited a senior employee from its audit firm, I would be concerned about the independence of <i>future</i> audits.					

2. Mr Smith left his job at one of the major accounting firms. In your opinion how much time should elapse before it would be acceptable for Mr Smith to join the management of one of his former audit clients? (Please tick the appropriate box for each scenario).

	None - Start Straight Away	6 Mths	1 yr	1 ½ yrs	2 yrs	3 yrs	> 3 years
If Mr Smith had been the senior auditor.							
If Mr Smith had not been the senior auditor.							
If Mr Smith's new job involved preparation of the company's accounts.							
If Mr Smith's new job did not involve preparation of the company's accounts.							

**SECTION 2: LONG ASSOCIATION BETWEEN THE AUDIT FIRM AND THE CLIENT COMPANY.**

3. Please indicate the extent of your agreement with each of the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Before investing in a company I consider the length of the relationship between the company and its auditors.					
A long relationship (over 5 years) between an auditor and a client company is a threat to auditor independence and would affect my decision to invest.					

4. In the UK, in order to strengthen auditor independence, audit partners cannot remain in charge of one particular audit continuously for more than five years. Do you think this rule is: (Please tick one box only).

Sufficient
  Not Sufficient
  Not Needed
  Unsure

5. In your opinion, would it be better if companies were required to employ a different audit firm every five years? (Please tick one box only).

Yes
  No
  Unsure

**SECTION 3: AN AUDITOR'S ECONOMIC DEPENDENCE UPON A CLIENT COMPANY.**

6. Please indicate the extent of your agreement with each of the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Before investing in a company I consider the amount of audit fees the company pays to its auditor.					
I would not invest in a company if I perceived its auditors to be economically dependent upon it.					
It is possible for an audit firm to be economically dependent upon a client and still maintain its independence from that client.					

**SECTION 4: THE PROVISION OF NON-AUDIT SERVICES.**

Audit firms often provide other accounting-related services to their audit clients.

7. Please indicate the extent of your agreement with each of the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
When investing in a company I consider the amount of non-audit services (such as consulting and bookkeeping) that the company employs from its auditor.					
The provision of non-audit services to an existing audit client affects my confidence in an auditor's ability to remain independent.					
When an audit firm works with a client company to provide non-audit services to other companies, this does not damage auditor independence towards this client.					

8. In your opinion, at what point would the percentage of non-audit fees out of the total fees paid by a particular client to an auditor, become a threat to an auditor's independence?

Less than 10%	<input type="checkbox"/>	11% - 20%	<input type="checkbox"/>	21% - 30%	<input type="checkbox"/>
31% - 40%	<input type="checkbox"/>	41% - 50%	<input type="checkbox"/>	51% - 60%	<input type="checkbox"/>
61% - 70%	<input type="checkbox"/>	> 70%	<input type="checkbox"/>	Never a threat	<input type="checkbox"/>

9. Do you think that audit firms should be prohibited from providing their audit clients with non-audit services? (Please tick the appropriate box for each case).

	Yes	No	Unsure
Assuming that non-audit services and audit are conducted by the <b>same</b> personnel.			
Assuming that non-audit services and audit are conducted by <b>different</b> personnel.			

If you have answered yes to any of the above, should this prohibition be:

By Law	<input type="checkbox"/>	By Professional Rules	<input type="checkbox"/>	Unsure	<input type="checkbox"/>
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**SECTION 5: SOME INFORMATION ABOUT YOU.**

The answers you give to these questions will help in making statistical comparisons; at no point will we try to identify you.

10. Are you:

Male	<input type="checkbox"/>	Female	<input type="checkbox"/>
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11. What age-bracket do you fall into?

Under 30 yrs	<input type="checkbox"/>
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30-40 yrs	<input type="checkbox"/>
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41-50 yrs	<input type="checkbox"/>
-----------	--------------------------

51-60 yrs	<input type="checkbox"/>
-----------	--------------------------

Over 60 yrs	<input type="checkbox"/>
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12. Do you have any recognised (UK or foreign equivalent) accounting qualifications?  
(Please tick appropriate answer).

Yes	<input type="checkbox"/>
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No	<input type="checkbox"/>
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If 'YES' Please specify which: \_\_\_\_\_

13. Please indicate the extent of your work experience in accounting firms: (Please tick appropriate answer).

One of the Big Four (or predecessor) accounting firms.	<input type="checkbox"/>
A medium sized accounting firm.	<input type="checkbox"/>
A small accounting firm.	<input type="checkbox"/>
None.	<input type="checkbox"/>

14. If an accounting firm has employed you, have you ever left that accounting firm to take employment with an audit client?

Yes	<input type="checkbox"/>
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No	<input type="checkbox"/>
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15. How thoroughly do you consult the following sources of accounting information? (Please tick the appropriate box for each source).

	Read thoroughly	Read briefly	Do not read at all
The Company Annual Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Financial Press Reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stockbrokers' Reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teletext or other TV Media	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friends and Relatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Others: (Please Specify).

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16. Approximately how many listed companies do you currently invest in?

<input type="checkbox"/>
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**THANK YOU FOR YOUR TIME AND EFFORT IN COMPLETING THIS QUESTIONNAIRE.**

## **Follow-up Letter for Private Investor Questionnaire**

2005

Dear Sir/Madam,

You may remember that I recently sent you a questionnaire about your views on auditor independence. The results of this survey will form the basis of my PhD research.

If you have already returned my questionnaire, I would like to thank you for taking the time to do so. If you have not had a chance to complete the questionnaire, could I urge you to do so? Your views could make an important contribution to the current debate. Even if company finance does not interest you at all, I would value your views. I have included a second copy of the questionnaire with this letter and would be very grateful if you could spare just a few minutes to complete it and return it in the attached reply-paid envelope.

I would like to remind you that any views which you express in this survey will be kept completely confidential. I was able to obtain your details, as a private shareholder, from Companies House in Cardiff. However, I guarantee you that I will not be passing your details on to anyone else under any circumstances.

Please do not hesitate to contact me either by phone or by email if you have any questions.

Your co-operation is very much appreciated.

Thank you.

Yours Sincerely,

ELEANOR DART

**E-mail: DARTE@CARDIFF.AC.UK**

**Phone: 07714324857**

