VAASAN YLIOPISTO

KIM ITTONEN

A Theoretical Examination of the Role of Auditing and the Relevance of Audit Reports

VAASAN YLIOPISTON JULKAISUJA

OPETUSJULKAISUJA 61

BUSINESS ADMINISTRATION 28

ACCOUNTING AND FINANCE

VAASA 2010

PREFACE

The objective of this book is to present and discuss the frameworks that affect the demand for audit services. Knowledge of the theories discussed in this book are fundamental to everyone studying auditing and accounting. While most of the "normal" auditing text books focus on *what* the auditors do and how they do it, this book goes one step back and examines *why* auditors exist in the first place. The author believes that by knowing the theories and factors affecting existence and the demand for audit services, the understanding of what and why certain things are done by auditors is deepened.

This book is structured in the following way. In "Part I" the theories of auditing are presented. The main focus here is on agency theory because it is the most prominent of the existing theories. In the latter half of "Part I" the factors affecting the demand for financial information and auditing are discussed. This perspective is important because it helps the reader better understand, for example, why different companies or users demand different levels of information or assurance.

The purpose of "Part II" is to illustrate what implications auditing, particularly audit reporting, may have. This section examines the usefulness of audit reports to financial statement users by examining evidence from the stock markets and decision making processes.

To activate the reader each chapter is preceded by a statement of the learning objects. These are matters that the author thinks that the reader should know after reading the chapter. In addition, each chapter is followed by discussion questions. The chapter does not necessarily give a direct answer to these questions, but rather, they are questions that arise from the issues discussed.

CONTENTS

LIST OF TABLES

LIST OF FIGURES

PART I.

Theories on the demand for auditing

1 INTRODUCTION

A theory is defined in Encyclopædia Britannica as follows:

> Scientific Theory. (2010). In Encyclopædia Britannica. Retrieved February 10, 2010, from Encyclopædia Britannica Online: http://search.eb.com/eb/article-9066294
>
> "systematic ideational structure of broad scope, conceived by the human imagination, that encompasses a family of empirical (experiential) laws regarding regularities existing in objects and events, both observed and posited. A scientific **theory** is a structure suggested by these laws and is devised to explain them in a scientifically rational manner."

Theories on the demand for auditing provide a general framework for auditing, or at least for understanding it. Mautz and Sharaf (1961) define the purpose of theory in the following way: *"One reason, then, for a serious and substantial investigation into the possibility and nature of auditing theory is the hope that it will provide us with solutions or, at least, clues to solutions, of problems which we now find difficult"*.

For example, auditing theory helps explain why auditing is needed in the first place. What is the role or purpose the audit process is having in the communication between a company and its environment? Furthermore, auditing theory attempts to explain why some of the postulates and key concepts of auditing are so important (see Mautz and Sharaf 1961; Flint 1988). Auditing theory also uncovers some of the laws that govern the audit process and its activities. Finally, it provides us with a framework for understanding the relationships and interrelationships between different parties of a firm.

2 THEORETICAL FRAMEWORK FOR AUDITING

LEARNING OBJECTIVES

1. Recognize four theories for auditing.
2. Recognize where and how these proposed theories overlap, coincide or conflict.
3. Recognize three different roles for auditing
4. Understand how the different roles affect the perceived purpose of auditing.
5. Understand how the different roles affect the perceived role of the auditor.

2.1 Theories of auditing

There are several different theories that may explain the demand for audit services. Some of them are well known in research and some of them are more based on perceptions. Figure 1 illustrates four audit theories according to Hayes et al. (2005).

The policeman theory claims that the auditor is responsible for searching, discovering and preventing fraud. In the early 20th century this was certainly the case. However, more recently the main focus of auditors has been to provide reasonable assurance and verify the truth and fairness of the financial statements. The detection of fraud is, however, still a hot topic in the debate on the audior's responsibilities, and typically after events where financial statement frauds have been revealed, the pressure increases on increasing the responsibilities of auditors in detecting fraud.

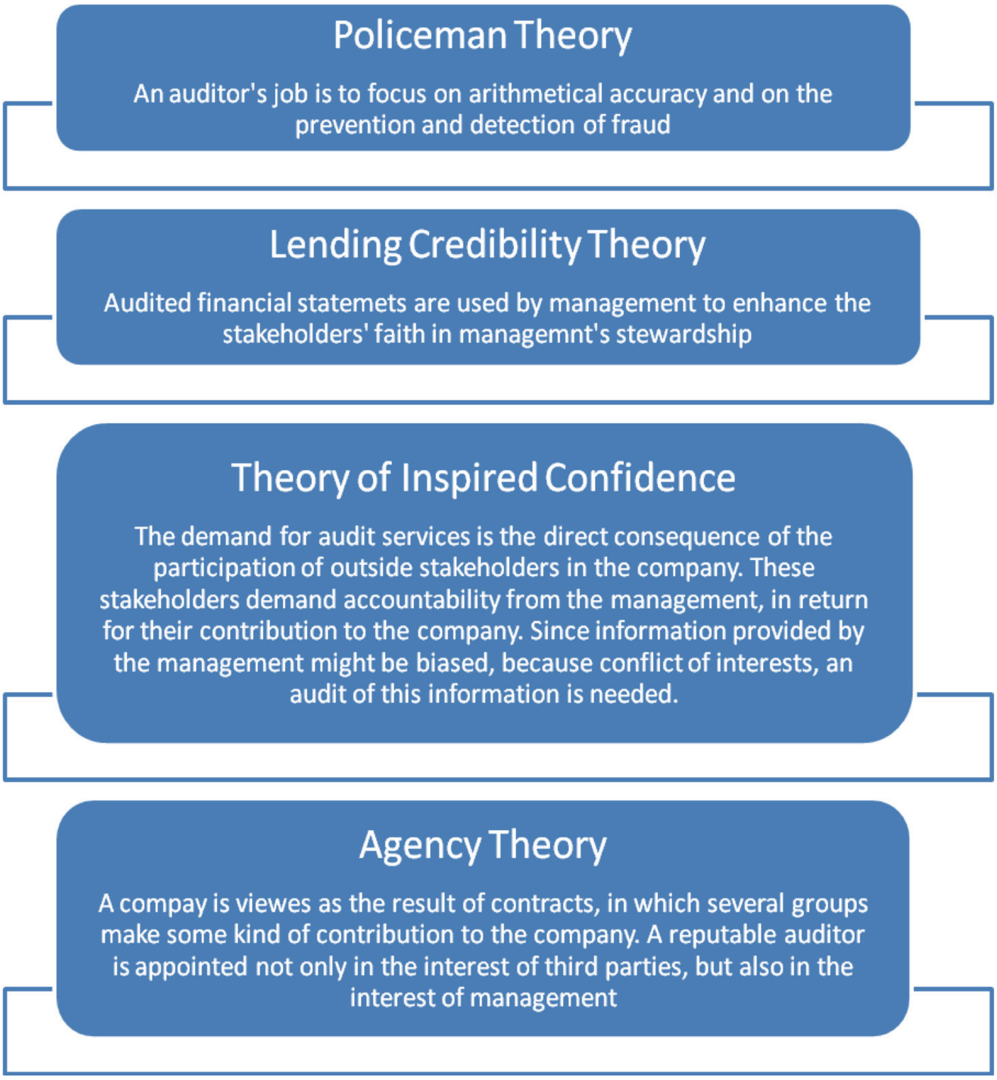

Figure 1. Four theories of auditing (Hayes et al. 2005)

The lending credibility theory suggests that the primary function of the audit is to add credibility to the financial statements. In this view the service that the auditors are selling to the clients is *credibility*. Audited financial statements are seen to have elements that increase the financial statement users' confidence in the figures presented by the management (in the financial statement). The users' are percieved to gain benefits from the increased credibility, these benefits are typically considered to be that the quality of investment decisions improve when they are based on reliable information.

The theory of inspired confidence (Theory of rational expectations) (Limperg 1932) addresses both the demand and the supply for audit services. The demand for audit services is the direct consequence of the participation of third parties (interested parties of a company) in the company. These parties demand accountability from the management, in return for their investments in the company.

Accountability is realized through the issuance of periodic financial reports. However, since this information provided by the management may be biased, and outside parties have no direct means of monitoring, an audit is required to assure the reliability of this information. With regard to the supply of audit assurance, Limperg (1932) suggests that the auditor should always strive to meet the public expectations.

Agency theory (Watts and Zimmerman 1978, 1986a, 1986b) suggests that the auditor is appointed in the interests of both the third parties as well as the management. A company is viewed as a web of contracts. Several groups (suppliers, bankers, customers, employees etc.) make some kind of contribution to the company for a given price. The task of the management is to coordinate these groups and contracts and try to optimize them: low price for purchased supplies, high price for sold goods, low interest rates for loans, high share prices and low wages for employees. In these realationships, management is the *agent*, which tries to gain contributions from *principals* (bankers, shareholders, employees etc).

The most prominent and widely used audit theory is the agency theory. Consequently, chapter three will focus on discussing issues that arise from the principal-agent relationship. Before that the framework for audit theory is presented next.

2.2 The role of the audit

In the previous section four theories of auditing were presented. Related, and to some extent overlapping, with these theories Wallace (1980) proposed three hypotheses for explaining the role of the audit in free and regulated markets: the monitoring hypothesis, the information hypothesis and the insurance hypothesis. Next these three roles will each be described to provide an overview of the different roles auditing can take in different environments.

2.2.1 The monitoring hypothesis

The monitoring hypothesis assumes that when delegating decision-making power to one party, as suggested in agency theory, the agent is motivated to agree to be monitored if the benefits from such activities exceed the related costs. This hypothesis is applicable to all co-operative relationships in any organization, not only relationships between owners and managers, but also in relationships between employers and employees, creditors and shareholders, different levels of management in companies and government and taxpayers. (Wallace 1980 and 1987)

Beaver (1989) pointed out that the monitoring theory strives to solve problems that arise due to moral hazard and information asymmetry between the agent and the principal. Moral hazard is the problem of the agent possessing superior information and thus having the opportunity to use it self-interestedly at the expense of the principal (Beaver 1989). Arrow (1985) calls the two types of principal-agent problems hidden action (moral hazard) and hidden information (information asymmetry).

Public disclosures have been seen as one way of controlling the monitoring hypothesis. They have been seen as restricting the superior information position of management. Further, an independent actor can be contracted to inspect the information environment. From this point of view, auditing is one form of controlling for the monitoring hypothesis. The audit reduces the agent's chances to withhold material information from the shareholders (Beaver 1989).

The relationship between the auditor and the board of directors is one factor that affects the monitoring of management. The auditor and the board of directors usually have a relationship, which is considered to increase the monitoring power of the owners. Furthermore, the independent audit committees are considered to be a mechanism that enhances the auditor's independent position in negotiations and increases the effectiveness and quality of the audit engagement (Ng and Tan 2003). Recent updates in control environment regulation for public companies have imposed higher demands on the independence and expertise of board members. Similarly, the auditors and the management are now mandated to issue internal control reports, which again increases and strengthens the monitoring role of the auditor over the management.

Wallace (1980, 1987 and 2004) brings forward many factors implying that auditing is a highly valued monitoring system among stockholders, creditors, and top management. For example, Chow (1982) finds that companies with a higher ratio of total debt to total assets or companies with more accounting based covenants are more likely to hire an auditor, presumably to address the agency relationship of management to creditors. Additionally, evidence suggests that the likelihood of voluntarily hiring an auditor increases with the number of employees (Hay and Davis 2004). The value of auditiong of management may also be explained by the management's loss organizational control (Abdel-Khalik 1993). In companies with more employees or more complex organizational structure, maagement may benefir from audit in the sense that it is an additional meand for improving internal control.

2.2.2 The information hypothesis

Financial reporting was earlier seen to be central to the monitoring purposes, but since the 1960's the focus moved to needs and the provision of information to enable users to take economic decisions (Higson 2003). Therefore, an alternative or complement to the monitoring hypothesis is the information hypothesis. One argument regarding the demand for audited financial statements is that they provide information that is useful in investors' decision-making. Investment decision models in the finance literature value a company by calculating the net present value of future cash flows. For example, future cash flows have been observed to be highly correlated with financial statement information. Therefore, the audit is valued by investors as a means of improving the quality of financial information. (Wallace 1980, 1987 and 2004)

Some of the same information that is used in monitoring contracts is also useful in making investment decisions. The difference from monitoring purposes, however, is that installing means of monitoring usually requires explicit contracting, as is the case when the agent commits to providing audited financial statements. However, the information hypothesis emphasizes that financial information is needed by investors to determine market values, which are means of making rational investment decisions, even in the absence of an explicit contract with the agent. (Wallace 1980)

Fama and Laffer (1971) discuss three major benefits of information: reduction of risk, improvement of decision-making and earnings of trading profits. Audited financial statements can be related to each benefit. Investors tend to be risk adverse, so they will demand a higher return for higher levels of risk or they will pay a higher price in the form of a risk premium to reduce the level of uncertainty or risk (Fama et al. 1971). For a simple example let us assume that the risk premium represents an individual assessment of how much an audit will reduce uncertainty concerning reported financial information. The audit can be regarded as cost-effective if the risk premium of each individual investor exceeds the cost of the audit to the company. (Wallace 1980, 1987, 2004)

An audit is also valued as a means of improving the financial data used by managers in decision-making. An auditor can improve the quality of the input data by finding errors and by making employees more careful in preparing records. More accurate data will improve internal decision-making. External use of more accurate data for credit and investment analysis, labor negotiations or regulation decisions will also improve managers' performance. (Wallace 1980, 1987, 2004)

The third use of information refers to gains from trade by investors with private information. According to the efficient market hypothesis asset prices reflect all publicly available information. Hence, no abnormal returns can be gained by using publicly available information. The information benefit of profits from trading is only realized by investors with private access to new information. The Securities Act require that audited financial statements are made publicly available. At the public announcement of the audit results, the price of the securities will adjust to the information (e.g. Chen et al. 2000; Taffler et al. 2004) if the information is relevant and not already known or expected. It may also be that no price adjustment will result from the announcement of audit results, the same conclusions could have been reached by outsiders at an earlier date or the audit results could be replaced by available surrogate information. Therefore, the audit function can be evaluated with respect to the benefit of trading gains. In other words the announced audit findings may only confirm investors' expectations and existing market valuations. However, the absence of gains from trade on audit results does not imply lack of value for audited information. (Wallace 1980, 1987)

The role of the audited data is confirmed by research results (Beaver et al. 1970) which demonstrate an improvement in the estimation of risk through the use of accounting information. The improved estimation of risk does not mean that abnormal earnings could be gained, but suggests that investors have more accurate information for evaluating investments (Wallace 1980 and 2004). The perceived credibility of accounting information has been observed to have an effect on interest costs (Wallace 2002), underpricing of initial public offerings (Menon and Williams 1991; Hogan 1997; Willenborg 1999) and bankruptcy (Menon and Williams 1994).

2.2.3 The insurance hypothesis

The third hypothesis on how the demand for audits evolves relates to management's liability exposure (Wallace 1980). Under the Securities Act, the auditor and the auditee are jointly and severally liable to third parties for losses attributable to defective financial statements. The ability to shift financial responsibility for reported data to an auditor lowers the expected loss from litigation or related settlements to managers, creditors and other professionals involved in the securities market. As potential litigation costs increase the insurance demand from managers and professional participants for an audit can be expected to grow. (Wallace 1980, 1987, 2004)

To the question why managers and other professionals look for insurance from auditors rather than an insurance company, four possible explanations have been proposed. First, the audit function is so firmly established in society that the decision of management not to hire an auditor would strongly imply negligence or fraud on the part of the managers of other professionals. Second, accounting firms have established in-house legal departments to defend them in professional liability suits. Audits have been seen as possibly providing more efficient insurance coverage as a co-defendant, than the insurance company as a third party. Third, the auditor facing a litigation suit is concerned about his/her reputation. Similarly, managers are concerned about their own reputation and the company's reputation as a well-run company. The insurance company on the contrary will make decisions on a litigation suit as a cost-benefit choice between out of court settlement of legal defense. Thus, the auditor and the manager share a common interest in properly considering the effect of the litigation on the reputation of the parties involved.

Fourth, auditors have "deep pockets" relative to a bankrupt or failing company that cannot pay. Based on court decisions to hold auditors liable for inaccurate financial reporting, auditors are apparently viewed as a means of socializing the risk. This means that auditors spread the cost of client's business failures to other clients through higher fees and to the society through higher prices and lower returns on investment.

O'Reilly, Leitch and Tuttle (2006) show that the going concern audit report information is assessed less negatively when the environment perceives the auditor to provide some insurance. Similarly, Lennox (1999) concludes that the larger auditors with "deeper pockets" are more prone to litigation despite the higher quality that they provide, and thus this is interpreted as confirming the existence of an insurance effect on the demand for auditing. Finally, Menon et al. (1994) also find evidence that auditors are seen by investors as guarantors of financial statement quality and of their investments. Furthermore, investors also appear to be willing to pay a premium for the right to recover losses from the auditor.

DISCUSSION QUESTIONS

DQ 1. How do you think that time and changes in the business environment has affected the applicability of the four theories?

DQ 2. What existing corporate governance structures or mechanisms can you think of that can be explained using the same theories than auditing?

DQ3. Think of the three roles of auditing discussed previously. In which circumstances would it be understandable that an auditor is not engaged?

DQ4. What are the benefits of high quality information?

DQ5. Think of the different ways there are for the management to increase the percieved quality of the information that they disclose?

DQ6. Can you think of different auditor characteristics that signal a higher or lower information quality.

DQ7. Based on the propositions of the insurance hypothesis, how does the restriction of the auditors' liablility for financial losses (as recommended in the European Union Eight Directive) affect the demand for audit services?

3 KEY CONCEPTS OF AGENCY THEORY

LEARNING OBJECTIVES

1. Understand the contractual structure of a company
2. Understand what an agent and a principal are.
3. Understand the basic elements of an agency relationship
4. Understand what is meant by conflict of interest, information asymmetry, and agency costs

3.1 Contracting view of the company

In economic theory the term "company" was first defined by Coase (1937) as consisting of a system of relationships which come into existence when the direction of resources is dependent on an entrepreneur. The paper suggests that operating in an open market and using the market price mechanism involves costs. In addition, the costs of negotiating and concluding a separate contract for each exchange transaction are not eliminated when there is a company, but rather that they are reduced. The paper thus concludes that the advantage of forming an organization to direct the resources is cost-saving. Jensen (1983) elaborates further that these contracts specify the performance evaluation system, the reward system and the decision rights within the organization.

Furthermore, Coase (1937) specifies in his research why some activities are handled by companies and others by open markets. This study led the way to research to further examine the characteristics of the company. Alchian and Demsetz

(1972) explain that there are circumstances or different kinds of organizational arrangements under which the cost of managing resources in a company is lower than the cost of allocating resources through market transactions.

The company is identified by Alchian et al. (1972) as a contractual structure with joint input production, several input owners and one party who is common to all the contracts of the joint inputs. This party last mentioned is empowered to renegotiate any contract independently of contracts with other input owners; additionally that party holds the residual claim and has the right to sell his/her central contractual status. This central party is the owner.

3.2 Defining agency theory

By definition, agency theory attempts to describe a relationship where one party (the principal) delegates work to another (the agent). Furthermore, it is concerned with resolving the problems in a relationship with conflict of interests and risk sharing when attitudes toward risk diverge (Eisenhardt 1989). The Encyclopedia Britannica defines "financial agency theory" in the following manner:

> Agency Theory, Financial. (2010). In Encyclopædia Britannica. Retrieved February 10, 2010, from Encyclopædia Britannica Online: http://search.eb.com/eb/article-9439355
>
> "in organizational economics, a means of assessing the work being done for a principal (i.e., an employer) by an agent (i.e., an employee). While consistent with the concept of agency traditionally advanced by legal scholars and attorneys, the economic variants of agency theory emphasize the costs and benefits of the principal-agent relationship. While a beneficial agency cost is one that increases a shareholder's value, an unwanted agency cost occurs when management actions conflict with shareholder interests. Such would be the case when managers put their own interests ahead of an owner's interests (e.g., manipulating short-term earnings at the expense of long-term performance in order to receive a bonus). Ongoing analyses of agency costs are a common managerial tool, especially in corporations that are managed by nonowners, because they serve to indicate whether—or how well—a manager (agent) is fulfilling his fiduciary obligation to an owner (principal)."

The development of agency theory has resulted in two strands of literature which address the same problem: positive agency theory and principal-agent –theory (Jensen 1983). According to Jensen (1983) and Eisenhardt (1989), positivist research has focused almost exclusively on the relationship between the owner and the manager in public companies. Above all, positivist literature aims at identifying situations where the interests diverge and describing instruments that limit the agent's opportunistic behavior. Eisenhardt (1989) acknowledges the particular influence of three articles on the positivist agency literature: Jensen et al. (1976) on the ownership structure of the corporation, Fama (1980) on the role of efficient capital markets in controlling the behavior of managers and finally Fama and Jensen (1983) on the role of board of directors as a monitoring instrument.

The principal-agent literature has concentrated on modeling the general relationships between the principal and the agent (Jensen 1983). As a result the theory is more applicable e.g. to employer-employee, buyer-supplier and other agency relationships. Consequently, the literature is generally more mathematically orientated than is the positive agency literature (Eisenhardt 1989). Furthermore, Eisenhardt (1989) describes the heart of principal-agent theory as the trade-off between the cost of measuring the agent's behavior and the cost of measuring outcomes and transferring risk to the agent.

A general description of an agency relationship states that it is a contract under which one or more principals engage another person or persons as their agent(s) to perform some service on their behalf. To enable this performance, delegation of some decision making authority to the agent is needed (Jensen et al. 1976). As previously mentioned, the financial accounting literature focuses mainly on the positive agency literature, i.e. the relationship between the owner and the manager. However, as Wallace (1980) suggests, this relationship is also easy to observe between other actors such as employers-employees, creditors-shareholders, government-taxpayers, as the principal-agent theory illustrates.

The standard positive agency theory involves a principal (owner) contracting an agent (manager) to act on his/her behalf. As Jensen et al. (1976) explain, contracting involves delegating decision making authority to the agent. This distinguishes ownership from control. If both parties to the relationship strive to maximize their utility, there is the possibility that an agent will choose to act in his/her own interests, not in those of the principals, this results in conflict of interest -problems (Jensen et al. 1976). To limit the divergences from his/her own interests, the principal has the option of setting up incentives for the agent and limiting the conflicting activities of the agent by establishing appropriate means of control to mitigate conflicts of interests (Jensen et al. 1976).

As a conclusion to the description above, it can be noted that agency theory views the company as a network of contracts. This view constitutes one of the major foundations of theoretical accounting. The theory helps to understand and explain the behavior of business actors. Ross (1973) and Jensen et al. (1976) developed the theory of ownership structure of a company. This theory is developed on the basis of a distinction between ownership and control. From this point of view, the positive agency literature examines the use of information for contracting purposes, for example, how information can be used to persuade the manager to act in the interests of the owner (Ng 1978).

According to Eisenhardt (1989) agency theory focuses on resolving two problems occurring in the agency relationship: agency problems and the problem of risk sharing. An agency problem occurs when the interests of the principal and agent conflict and it is difficult or expensive for the principal to monitor the agent's actions. On the other hand, a problem of risk sharing occurs when the principal and agent have different attitudes towards risk.

Agency costs are the expenses incurred due to the contracting process (Adams 1994). The principal can, in general, reduce agency costs by monitoring. However, monitoring may also involve costs. Fama et al. (1983) define agency costs as the costs of structuring, monitoring and bonding a set of contracts among agents with conflicting interests. Agency costs also include the costs due to the fact that it is not appropriate to monitor all contracts perfectly (Jensen 1983). Adams (1994) observes that, in order to ensure the optimal level of interest alignment and information asymmetry, both principals and agents will incur contracting costs. For example, principals will incur monitoring costs from subjecting the financial statements to external audits. Agents, on the other hand, incur costs e.g. for external financial reporting and internal controls (Adams 1994).

Alchian et al. (1972) note that the theory of rational expectations underlies the demand for monitoring. This concept expects actors to take into account all available information that influences the outcome of their decisions, and that they use this information intelligently and therefore do not make systematic mistakes. In other words, principals cannot be consistently deceived by agents.

According to Alchian et al. (1972) the main implication of rational expectations theory for agents is that principals foresee the divergence between the interests of principals and agents. Therefore, the principals will insist on compensation for the risk of loss they perceive through adjustment of the agent's wage (Wallace 1980 and 1987). This causes the agent, rather than the principal, to reduce agency costs and the demand for monitoring activities (Alchian et al. 1972).

3.3 Conflict of interests

By definition, a conflict of interest is a situation where an individual or an organization, an agent, has multiple interests and of those interests one could possibly corrupt the motivation for an act in the other. Generally, a conflict of interest presupposes a circumstance where the agent is entrusted with some impartiality (objectivity or independence). The presence of a conflict of interest is independent from the execution of impropriety. Therefore, a conflict of interest can be discovered and voluntarily defused before any corruption occurs.

As an illustrative example of conflict of interest, think of a self-dealing conflict of interest -situation when a government official responsible for computer equipment purchases, decides to enter into an transaction with a company that the official owns himself. As a result the decision maker is on the both sides of the transaction: buyer and supplier. In accounting and auditing contexts conflict of interest usually refers to the conflicts between shareholders' and managers' objectives in agency relationships (see Figure 2 below)

As noted, if in an agency relationship ownership is separated from control and both agent and principal strive to maximize their own utility, this will result in conflict of interests (Jensen et al. 1976). Studies on managerial compensation have generally found that company size increases manager remuneration (Jensen and Murphy 1990; Conyon and Murphy 2000). This provides management with an incentive to focus on company size growth, rather than growth in shareholder returns. Managers also tend to pursue growth by diversifying, which reduces management's industry specific risk and strengthens their job security. However, Lang and Stulz (1994) find that shareholder returns are greater in undiversified companies and they also show that the value of the companies is reduced as they diversify further.

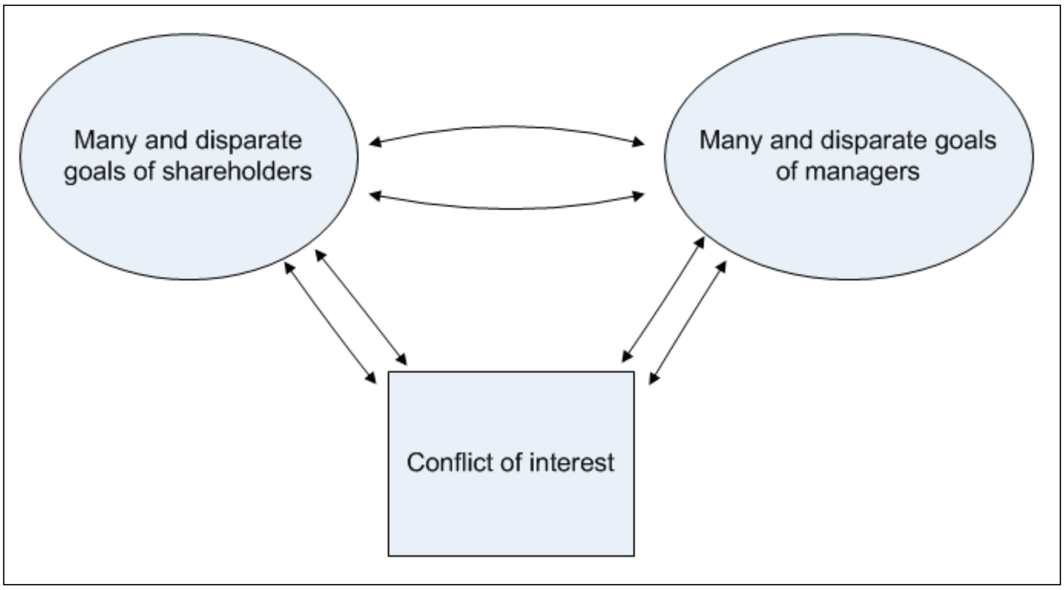

Figure 2. Conflict of interest between shareholders and managers (Soltani 2007)

According to Jensen (1986, 1989), managers of low growth and high free cash flow companies in particular are involved in non value-maximizing activities. Managers increase perquisite consumption and compensation as well as manipulation of accounting numbers at the expense of shareholders (Jensen 1989; Shleifer and Vishny 1989; Lang, Stulz and Walking 1991; Christie and Zimmermann 1994). For a company to operate efficiently and maximize shareholder value, free cash flow must be distributed to shareholders rather than retained (Jensen 1989). Accordingly, Jensen (1986) concludes that the agency costs are higher for companies with low growth and high free cash flow.

The free cash flow hypothesis is further extended by considering the effects of separating ownership from control. Following theories from Jensen et al. (1976) and Jensen (1986) on the separation of ownership and control, agency costs of free cash flow are more likely to occur in companies with low management ownership. This is because managers' interests are more aligned with shareholders' interests when they own shares in the company. Agrawal and Jayaraman (1994) argue that the agency costs of free cash flow are a decreasing function of management ownership.

If agency costs are higher in low growth – high free cash flow companies, this would imply greater demand for monitoring on the part of the principal and therefore the relevance of auditing could also be greater. This phenomenon is expected to be present particularly in companies where ownership is separated from control as Gul et al. (1998, 2001) proposed.

High level of free cash flow is also suggested to affect the assessment of the inherent risk, i.e. the risk of a material misstatement in the unaudited financial statements by the auditor (Gul et al. 1998, 2001). Firms with agency problems caused by free cash flow are thus likely to pay higher audit fees (Gul et al. 2001; Nikkinen et al. 2004). Gul et al. (2001) also suggest that the positive association between free cash flow and audit fees is stronger for companies with low levels of management ownership. However, this association is weaker in companies with high levels of debt (Gul et al. 2001).

3.4 Information asymmetry

An agency theory perspective also suggests that the principal-agent relationship may be associated with information asymmetry. The agent, as the party with greater involvement in the company, has access to information which may not be available for the principal without cost. The agent has the opportunity to use this information to his/her own advantage. This generates the need for regulated accounting and financial reporting.

The signaling theory, which is based on the "lemon problem" (Akerlof 1970), is a suitable theory in explaining how the information asymmetry affects the voluntary supply of financial information. First, here's how Akerlof (1970) illustrated the existence and implications of information asymmetry:

> Akerlof, George A. (1970). THE MARKET FOR "LEMONS": QUALITY UNCERTAINTY AND THE MARKET MECHANISM. *Quarterly Journal of Economics*, Vol. 84 Issue 3.
>
> pp. 489–490:
>
> "The example of used cars captures the essence of the problem. From time to time one hears either mention of or surprise at the large price difference between new cars and those which have just left the showroom. The usual lunch table justification for this phenomenon is the pure joy of owning a "new" car. We offer a different explanation. Suppose (for the sake of clarity rather than reality) that there are just four kinds of cars. There are new cars and used cars. There are good

> cars and bad cars (which in America are known as "lemons"). A new car may be a good car or a lemon, and of course the same is true of used cars.
>
> The individuals in this market buy a new automobile without knowing whether the car they buy will be good or a lemon. But they do know that with probability q it is a good car and with probability (1 — q) it is a lemon; by assumption, q is the proportion of good cars produced and (1 —q) is the proportion of lemons.
>
> After owning a specific car, however, for a length of time, the car owner can form a good idea of the quality of this machine; i.e., the owner assigns a new probability to the event that his car is a lemon. This estimate is more accurate than the original estimate. An asymmetry in available information has developed: for the sellers now have more knowledge about the quality of a car than the buyers. But good cars and bad cars must still sell at the same price — since it is impossible for a buyer to tell the difference between a good car and a bad car. It is apparent that a used car cannot have the same valuation as a new car — if it did have the same valuation, it would clearly be advantageous to trade a lemon at the price of new car, and buy another new car, at a higher probability q of being good and a lower probability of being bad. Thus the owner of a good machine must be locked in. Not only is it true that he cannot receive the true value of his car, but he cannot even obtain the expected value of a new car.
>
> Gresham's law has made a modified reappearance. For most cars traded will be the "lemons," and good cars may not be traded at all. The "bad" cars tend to drive out the good (in much the same way that bad money drives out the good). But the analogy with Gresham's law is not quite complete: bad cars drive out the good because they sell at the same price as good cars; similarly, bad money drives out good because the exchange rate is even. But the bad cars sell at the same price as good cars since it is impossible for a buyer to tell the difference between a good and a bad car; only the seller knows. In Gresham's law, however, presumably both buyer and seller can tell the difference between good and bad money. So the analogy is instructive, but not complete."

The takeaway from the "lemons" -theory at this stage is that if the quality of the car cannot be signaled to the purchaser, good and bad cars sell for the same price. As a result, good cars are undervalued and poor cars overvalued.

Given the third parties' uncertainties about the quality of the company, the lemon, managers have the opportunity to reduce the uncertainty by disclosing the set of information that they believe will respond to the demand from the interested parties, or alternatively, maintain the information advantage that they have over the external investors. According to the *signaling theory* it is the good firms' managers' aim to help investors identify good companies from bad. As in the car example, if investors cannot distinguish between these two types of companies, investors tend to treat both types as averages, i.e. that they are not good but not bad either. As a consequence, investors will "undervalue" the good companies and "overvalue" the bad companies. This will lead to inefficiencies in the markets. However, the presence of financial reporting and independent auditor's assurance managements' incentives to make "overly optimistic" disclosures in their financial statements will be reduced.

Because of rational expectations the agent usually has incentives to publish the accounting figures. Accounting numbers are frequently used by owners to monitor whether contractual obligations have been met and to restrict managers' power to promote personal interests (Watts and Zimmerman 1979). However, financial reporting of accounting numbers is not usually considered an information system for managers, since the company's internal management accounting is assumed to capture the company's actual financial position for the purposes of management (Ng 1978).

Adverse selection and moral hazard are problems that arise from information asymmetry. Both of them are particularly related to the incentives and monitoring problem. Soltani (2007) summarizes that in the adverse selection problem the principal is able to observe the agent's behavior but not the performance. This may be a result of weak proxies measuring the quality of the performance. If the performance of the agent cannot be or is improperly measured, there is an increased likelihood that the agent's performance will be below expectations. Moral hazard refers to the situation where the agent may have, thanks to information asymmetry, an incentive to act inefficiently (not in the interest of the principal) if the interests of the agent and the principal are not aligned. The situation may arise when the principal is not able to monitor the agent's behavior, but is able to judge the outcome, i.e. the quality of work performed based on a chosen measure. However the agent may modify his behavior towards only striving to fulfill the measures, being at the same time unconcerned about whether the behavior is actually what the principal desires.

Accounting and auditing are essential factors in monitoring the agency relationship. Healy and Palepu (2001) argue that the need for financial reporting and disclosure arises from information asymmetry and conflict of interests between managers and outside shareholders. Furthermore, the credibility of management disclosures is enhanced by regulation, auditing and capital market intermediaries (Healy et al. 2001). Accounting numbers are of little value unless they are prepared according to generally accepted standards (regulation) and unless compliance with these standards is monitored (auditing). Therefore, the role of auditing is associated with both conflict of interests and information asymmetry and thus it has indeed a significant role in monitoring agency contracts.

A unique feature in financial reporting is that the owner does not have full control over what accounting information system is being applied and what will be reported (Ng 1978). However, the generally accepted accounting principles guide to a certain extent the methods chosen by the manager and the existence of external auditing examines the application of these principals, but ultimately within those limitations the manager still decides, based on his/her own interests, what to report and at what frequency (Ng 1978).

As pointed out by Lennox et al. (2006), managers disclose value relevant information to owners and investors to reduce the information asymmetry. A reduction in information asymmetry increases the liquidity in the company's stock and reduces the cost of capital (Diamond and Verrecchia 1991). Verrecchia (2001) uses a definition "information asymmetry component of the cost of capital", by which he means the discount that e.g. the company provides to investors to accommodate the adverse selection problem, when there exists different degrees of informedness. A reduction in information asymmetry also reduces the opportunity to profit from informed trading (Diamond 1985). Information asymmetry can be reduced primarily by increasing disclosure activity (Verrecchia 2001; Brown, Hillegeist and Lo 2004).

Costs incurred from principals' monitoring actions are one component of agency costs (Jensen et al. 1976). Monitoring costs in a company accrue when there is a difference between owners' and managers' interests. Since less monitoring is required when owners' and managers' interests are aligned, Jensen (1986) suggested that agency costs are lower for companies with high levels of management ownership. Studies show that audit fees, as a part of monitoring costs, are higher for companies with lower management ownership (e.g. Gul et al. 2001; Nikkinen et al. 2004). Similarly, Chow (1982) finds some support for the view that the level of agency problems is positively related to demand for auditing and later Fan et al. (2005) find that agency problems affect the likelihood of companies employing brand name auditors (Big 5 -auditors).

Information asymmetries between the company and the investors can also be mitigated if the company has a richer information environment. Information environment refers to the amount and the quality of company and market-specific information available for investors. Information for decision-making may be gathered from various accounting and non-accounting sources. The primary sources of information are the regulated disclosures of the company. One purpose of disclosure regulation is indeed the reduction of the information gap between the company and its investors and between informed and uninformed investors (Healy et al. 2001).

In addition to the company disclosures, the richness of the information environment is affected by private information production and disclosure. There are at least two significant sources in addition to the company that produce and disclose information: analysts and news agencies. The disclosure regulation imposes more strict disclosure requirements on larger companies. And additionally, as public interest is greater in larger companies, the analysts and news agencies concentrate their information production on these. As a consequence, large companies have on average a richer information environment.

Recent evidence documents that the richer information environment of larger companies constrains managements' abilities to behave opportunistically, e.g. in managing abnormal accruals (Mitra et al. 2005). The profitability and the frequency of insider trades, both of which proxy for information asymmetry and private information, are documented to have a negative relationship with analyst following and company size, and the informativeness of accounting information reduces the frequency of insider trades (Frankel and Li 2004; Ryan 2005). Piotroski and Roulstone (2004) suggest that informed trading and analysts forecasting activity all affect the amount of disclosure information that is impounded in the share prices, but the type of information that they impound depends on each party's information advantage. Insiders and institutions incorporate company-specific information, while analysts convey industry-level information. All in all, this evidence indicates that the richness of the information environment is effective in reducing information asymmetries and constraining management's opportunistic behavior.

Finally, information environment is also documented to affect the information content of SEC filings. Disclosure information such as SEC filings that are value relevant causes investors to revise their expectations concerning discount rates and future free cash flows. However, Callen et al. (2006) find that SEC filings (a financial statement or other formal document submitted to the U.S. Securities and Exchange Commission) contain less value relevant information at the SEC filing date for companies with a higher proportion of long-term sophisticated investors. This is consistent with the perception that sophisticated investors are likely to produce their own and use information disclosed by other sources to assess the company before the SEC filings become available. In other words, in a richer information environment sophisticated investors are able to anticipate forthcoming disclosures.

3.5 Agency costs of debt

The benefits and costs of debt financing have been discussed in the literature for a long time. Jensen et al. (1976), Myers (1977) and Smith et al. (1979) suggest that the interests of shareholders and bondholders conflict over the companies investment and financing decisions. The typical conflict is that the bondholders apprehend that if not limited, the shareholders expropriate wealth from the bondholders by investing in projects that are riskier than the current projects. While shareholders capture most of the gains if such actions pay off, the bondholders bear most of the risks in case of failure (Jensen et al. 1976).

Bondholders have the option to limit the opportunistic behavior when engaging themselves in a debt contract. This can be done by insisting on increased monitoring (Jensen et al. 1976), writing restricting covenants (Smith et al. 1979), shortening the maturity time of debt (Myers 1977), demanding a higher interest rate (Bergman and Callen 1991) or demanding financial reporting conservatism (Ahmed et al. 2002). The costs of debt can be summarized to consist of two components: (i) the loss in company value due to suboptimal investment decisions and (ii) the contracting costs that the company uses to mitigate the shareholder-bondholder conflicts (Billett, King and Mauer 2007).

Shareholder-bondholder conflicts are likely to increase as the probability of debt payments diminishes. Bodie and Taggart (1978) show that underinvestment will increase during periods of financial distress because covenants will start increasing the payments from new investments' value to bondholders when default seems more likely. Beatty et al. (2008) provide evidence that as the probability of default increases lenders are more likely to demand financial reporting conservatism and conservative contract modifications. Similarly, Billett et al. (2007) find that more restricting covenants are increasingly used to control shareholder-bondholder conflicts in leveraged and growth companies, and less restricting covenants when the proportion of short-term debt is higher.

Several studies have examined the relationship between management monitoring and agency costs of debt. Agency costs of debt are likely to be lower when management discipline and direct monitoring are higher. Agrawal and Mandelker (1982) suggest that the monitoring imposed by capital markets and contractual methods both may help discipline managers and avoid expropriation of shareholder or bondholder wealth, and therefore align the interests of management and shareholders/bondholders. Ertugrul et al. (2008) find that increasing the board members' incentives for more effective monitoring will discipline managers, decrease agency problems and thus result in decreased bond yield spreads. Anderson, Mansi and Reeb (2003) show that ownership structure is associated with agency costs of debt. In detail, they find that founding family companies have such organizational structures, which generate strong incentives for commitment of management to the company and the family to monitor the company, and this also protects the interests of bondholders.

Finally, there is considerable evidence that accounting information quality and quantity affects the debt financing conditions. Accounting information quality affects the information risk of bondholders and is therefore expected to affect debt financing. Sengupta (1998) finds a relationship between analyst-based evaluations of aggregate disclosure efforts and cost of debt. Francis et al. (2005) report that companies with lower accounting quality have higher interest expenses and lower debt ratings than companies with higher accounting quality. Bharath et al. (2008) find that the accounting quality affects the choice of debt market (private vs. public), with lower accounting quality companies preferring private debt (i.e. bank loans). Additionally, Bharath et al. (2008) report that in private markets the accounting quality affects the price as well as the maturity and covenants, whereas in the public debt the price is more likely to be affected.

DISCUSSION QUESTIONS

DQ 1. Apart from the relationship between management and owners, think of every-day-life examples, where "agency-relationships" exist.

DQ 2. Let us imagine that you import used cars from Estonia to Finland (some sources claim that you can gain profits by doing so). Potential customers in Finland may think that these cars are of inferior quality. How could you decrease the information asymmetry related to the quality of the cars you are selling?

DQ3. If management decides not to contract an auditor, what are the advantages and disadvantages that this decision may result?

4 DEMAND AND SUPPLY FOR FINANCIAL INFORMATION

LEARNING OBJECTIVES

1. Understand why investors and third parties need financial information.
2. Understand the benefits for management of disclosing information.
3. Understand the forces that affect decisions concerning mandatory and voluntary disclosures.
4. Understand the three objectives of financial information.

Financial accounting information, including the audit report, is useful if it helps the users in their decision making. Useful information has at least the following three characteristics: quality, relevance and timeliness.

Quality of the information typically implies that the information has been generated in accordance with generally accepted principles, such as IAS in accounting or ISA in auditing, for example. Relevance of the information suggests that information should be useful in making a particular decision, as, for example, an investor and bank loan manager require different information for accurate decisions. Timeliness of information indicates that the information is current and future events are dealt with according to generally accepted principles. Naser, Nuseibeh and Al-Hussaini (2003) found that credibility and timeliness are the most important features of useful information.

Financial accounting information has two major purposes. First, financial accounting is a way to transfer information from managers to interested parties external to a company, reducing the information asymmetry between internal and external parties. Information asymmetry indicates that managers have access to information that people outside the company do not have. Financial accounting provides a way for managers to communicate private information to interested parties that do not otherwise have access to it. Access to financial information helps interested parties make more accurate assessments of the company. Second, financial accounting information is often used in contracts between the company and other parties such as lenders, managers, business partners, government etc. Basing contracts on accounting information computed with generally accepted accounting principles helps reduce the cost of contracting by reducing risk. (Guenther 2005)

Privately owned companies differ from publicly owned companies in their ownership, governance, financing, management, and compensation structures. These differences affect the demand and supply of financial information in privately and publicly owned companies. In publicly owned companies, the demand for financial reporting arises from reducing information asymmetry between managers and other parties, e.g. investors. Tax, dividend, compensation and payment policies affect the demand for financial reporting in privately owned companies. The ownership in privately owned companies is typically more concentrated and shareholders have a more active role in management. Therefore, it could be expected that private companies are more likely to communicate privately with shareholders, creditors, employees and other interested parties than are publicly owned companies. However, no empirical evidence on this is available. It is proposed that the demand for public financial reporting quality is reduced in private companies (Ball and Shivakumar 2005). Conversely, higher quality financial reporting is demanded from publicly owned companies.

Ball et al. (2005) expect higher demand for financial reporting quality in publicly owned companies to be a consequence of the higher legal obligations of managers and auditors and higher risk of litigation. In private companies reducing information asymmetry is not the primary goal. Tax, dividend and compensation policies are more important in private companies as the flexibility of accounting rules can be utilized to benefit the smaller group of interested parties. Ball et al. (2005) show that insider access and high quality financial reporting are substitutes for reducing information asymmetry and they expect private and publicly owned companies to follow a similar pattern.

It is important to recognize that financial disclosures can be divided into two sets: mandatory and voluntary disclosures. Mandatory financial disclosures include all regulated filings, e.g. financial statements, footnotes, etc. The extent and timing of mandatory disclosures are affected by laws and guidelines from authorities. Voluntary disclosures can be seen as a means for management to increase communication with the third parties. Examples of voluntary disclosures include management forecasts, press releases, websites and analysts' presentations. Financial information about a company may be acquired also from other sources than the company. For example, financial analysts and financial press regularly communicate financial information about companies to their audience (see e.g. Soltani 2007, for further discussion).

Figure 3 illustrates forces that affect the supply of financial information. The supply of mandatory financial disclosures is mainly influenced by regulatory forces and capital market forces. The financial reporting standards set the minimum requirements for annual reports, whereas capital markets impact, more or less, to what extent management discloses voluntarily, i.e. more than required by regulation. The same principle applies also for the timing of the disclosures, regulation set the boundaries, while the market rewards companies that are able or willing to make more timely disclosures.

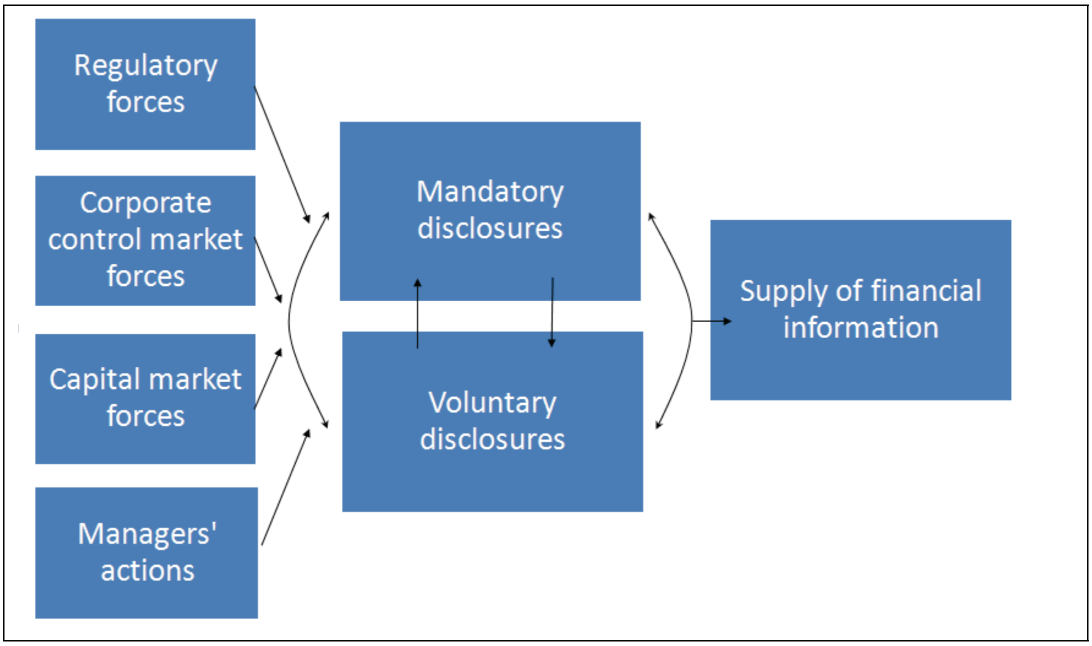

Figure 3. Forces affecting supply of financial information (Soltani 2007).

Soltani (2007) divides the objectives of financial reporting into three factors. First, financial reporting provides information for the users business and economic decisions. Users can be divided into internal (management and directors) and external (owners, lenders, employees, suppliers, clients etc.). It is important to remember that although the internal users have the benefit of using management accounting information as a source, the financial statements that are produced quarterly or annually contain a significant amount of additional information as well. The second objective of financial reporting is to help investors predict future cash flows. According to finance theory, the stock price of the company represents the net present value of future cash flows. The information about cash flows is important, since cash flows affect companies' abilities to continue as a going concern and pay interests and dividends. Because future cash flows are not known, investors use disclosed and undisclosed information to produce estimates of future cash flows. The richer and reliable the disclosed financial information (mandatory and voluntary) is, the more accurate estimations the investors can make. The third objective of financial information is to provide information concerning the company's economic resources, the claims to the resources (obligations) and the effects of transactions and events that may affect the existence of the resources and claims to them.

DISCUSSION QUESTIONS

DQ 1. What advantages and disadvantages are involved for the management from disclosing financial information?

DQ 2. In what sense are the different third parties of a company differently affected by the extent and quality of disclosed information (hint: think of the different amount of resources available and/or access to information etc.

5 THE DEMAND FOR AUDITING

LEARNING OBJECTIVES

1. Recognize the different parties demanding auditing
2. Understand the factors affecting the demand for auditing
3. Understand why all interested parties are not capable off or able to do the audit themselves.

Contracts between principals and agents will not reduce the costs of conflicts unless the parties can determine whether the contract has been breached. Therefore there is a natural demand for monitoring (Watts et al. 1986a). The literature suggests that accounting plays an important role in contract terms and monitoring these terms. This establishes the demand for accounting. Reporting of accounting figures, i.e. financial reporting, represents an information system to the owner (Ng 1978).

It should be noted, however, that financial reporting does not add any (or not much) information to the *manager*, because management is assumed to have an information advantage over the external third parties, and be able to observe the company's performance through the internal management accounting information (Ng 1978). Accounting numbers are used e.g. in lending agreements between the companies and their financers. These agreements often include covenants which are tied to financial statement ratios. Also, management compensation and bonus plans are another example where accounting numbers are used to measure management performance. (Watts et al. 1986a)

Moreover, it is important to recognize that management produced financial reports alone do not solve the agency problems that are due to information asymmetry or conflict of interests. Because management is responsible for reporting on the financial condition of the company, management is also in a position to adjust the figures if the owner is not able to directly observe the actions. Thus there is always an information risk present when financial information is made available to the owners. Figure 4 specifies the third parties demanding financial statement information.

Auditing plays an important role in monitoring contracts and reducing the information risk (Watts et al. 1986b). Without an external audit the accounting information used for decision-making by several internal and external parties lacks credibility. Therefore the most important requirement of the external audit is to increase the credibility of financial statements generated from accounting information (Lee 1972). Principals contract auditors to view the accounting numbers, procedures used in compensation and bonus plans and any breaches of contracts (Watts et al. 1986a). The increased credibility of the financial information potentially benefits both owners and management.

Figure 4. Third parties demanding financial statement information (e.g. Soltani 2007)

Figure 5, as illustrated by Eilifsen et al. 2006, provides an overview of how the agency relationship is creating the demand for auditing. Information asymmetry creates a need for an independent intermediary, the auditor, to verify and provide assurance of financial reports prepared by the management. Without the verification of the auditor managers would have an incentive to misrepresent the performance of the company and their management skills, since they could gain private benefits by such actions.

The purpose of auditing, as Littleton (1933) pointed out in an early view, was "to verify the honesty of persons charged with fiscal rather than managerial responsibilities". At this time auditing was associated with monitoring government officials. Audits were designed to check upon accountability and stewardship (Littleton 1933). Later, Flint (1988) described auditing as "a social control mechanism for securing accountability". The view of auditing as a mechanism in securing stewardship and accountability of the agents has remained.

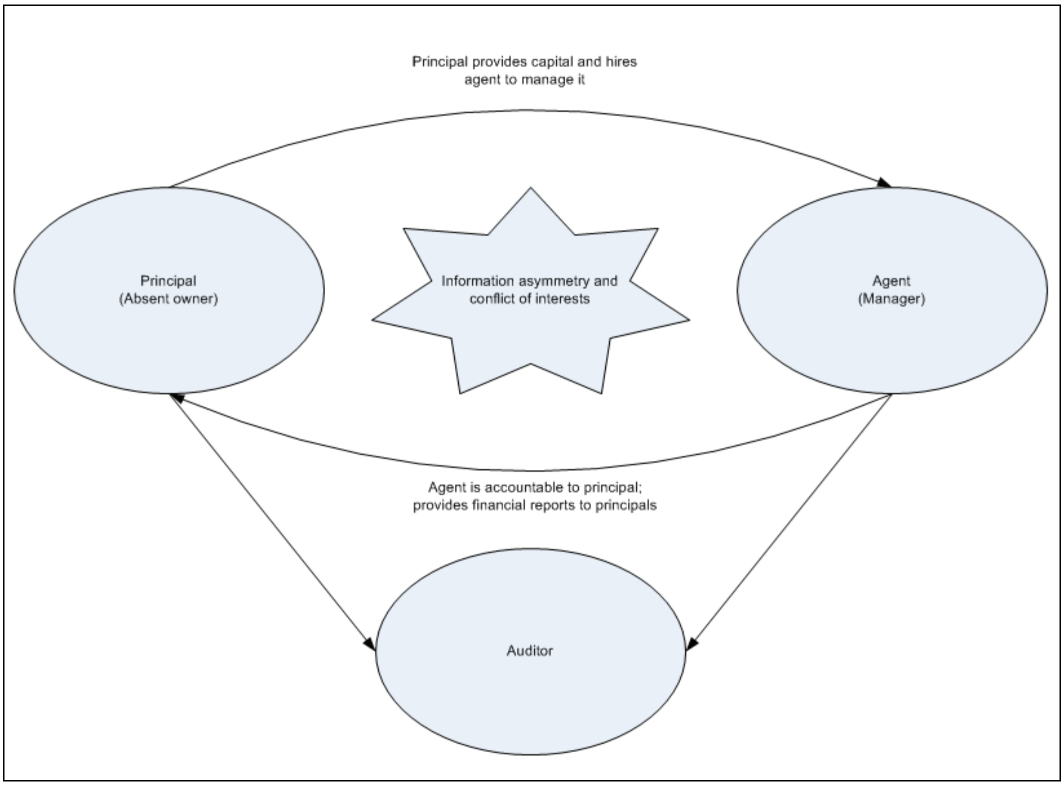

Figure 5. Overview of the principal-agent relationshio leading to the demand for auditing (Eilifsen et al. 2006)

5.1 Four conditions creating the demand for auditing

The American Accounting Association's (AAA) Committee on Basic Auditing Concepts (1973) summarized the criteria that create the demand for auditing:

1. The potential or actual *conflict of interest*.
2. *Consequence*s *of errors*
3. *Complexity*.
4. *Remoteness*.

First, as previously discussed, the demand for auditing may arise from the existence of *conflict of interest* between the preparer of the information and the user. This situation may cause the information to be biased, i.e. the manager is allowed to choose the method, extent and timing of the reporting. This may make the quality of information suspect and necessitate an independent review of the information, an audit.

Two sources of conflict of interests may be identified related to corporate reporting, deliberate and unintentional. First, management may deliberately prepare and disclose biased information to pursue personal interests. For example, management compensation plans are typically based on reported earnings or some other financial performance measures, which are usually derived from financial statements. Management may thus have an incentive to disclose biased information which helps in reaching targets set by the shareholders. Second, unintentional bias in financial information could exist if management, without realizing, attempts to satisfy the needs of one outside interest group at the expense of the others. The manager may satisfy the interests of their creditors (banks) to gain favorable loan terms or to meet the debt covenants. Alternatively, management may strive to satisfy the needs of significant owners, at the expense of other owners. One main objective of auditing is to ensure unbiased reporting which could benefit one interest group at the expense of the others.

Second, the demand for auditing may also be attributed to the significant economic, social or other *consequences of* users' *erroneous decisions*. To increase the quality of their decision making, investors need reliable and complete information. The audit function adds to the credibility of the underlying information and, as a consequence, users may rely more on the information and make more accurate evaluations.

Third, both accounting and preparation of financial statements are becoming more and more *complex*. Similarly, the interpretation of financial statements also requires thorough understanding of accounting and reporting practices, business processes governance issues and institutional settings. Users are therefore finding it more and more difficult (or even impossible) to evaluate the quality of financial statements and interpret the signals of the disclosures. Complexity of the reporting process may also increase the risk of unintentional errors due to the lack knowledge of the preparer. Furthermore, the average user of financial information (e.g. an average amateur private investor) is not knowledgeable enough to fully understand financial reports, much less detect possible intentional or unintentional errors. The auditor is hired to provide users an assessment of the quality of the information.

Fourth, typically the users of financial statements do not have, due to legal and institutional barriers) direct access to the accounting records from which financial statements are prepared. Furthermore, if the accounting records would be made available for assessment, time and cost constraints normally prevent users from making a meaningful investigation. *Remoteness* prevents users from directly "auditing" the financial statements themselves. Due to these restrictions users must rely on a third party, the audit firm, to assist them in assessing the quality of financial information, or accept the quality of the financial data in good faith.

The committee (American Accounting Association 1973) considered that these four conditions interact in such a way that as they increase in intensity they form the demand for auditing. Conditions 2–4 are based on the theory of rational expectations. The concept of rational expectations assumes that people take into account all available information that influences the outcome of their decisions. Further, it expects people to utilize their information intelligently and therefore they do not systematically make mistakes (i.e. they learn from the past). This means that principals will not be consistently misled by agents. (Wallace 1980)

The implication of rational expectations theory for agents is that principals will:

1. expect agents' self-interests to diverge from the principals' interests

2. be able to estimate the effect of such divergence

3. adjust prices (e.g. compensation offered) to reflect the related costs of the agents' expected activities.

The ability of principals to protect themselves through an adjustment of prices generates the agents' demand for monitoring activities. The agents rather than the principals can be seen as the source of demand for monitoring. Principals are basically unconcerned, because they can protect themselves from the risk of loss by reducing compensation for the agent's services. Agents demand monitoring in order to avoid the downward adjustment of their compensation. (Wallace 1980)

The committee of the American Accounting Association (1973) concluded that it becomes increasingly important that an informed, independent conclusion is reached by the user as to the quality of the accounting information received. Furthermore, it is increasingly difficult for the user of the information to reach an informed, independent conclusion without outside assistance (American Accounting Association 1973).

5.2 Evidence on factors affecting the demand for auditing

The monitoring of an agent can assume a variety of forms: owner-manager involvement, contingent compensation or bonus plans, periodic reports on performance etc. (Wallace 1980). Beaver (1989) suggests that one means to align the interests of management and shareholders is to use profit-sharing agreements or stock options as incentive contracts. The primary means for continuous performance reporting is a set of a company's financial statements (Wallace 1980). Substantial evidence exists that earnings announcements by companies result in stock price adjustments (Ball and Brown 1968) or that accounting information is related to the market value of a corporation's shares (Beaver 1968), and that accounting ratios can be used to estimate the probability of bankruptcy (Beaver 1966) and the risk of owning a company's stock (Beaver, Kettler and Scholes 1970).

These facts suggest that reported earnings have information content (Foster 1978) and are useful in the assessment of an agent's performance. The use of accounting information in management compensation and bond indenture contracts (Smith, Clifford and Warner 1979) demonstrates the use of reported earnings in performance evaluation. From the discussion on agency theory and the implications of rational expectations, incentives clearly exist for agents to provide financial statements to assist monitoring activities by principals (Wallace 2004).

However, if the principals do not trust the numbers provided by an agent they will insist on compensation (through adjustment of the agent's wage) for the risk of loss they perceive. Evidence exists that restatements of accounting numbers provided result in stock price adjustments (Palmrose, Richardson and Scholz 2004) and lower earnings response coefficient (Livnat and Tan 2004). This implies that when accounting numbers are found to be inaccurate, the investors' trust in accounting numbers will be impaired for future periods.

Therefore, in light of the above-mentioned factors the agent will, in addition to providing financial reports, agree to provide evidence that the reported numbers were carefully prepared and free from material errors. External auditing is the product which provides this assurance, taking into account the limitations of auditing on detecting material errors. (Wallace 1980 and 1987)

The audit literature has acknowledged that agency costs, caused by information asymmetry and conflict of interest are positively related to the demand for high quality auditing. Francis and Wilson (1988) find that agency costs affect the choice of a higher quality brand name ("Big 8") auditor. Similarly, DeFond (1992) finds that changes in agency costs are associated with changes in audit quality. However, Nichols and Smith (1983) do not find a positive abnormal stock market reaction to companies' announcements of switching to higher quality auditors. Both Francis et al. (1988) and DeFond (1992) explain that companies have different demands for audit quality based on the alignment of interests between the management and the owners. The divergence of interests consists of conflict of interests and information asymmetry and the degree of these determine the degree of auditing needed. Auditing is understood to make the management more credible to investors either in the absence of or in addition to other means to control agency conflicts.

Blouin, Grein and Rountree (2007) study two determinants of auditor selection, switching costs and agency costs. Blouin et al. (2007) used the collapse of Arthur Andersen to examine the effects of the client company losing the agency benefits inherent in the relationship with the auditor. Client companies are perceived to have lost their agency benefits due to the reduction in perceived audit quality of Arthur Andersen, which has been documented in several studies (e.g. Chaney and Piplich 2002; Krishnamurthy, Zhou and Zhou 2006). Blouin et al. (2007) found that companies with higher agency problems were more likely to start a new audit relationship instead of following the incumbent Arthur Andersen audit team to the audit firm that took over the operations of Arthur Andersen. Accordingly, this further confirms that auditing is an important means of reducing agency costs and therefore the companies' agency problems are a key determinant in the auditor selection process.

In some later studies, the effect of divergence of interests on the informativeness of earnings was first studied by Warfield, Wild and Wild (1995). They find that managerial ownership is positively related to informativeness of earnings on the stock markets and negatively related to the magnitude of discretionary accruals.

The reasoning behind this is that as the demand for accounting-based management constraints is higher when management ownership is lower, management is expected to respond to this in their self-interest. The study of Warfield et al. (1995) was extended by Yeo, Tan, Ho and Chen (2002) as they show that at higher levels of management ownership the informativeness of earnings does not have a positive relationship with management ownership, but the relationship has reversed. This would suggest that the entrenchment effect becomes effective at high levels of management ownership.

However, Gul, Lynn and Tsui (2002) develop the study by Warfield et al. (1995) by looking at how audit quality affects the positive relationship between the informativeness of earnings and management ownership and the negative association between discretionary accruals and management ownership. The results of Gul et al. (2002) support the conclusion that agency problems have an effect on the demand for auditing.

The audit fee literature has also extended the findings of Warfield et al. (1995) and Yeo et al. (2002). Gul, Chen and Tsui (2003) find that management ownership weakens the positive relationship between discretionary accruals and audit fees; however, in companies with high accounting-based management compensation the negative effect of management ownership is found to be weaker. The audit fee literature proposes that there is a relationship between agency problems and audit fees (see Hay, Knechel and Wong 2006 for a review). The relationship is expected to be positive, because of the auditor's increased exposure to liability.

Consistent with this, Gul et al. (1998) finds first that for low growth companies the positive relationship between free cash flow and audit fees is weaker for companies with high debt. Later, Gul et al. (2001) added that like debt, management ownership also affects the positive relationship between audit fees and free cash flow. Finally, Nikkinen et al. (2004) report that management ownership has a negative effect and free cash flow a positive effect on audit fees and thus the agency costs can be used to some extent in explaining audit fees. The studies by Gul et al. (1998, 2001) and Nikkinen et al. (2004) further support the theory that the agency costs of the company have an effect on the demand and supply of audit services.

DISCUSSION QUESTIONS

DQ1. This chapter describes the demand for auditing from the perspective of financial information quality. What other benefits, besides an assessment of the quality of the financial information, does the audit provide for the interested parties of a firm?

DQ2. There has been a discussion concerning the audit exemption thresholds in different countries. From the point of view of the "public interest", how are high vs. low thresholds motivated?

Part II.

Usefulness of Audit reports: a review of the literature

6 THE RELEVANCE OF AUDIT REPORTS

LEARNING OBJECTIVES

1. Provide examples from academic research on the relevance of auditors reporting
2. Understand why audit reports could affect stock returns
3. Provide a review of the academic research concerning audit reports and stock markets
4. Understand the difference between "normal" audit reports, i.e. those on financial statements, and audit reports on the effectiveness of internal controls.
5. Provide a review of the academic literature concerning whether audit reports affect the decision making process of users.

6.1 Market reactions to audit report announcements

The first approach in studying the information content of audit opinions is the capital market approach. This line of research studies the relevance of information contained in audit opinions by analyzing the direct stock market reaction to audit opinion or indirectly the market reaction to audit opinion related announcements.

Considerable evidence supports the simultaneous or delayed correlation between earnings information and stock price changes (Ball et al. 1968; Bernard and Thomas 1989; Jegadeesh and Livnat 2006). However, as Lev (1989) reports, earnings explain only a fraction of the change in returns on the earnings announcement date. Due to this, accounting research explored models with other financial information (Ou and Penman 1989; Livnat and Zarowin 1990; Sloan 1996). One such source of information is the audit report. Audit reports have the potential to change the market responsiveness to earnings by adding noise or reducing the persistency of reported earnings (Choi and Jeter 1992).

The audit report can be expected to potentially affect stock prices mainly for two reasons. First, the audit report may contain information that affects either the estimation of the magnitude of future cash flows and/or the riskiness of future cash flows. Any information that can result in revisions of these components is relevant to the stock prices. Second, the audit report can contain substantial information about the viability of the company, e.g. the going concern audit report. The report should at all times reflect the auditor's access to inside information such as forecast data and management plans, and, taking this into account, the auditor's reporting decision also reveals some private information (Mutchler 1984). However, Mutchler (1985) explains that e.g. the going concern audit report is a function of publicly available information, and suggests that such reports can be predicted.

Melumad and Ziv (1997) proposed in their theoretical model of market reactions to qualified audit reports that the reaction to avoidable and unavoidable qualified audit reports is different. An avoidable audit report, which the management could have avoided by making a change in reporting, could result in either a positive or a negative reaction. Whereas an unavoidable qualified audit report, which the management could not have avoided, is expected to result in a negative reaction.

The reaction of financial markets to audit report announcements has been extensively studied in the accounting literature. The fundamental question addressed in these empirical studies is whether the audit reports affect investors' pricing decisions. A list of the most relevant studies for this dissertation is presented in Table 1.

Audit reports on financial statements

The event date problem becomes evident when the event date selection in the literature is reviewed. The first observation is that several studies have used a choice of dates. This is illustrated by how e.g. Loudder et al. (1992) describe their sample selection: "The qualification disclosure date was defined as the earliest of (1) the publication date of a media story, if one was found, (2) the annual report date, or (3) the 10-K stamp date". Multiple event dates have also been used by several other studies and this is clearly an indication of the difficulty to identify or determine the first day of trade on the information contained in the audit opinion.

In the U.S. studies the most frequently used announcement date is the form 10-K (10-K) filing date (see e.g. Chow et al. 1982, Ameen et al. 1994, Carlson et al. 1998). Traded companies must file their annual reports with the SEC on the 10-K. The problem with this report and event date is that the 10-K provides in addition an overview of the companies' business and financial condition. This means that a large amount of information is released on that particular day, of which the audit opinion information is only a part.

Another frequently applied announcement date is the media disclosure date (e.g. Dopuch et al. 1986, Loudder et al. 1992, Fleak et al. 1994). The choice of this event date may resolve may of the problems with concurrent other information releases associated with the 10-K date, because there is no concurrent announcement from the company at that point in time. The media disclosure date may also in many cases be earlier than the 10-K filing and, as stated earlier, it is essential to identify the first day trade takes place with the audit report information. The problem with the media disclosure date is that for research purposes there are so few observations.

Table 1. Studies on the relevance of audit reports in the stock markets.

Authors	**Year**	**Journal***	**Observed market**
Audit reports on financial statements:			
Baskin	1972	TAR	U.S.
Firth	1978	TAR	U.K.
Chow and Rice	1982	AJPT	U.S.
Banks and Kinney	1982	JAR	U.S.
Davis	1982	AJPT	U.S.
Elliot	1982	JAR	U.S.
Dodd, Dopuch, Holthausen and Leftwich	1984	JAE	U.S.
Dopuch, Holthausen and Leftwich	1986	JAE	U.S.
Fields and Wilkins	1991	AJPT	U.S.
Choi and Jeter	1992	JAE	U.S.
Loudder, Khurana, Sawyers, Cordery, Johnson, Lowe and Wunderle	1992	AJPT	U.S.
Mittelstaedt, Regier, Chewning and Pany	1992	AJPT	U.S.
Ameen, Chan and Guffey	1994	JBFA	U.S.
Fleak and Wilson	1994	JAAF	U.S.
Frost	1994	AJPT	U.S.
Chen and Church	1996	TAR	U.S.
Jones	1996	JAPP	U.S.
Carlson, Glenzen and Benefield	1998	QJBE	U.S.
Fargher and Wilkins	1998	JBFA	U.S.
Chen, Su and Zhao	2000	CAR	China
Holder-Webb and Wilkins	2000	JAR	U.S.
Soltani	2000	IJA	France
Schaub and Highfield	2003	JAM	U.S.

Table 1. Continued

Authors	**Year**	**Journal***	**Observed market**
Pucheta, Vico and Garcia	2004	EAR	Spain
Taffler, Lu and Kausar	2004	JAE	U.K.
Ogneva and Subramanyam	2007	JAE	U.K./U.S./
Herbohn, Ragunathan, Garsden	2007	AF	Australia
Kausar, Taffler and Tan	2009	JAR	U.S.
Audit reports on internal control weaknesses:			
Ashbaugh-Skaife, Collins, Kinney and LaFond	2009	JAR	U.S.
Ittonen	2010	MAJ	U.S.
Ogneva, Subramanyam and Raghu-nandan	2007	TAR	U.S.
Beneish, Billings and Hodder	2008	TAR	U.S.
Hammersley, Myers and Shakespeare	2008	RAST	U.S.

* AF= Accounting and Finance, AJPT= Auditing: a Journal of Practice and Theory, CAR= Contemporary Accounting Research, EAR= European Accounting Review, IJA= International Journal of Auditing, JAAF= Journal of Accounting, Auditing and Finance, JAE= Journal of Accounting and Economics, JAM= Journal of Asset Management, JAPP= Journal of Accounting and Public Policy, JAR= Journal of Accounting Research, JBFA= Journal of Business Finance & Accounting, MAJ=Managerial Auditing JournalQJBE= Quarterly Journal of Business and Economics, RAST= Review in Accounting Studies, TAR= The Accounting Review.

In an Australian setting Herbohn et al. (2007) study the market reactions on the date of the final annual report. They recognize that Australian companies were required first to release a preliminary annual report with the earnings information and later they publicize the final annual report. Herbohn et al. (2007) are thus able to restrict the influence of earnings information from the abnormal returns on the day of the final annual report. However, as they note, the final annual reports may still contain amendments to the earnings or other relevant non-earnings information and, furthermore, the preliminary report may already contain information that creates an expectation of a going concern audit report, which would reduce the reaction on the final annual report announcement date.

Moreover, Loudder et al. (1992), Fleak et al. (1994), Ameen et al. (1994), Carlson et al. (1998) among others use the annual report announcement day in their analysis. This event date can be regarded as the ultimate date when the audit report is announced (of course the audit report can later be withdrawn or amended), because the companies must publish their annual reports and the annual reports must contain an audit report.

Soltani (2000) in his French and Pucheta et al. (2004) in their Spanish study use an estimation of the date when the audit report is publicly announced. They both use the 15th day before the annual general meeting as the event date. As alternative event dates, Soltani (2000) also suggests the date of the auditor's signature on the audit report and an average between the date of the auditor's signature and 15 days before the general meeting, but results are reported only using the first mentioned date.

More recent studies have proposed means to circumvent the event date -problem. Fields et al. (1991) acknowledge that "The main difficulty in most of these prior studies was the lack of precision in identifying the date upon which information, if any, was revealed to the markets. In their study, Fields et al. (1991) examine the share price reactions to public announcements of withdrawn qualifications. The withdrawn qualification can be used to measure the information content of audit reports in exactly the same way as the underlying audit report is used. The use of qualification withdrawals announcements in this line of research can further be motivated by the fact that the withdrawals are not anticipated and may therefore result in a reaction in the stock prices and that they are more timely and less noisy than e.g. 10-K announcement (Fargher et al. 1998). Fargher et al. (1998) examine the shifts in systematic risk around the publicly announced qualification withdrawals. They hypothesized that the announcement of a qualification withdrawal would decrease the systematic risk of equity, i.e. the equity beta.

Chen et al. (1996) propose another alternative means to avoid the event date -problem of audit report announcements. They study whether going concern audit reports are useful in predicting bankruptcy. They focus on the excess returns in the period surrounding bankruptcy filings and find that companies receiving going concern audit reports experience less negative excess returns around the bankruptcy filing. A plausible interpretation is that going concern opinions have information value, at least in the case of bankruptcy.

Finally, Taffler et al. (2004), Ogneva et al. (2007) and Herbohn et al. (2007) approach the question of the relevance of audit reports to the stock markets using a long-term perspective. This approach is less sensitive to the selection of the event date since it examines the stock returns in a 12-month period following the publication of the going concern audit report. Taffler et al. (2004) find a significant reaction in the U.K. following the going concern audit report. Ogneva et al. (2007) are unable to find a reaction on the U.S. and Australian markets, whereas Herbohn et al. (2007) find in Australia only a significant market reaction in the 12-month period prior to the going concern report announcement and Kausar et al. (2009) demonstrate a significant 12 month stock market reaction to first-time going concern audit reports in the U.S.

Audit reports on internal controls

The passing of the Sarbanes-Oxley Act (SOX 2002) Section 302 and Section 404 changed the requirements for making public disclosures regarding internal controls. In the pre-SOX period there were no requirements for management or auditors regarding disclosures of internal control effectiveness. Prior to SOX (2002) companies could voluntarily assess and report on the effectiveness of internal controls, but only few did so (see McMullen, Raghunandan and Rama (1996) for a review on pre-SOX reporting activity).

Section 404 of the SOX (2002) requires that public company annual filings (10-K) contain management's assessment of the design and the effectiveness of the company's internal controls. Moreover, it also requires the auditor to provide a separate opinion on management's assessment and the auditor's evaluation of the internal controls. The auditors' reports on internal control deficiencies are usually referred to as the auditors' Section 404 disclosures. Closely related to these reports where the Section 302 reports by the management. Before the implementation of SOX (2002) Section 404, Section 302 first required management to evaluate the internal controls over financial reporting and report results of their evaluation. Whereas Section 404 reports accompany annual reports, the Section 302 reports could be filed separately.

Research on both Section 302 and Section 404 disclosures shows that internal control weaknesses are associated with companies that are smaller, financially weaker, rapidly growing, more complex, and which have ongoing restructuring

(Doyle, Ge and McVay 2007a; Ashbaugh-Skaife et al. 2007). As expected, weaknesses in internal controls are also related to significantly decreased financial statement quality. Doyle, Ge and McVay (2007b) and Ashbaugh-Skaife, Collins, Kinney and LaFond (2009) find that internal control weaknesses are associated with lower quality accruals. Weaknesses in internal controls can affect the quality of financial statements by either allowing more intentional earnings management or unintentional errors. The evidence (Ashbaugh-Skaife et al. 2008) suggests however, that weaknesses are more likely to lead to unintentional errors

As the evidence of the effect of internal control weaknesses on financial reporting quality seems convincing, it is of interest to look closer at the market and capital effects of these disclosures. In general, the negative effect of internal control weaknesses on financial information quality increases the information risk and uncertainty of equity or debt holders. Therefore, investors should demand a higher risk premium. Regarding the Section 302 disclosures, there is evidence that there is a negative abnormal reaction to the announcement of internal control weaknesses (Beneish et al. 2008; Hammersley et al. 2008). However, Beneish et al. (2008) report that the auditor quality and client size attenuates the reaction to Section 302 disclosures, and Hammersley et al. (2008) find that the reaction depends on the characteristics of the weakness. This evidence suggests first that the richness of the information environment may affect the reaction, and secondly that specific types of weaknesses are more difficult to anticipate even in a richer environment.

Section 404 reports are filed most commonly with the annual 10-K reports. The empirical evidence implies that auditors' Section 404 internal control weakness disclosures are not associated with abnormal returns around the announcement (Ogneva et al. 2007; Beneish et al. 2008). Beneish et al. (2008) conclude that the information environment of companies that are required to report under Section 404 is richer and that this attenuates the surprise or that Section 404 reports may reflect a low materiality threshold for disclosure. In an additional analysis Beneish et al. (2008) study the cost of capital effects of internal control weakness disclosures. They report that Section 302 reports increase the cost of capital, whereas Section 404 reports do not. However, Ashbaugh-Skaife, Collins, Kinney and LaFond (2009) find a significant negative market reaction to Section 404 reports, and their cross-sectional test also indicates that the systematic risks are higher for companies disclosing internal control weaknesses.

These studies suggest that disclosed Section 404 internal control weaknesses may represent risk that is meaningful to investors. This being so, it would be fair to assume that the audit fees are higher for companies with internal control weaknesses. The empirical evidence confirms that companies with weaknesses pay higher audit fees (Hoitash, Hoitash and Bedard 2008).

Trading activities of informed market participants

The literature reviewed above revealed that the event date used in this research is the typically the 10-K report filing date. However, as studies on market reactions to other company-specific information announcements reveal, the actual date of the event may also be a relevant point of time to measure the reactions. For instance, Knechel et al. (2007) and Carter et al. (1999) study the market reactions to 8-K report announcements around the date of the actual event. In the study of Knechel et al. (2007) the event date used was the date of the dismissal of the incumbent auditor, rather than the filing date of 8-K the report indicating that the incumbent auditor was dismissed and a new auditor appointed.

Using the date of the actual event raises an important question. The question is why should there be a market reaction before some new information has been announced to the stock markets. Generally it is understood that stock prices incorporate all relevant publicly available information and companies are required to publicly announce all new and relevant information. This implies that before the public announcement only some market participants have access and an opportunity to use this information.

Informed market participants are by definition all those traders who are informed when an information event occurs at a company. Tookes (2008) informed traders as corporate insiders, employees, analysts, and others who have access to information before it is released to the market. Piotroski et al. (2004) includes, in addition to insiders and analytics, also institutional investors with significant ownership as informed market participants. Jayaraman (2008) defines informed traders as those who have acquired private information or who have access to private information due to his/her association with the company.

The information advantage of informed market participants is the greatest when the precision of public information is lower, information asymmetry between insiders and outsiders is greater, uncertainty about the value of the company is higher, and the informed traders' information is more accurate. Tookes (2008) proposes also that informed traders have the opportunity to extract higher excess returns in small companies' stock that are less competitive and have higher sensitivity to shocks. Huddart and Ke (2007) find evidence that abnormal returns after insiders' trades are lower for companies with richer information environment.

Similarly, Frankel et al. (2004), Lakonishok and Lee (2001), Seyhun (1986), and Finnerty (1976) find that the profitability of insider trades is positively related to information environment, measured by analyst following or company size. Jayaraman (2008) finds that informed trading is more active when public information is less informative.

The literature examining informed or insider trading supports the selection of the event date in this dissertation. The content of the audit report is privately available when the auditor presents it to the company and publicly available when it is filed publicly announced as a part of the 10-K report. The financial literature, however, has found considerable evidence of informed trading. In particular, as briefly reviewed above, the literature concludes that informed trading is more likely to occur in smaller companies with less competitive stocks and companies with high information asymmetry or poor information environment. This evidence suggests that when using the audit report date as the event date, then the effects of information asymmetry and information environment need to be controlled for. In addition, informed market participants have a greater benefit from private information when uncertainty about the price of the stock is greater and the private information is accurate. In the case of going concern audit reports or internal control weakness disclosures, the companies receiving these reports are typically smaller, financially distressed or going through restructuring and due to these factors the uncertainty around these companies is likely to be high. Thus, the conclusion is that the conditions after the audit report date are favorable for informed market participants' trading activities.

6.2 Relevance of audit reports in users' decision making

The professional auditor is assigned by the annual general meeting. This means that the auditor works for and reports to the shareholders. However, the target group or user group of audit reports can be seen as much broader. External investors, bank loan officers, authorities, financial analysts, i.e. users of financial statements, can all be considered users of audit reports.

The impact of audit reports on users has been studied over a long period in many papers (e.g. Libby 1979; Houghton 1983; Gul 1987; Bamber et al. 1997; LaSalle et al. 1997; Lin et al. 2003). This research trend is based on the question of how professionals in different positions perceive the information contained in the audit opinion to affect the reliability of the financial statement information and their decision-making.

Most of the studies on the relevance of audit reports in user decision-making are experiments. In these studies the decision made by the user is monitored when he/she is exposed to a specific type of audit report and a scenario of request for financing. Guiral-Contreras et al. (2007) divide these studies into three types. The first addresses how the level of auditor attestation affects loan officers' decisions (Johnson et al. 1983, Wright et al. 2000). The second type studies how the audit report format affects the loan officers' decision-making processes (Miller et al. 1993). The third type focuses on differences in the relevance of qualified and unqualified audit reports (LaSalle et al 1997, Bessell et al. 2003).

The experimental method used in this type of research is designed so that the effect of the auditors' report on the loan officers' decision-making process can be measured. The results from both earlier studies and more recent studies yield inconclusive results regarding the relevance of audit report information in lending decisions. According to the findings of Estes and Reimer (1977), Libby (1979), Abdel-Khalik, Graul and Newton (1986), Houghton (1983), Bessell et al. (2003) and Lin et al. (2003) the audit report does not have an effect on the loan officers' decisions. However, Firth (1979), Gul (1987), Bamber et al. (1997), LaSalle et al. (1997), Durendez (2003) and Guiral-Contreras et al. (2007) show that the audit report indeed may have an effect on the loan decision.

Some studies have addressed user groups other than loan officers. Bailey, Bylinski and Shields (1983) experimented with knowledgeable and less knowledgeable audit report readers, whereas Robertson (1988) and Durendez (2003) studied financial analysts dealing with financial statement information when making investment decisions.

A different stream of research from the previously described is the one that examines the usefulness of audit reports in predicting bankruptcies. This is an interesting question because one major risk that investors face is the probability of failure or bankruptcy. Independent auditors have an obligation to disclose information to the investors if they have substantial doubt about the ability of a firm to continue to meet its obligations, i.e. to continue as a going concern. This implies that auditing, particularly the going concern audit report, could serve as a warning signal of bankruptcy. However, there are several examples of cases, where auditors have failed to observe or report serious threats, and therefore, investors relying on auditors abilities to detect threats have been surprised by the problems.

Research has shown that the audit opinion may provide useful information to the investors. In particular, the value of the auditor’s statement stems from the fact that the auditor uses information that is not available for third parties and the auditor is additionally well informed of the client’s activities and future plans (Mutchler 1985; Menon and Schwartz 1987). The literature provides some confirmation on the claim that investors find the going concern audit report useful (Firth 1979; Campbell and Mutchler 1988) and that the auditor report is a good measure of external governance mechanisms (Willenborg and McKeown 2000; Fan and Wong 2005). Despite the auditor’s access to private information, some studies have shown that statistical models relying on public financial information outperform going concern audit reports in predicting bankruptcy and therefore the audit report is not valuable for the investors (Altman 1982; Koh and Killough 1990). These studies also suggest that the auditors should make use of statistical models in making decisions.

DISCUSSION QUESTIONS

1. Which factors or circumstances could affect how relevant the audit report is for the users?

2. In many experimental studies the researchers conclude that the audit report is important for the decision makers. On the contrary, the observations from practice suggest that financial statement users rarely even look at the audit report. What could be the reason for the divergence between the claimed and actual behavior of decision makers?

3. How could the trading activities of insiders affect the observed market reactions to audit reports?

4. If a decision maker, e.g. a loan officer, does not have an audit report available because the manager decided not to hire an auditor, how can the loan officer compensate the lack of assurance?

References

Abdel-Khalik, R. (1993). Why do private companies demand auditing? A case for organizational loss of control. *Journal of Accounting, Auditing and Finance* 8:1, 31–52.

Abdel-Khalik, R., P. Graul & J. Newton (1986). Reporting uncertainty and assessment of risk: replication and extension in a Canadian setting. *Journal of Accounting Research* 24:2, 372–382.

Adams, M. (1994). Agency theory and the internal audit. *Managerial Auditing Journal* 9:8, 8–12.

Admati, A. & P. Pfleiderer (1988). A theory of intraday patterns: volume and price variability. *Review of Financial Studies* 1, 3-40.

Agency Theory, Financial (2010). In Encyclopædia Britannica. Retrieved February 10, 2010, from Encyclopædia Britannica Online: http://search.eb.com/eb/article-9439355.

Agrawal, A. & N. Jayaraman (1994). The dividend policies of all-equity firms: a direct test of the free cash flow theory. *Managerial and Decision Economics* 15, 139–148.

Agrawal, A. & G. Mandelker (1987). Managerial incentives and corporate investment and financing decisions. *Journal of Finance* 42, 823–837.

Ahmed, A., B. Billings, R. Morton & M. Stanford-Harris (2002). The role of accounting conservatism in mitigating bondholder-shareholder conflicts over dividend policy and in reducing debt costs. *The Accounting Review* 77:4, 867–890.

Akerlof, George A. (1970). The market for "lemons": Quality uncertainty and the market mechanism. *Quarterly Journal of Economics* 84:3.

AICPA (1988a). The auditor’s consideration of an entity’s ability to continue as a going concern. *SAS* No. 59. American Institute of Certified Public Accountants. New York.

AICPA (1988b). Reports on audited financial statements. *SAS* No. 58. American Institute of Certified Public Accountants. New York.

AICPA (2005). Audit documentation. *SAS* No. 103. American Institute of Certified Public Accountants. New York.

AICPA (2007). Dating the auditor's report and related practical guidance. *AICPA Practice Alert* 1. New York.

Alchian, A. & H. Demsetz (1972). Production, information costs and economic organization. *American Economic Review* 62, 777–795.

Ameen, E., K. Chan & D. Guffey (1994). Information content of qualified audit opinions for over-the-counter firms. *Journal of Business Finance & Accounting* 21:7, 997–1011.

American Accounting Association (1973). Committee on basic auditing concepts, a statement of basic auditing concepts. Sarasota, Florida.

Anderson, R., S. Mansi & D. Reeb (2003). Founding family ownership and the agency cost of debt. *Journal of Financial Economics* 68, 263–285

Arrow, K. (1985). The economics of agency. Principals and agents: the structure of business (eds J. Pratt & R.J. Zeckhauser). Boston: Harvard Business School Press.

Ashbaugh-Skaife, H., D. Collins & W. Kinney (2007). The discovery and reporting of internal control deficiencies prior to SOX-mandated audits. *Journal of Accounting and Economics* 44:1–2, 166–192.

Ashbaugh-Skaife, H., D. Collins, W. Kinney, & R. LaFond (2009). The effect of SOX internal control deficiencies on firm risk and cost of equity. *Journal of Accounting Research* 47:1,1–43.

Ashbaugh-Skaife, H., D. Collins, W. Kinney & R. LaFond (2008). The effect of SOX internal control deficiencies and their remediation on accrual quality. *The Accounting Review* 83:1, 217–250.

Bailey, K., J. Bylinski & M. Shields (1983). Effects of audit report wording changes on the perceived message. *Journal of Accounting Research* 21:2, 355–370.

Ball, R. & P. Brown (1968). An empirical evaluation of accounting income numbers. *Journal of Accounting Research* 6:2, 159–178.

Ball, R. & L. Shivakumar (2005). Earnings quality in U.K. private firms: comparative loss recognition timeliness. *Journal of Accounting and Economics* 39:1, 83–128.

Bamber E. & R. Stratton (1997). The information content of the uncertainty-modified audit report: Evidence from bank officers. *Accounting Horizons* 11:2, 1–11.

Banks, D. & W. Kinney (1982). Loss contingency reports and stock prices: an empirical study. *Journal of Accounting Research* 20:1, 240–254.

Barth, M., R. Kasznik & M. McNichols (2001). Analyst coverage and intangible assets. *Journal of Accounting Research* 39:1, 1–34.

Baskin, E. (1972). The communicative effectiveness of consistency exceptions. *The Accounting Review* 47:1, 38–51.

Beatty, A., J. Weber & J. Jiewei (2008) Conservatism and Debt. *Journal of Accounting and Economics* 45:2-3, 154–174.

Beaver, W. (1966). Financial ratios as predictors of failure. Empirical research in accounting: Selected Studies 1966. *Journal of Accounting Research*, 4:3, 71–111.

Beaver, W. (1968). Market prices, financial ratios, and the prediction of failure. *Journal of Accounting Research*, 6:2, 179–192.

Beaver, W. (1989). *Financial Reporting: An Accounting Revolution*. New Jersey: Prentice-Hall Int., Inc.

Beaver, W., P. Kettler & M. Scholes (1970). The association between market-determined and accounting-determined risk measures. *The Accounting Review* 45:4, 654–682.

Beneish, M., M. Billings & L. Hodder (2008). Internal control weaknesses and information uncertainty. *The Accounting Review* 83:3, 665–703.

Bergman, Y. & J. Callen (1991). Opportunistic underinvestment in debt renegotiation and capital structure. *Journal of Financial Economics* 29:1, 137–171.

Bernard, V. & J. Thomas (1989). Post-earnings-announcement drift: delayed price response or risk premium? *Journal of Accounting Research* 27:3, 1–36.

Bernard, V. & J. Thomas (1990). Evidence that stock prices do not fully reflect the implications of current earnings for future earnings. *Journal of Accounting and Economics* 13:4, 305–340.

Bessell, M., A. Anandarajan & A. Umar (2003). Information content, audit reports and coing concern: an Australian study. *Accounting and Finance* 43:3, 261–282.

Bharath, S., J. Sunder & S. Sunder (2008). Accounting quality and debt contracting. *Accounting Review* 83:1, 1–28.

Billett, M., T-H. King & D. Mauer (2007). Growth opportunities and the choice of leverage, debt maturity, and covenants. *Journal of Finance* 62:2, 697–730.

Blouin, J., B. Grein & B. Rountree (2007). An analysis of forced auditor change: the case of former Arthur Andersen clients. *The Accounting Review* 82:3, 621–650.

Bodie, Z. & R. Taggart (1978). Future investment opportunities and the value of the call provision on a bond. *Journal of Finance* 33:4, 1187–1200.

Brown, S., S. Hillegeist & K. Lo (2004). Conference calls and information asymmetry. *Journal of Accounting and Economics* 37:3, 343–366.

Butler, M., A. Leone & M. Willenborg (2004). An empirical analysis of auditor reporting and its association with abnormal accruals. *Journal of Accounting and Economics* 37:2, 139–165.

Carey, P., R. Simnett & G. Tanewski (2000). Voluntary demand for internal and external auditing by family businesses. *Auditing: A Journal of Practice and Theory* 19:1, 37–51.

Carlson, S., G. Glenzen & M. Benefield (1998). An investigation of investor reaction to the information content of a going concern audit report while controlling for concurrent financial statement disclosures. *Quarterly Journal of Business and Economics* 37:3, 25–39.

Callen, J., J. Livnat and D. Segal (2006). The information content of SEC filings and information environment: variance decomposition analysis. *The Accounting Review* 81:5, 1017–1043.

Carter, M. & B. Soo (1999). The relevance of 8-K reports. *Journal of Accounting Research* 37:1, 119–132.

Chaney, P. & K. Philipich (2002). Shredded reputation: the cost of audit failure. *Journal of Accounting Research* 40:4, 1221–1245.

Chen, K. & B. Church (1996). Going concern opinions and the market's reaction to bankruptcy filings. *The Accounting Review* 71:1, 117–128.

Chen, C., X. Su & R. Zhao (2000). An emerging market's reaction to initial modified audit opinions: evidence from the Shanghai stock exchange. *Contemporary Accounting Research* 17:3, 429–455.

Choi, S. & D. Jeter (1992). The effects if qualified audit opinions on earnings response coefficients. *Journal of Accounting and Economics* 15: 2/3, 229–247.

Chow, C. (1982). The demand for external auditing: Size, debt and ownership influences. *The Accounting Review* 57:2, 272–291.

Chow, C. & S. Rice (1982). Qualified audit opinions and share prices – An investigation. *Auditing: A Journal of Practice and Theory* 1:1, 25–53.

Christie, A. & J. Zimmerman (1994). Efficient and opportunistic choices of accounting procedures: corporate control contests. *The Accounting Review* 69:4, 539–566.

Citron, D., R. Taffler and J.-Y. Uang (2008). Delays in reporting price-sensitive information: the case of going concern. *Journal of Accounting and Public Policy* 27:1, 19–37.

Coase, R. (1937). The nature of the firm. *Economica*, New series 4, 386–405.

Conyon, M. & K. Murphy (2000). The Prince and the Pauper? CEO Pay in the US and UK. *Economic Journal* 110:467, 640–671.

Craswell, A. (1985). Studies of the information content of qualified audit reports. *Journal of Business Finance & Accounting* 12:1, 93–115.

Davis, R. (1982). An empirical evaluation of auditors' "subject-to" opinions. *Auditing: A Journal of Practice and Theory* 2:1, 13–32.

DeFond, M. (1992). The association between changes in client firm agency costs and auditor switching. *Auditing: A Journal of Practice and Theory* 11:1, 16–31.

Diamond, D. (1985). Optimal release of information by firms. *Journal of Finance* 40:4, 1071–1094.

Diamond, D. & R. Verrecchia (1991). Disclosure, Liquidity and the cost of capital. *Journal of Finance* 46:4, 1325–1359.

Dodd, P., N. Dopuch, R. Holthausen & R. Leftwich (1984). Qualified audit opinions and stock prices. *Journal of Accounting and Economics* 6:1, 1–97.

Dopuch, N., R. Holthausen & R. Leftwich (1986). Abnormal stock returns associated with media disclosures of 'subject to' qualified audit opinions. *Journal of Accounting and Economics* 8:2, 91–172.

Dopuch, N., R. Holthausen & R. Leftwich (1987). Predicting audit qualifications with financial and market variables. *The Accounting Review* 62:3, 431–455.

Doyle, J., W. Ge & S. McVay (2007a). Determinants of weaknesses in internal control over financial reporting. *Journal of Accounting and Economics* 44:1–2, 193–223.

Doyle, J., W. Ge & S. McVay (2007b). Accruals quality and internal control over financial reporting. *The Accounting Review* 82:5, 1141–1170.

Duréndez Gómez-Guillamón, A. (2003). The usefulness of the audit report in investment and financing decisions. *Managerial Auditing Journal* 18:6/7, 549–559.

Eisenhardt, K. (1989). Agency Theory: An assessment and review. *Academy of Management Review* 14:1, 57–74.

Elliot, J. (1982). Subject to audit opinions and abnormal security returns – outcomes and ambiguities. *Journal of Accounting Research* 20:2, 617–638.

Ertugrul, M. & S. Hedge (2008). Board compensation practices and agency costs of debt. *Journal of Corporate Finance,* forthcoming.

Estes, R. & M. Reimer (1977). A study of the effect of qualified auditors' opinions on officers' lending decisions. *Accounting and Business Research* 28, 250–259.

Fama, E. (1980). Agency problems and the theory of the firm. *Journal of Political Economy* 88:2, 288–307.

Fama, E. & M. Jensen (1983). Separation of ownership and control. *Journal of Law and Economics* 26:2, 301–325.

Fama, E. & A. Laffer (1971). Information and capital markets. *Journal of Business* 44:3, 289–298.

Fama, E. & K. French (1993). Common risk factors in the returns on stocks and bonds. *Journal of Financial Economics* 33:1, 3–56.

Fan, J. & T. Wong (2005). Do external auditors perform a corporate governance role in emerging markets? Evidence from East Asia. *Journal of Accounting Research* 43:1, 35–72.

Fargher, N. & M. Wilkins (1998). Evidence on risk changes around audit qualification and qualification withdrawal announcements. *Journal of Business Finance & Accounting* 25:7–8, 829–847.

Fields, L. & M. Wilkins (1991). The information content of withdrawn audit qualifications: new evidence on the value of "subject-to" opinions. *Auditing: A Journal of practice and Theory* 10:2, 62–69.

Finnerty, J. (1976). Insiders and market efficiency. *The Journal of Finance* 31:4, 1141–1148.

Firth, M. (1978). Qualified audit reports: their impact on investment decisions. *The Accounting Review* 53:3, 599–823.

Fitch Ratings (2005). *Fitch's Approach to Evaluating Management and Auditor Assessments of Internal Control.* New York: Fitch Ratings.

Fleak, S. & E. Wilson (1994). The incremental information content of the going-concern audit opinion. *Journal of Accounting, Auditing and Finance* 9:1, 149–166.

Flint, D. (1988). *Philosophy and Principles of Auditing. An Introduction*. London etc.: Macmillan Education.

Foster, G. (1978). *Financial Statement Analysis*. New Jersey: Prentice-Hall.

Francis, J. & E. Wilson (1988). Auditor changes: A joint test of theories relating to agency costs and auditor differentiation. *The Accounting Review* 63:4, 663–682.

Francis, J., R. LaFond, P. Olsson, and K. Schipper (2004). Costs of equity and earnings attributes. *The Accounting Review* 79, 967–1010.

Francis, J., R. LaFond, P. Olsson, and K. Schipper (2005). The market pricing of accruals quality. *Journal of Accounting and Economics* 39, 295–327.

Frankel, R. & X. Li (2004). Characteristics of a firm's information environment and the information asymmetry between insiders and outsiders. *Journal of Accounting and Economics* 37:2, 229–259.

Fried, D. & A. Schiff (1981). CPA switches and associated market reactions. *The Accounting Review* 56:2, 326–341.

Frost, C. (1994). Uncertainty-modified audit reports and future earnings. *Auditing: A Journal of practice and Theory* 13:1, 22–35.

Geiger, M., K. Raghunandan & D. Rama (2005). Recent changes in the association between bankruptcies and prior audit opinions. *Auditing: A Journal of Practice and Theory* 24:1, 21–35.

Grice, J. (1997). An empirical study of SAS No. 59 and bankruptcy prediction models for auditors' going concern decisions. *Dissertation* in the Culverhouse School of Accountancy in the Graduate School of the University of Alabama.

Guenther, D. (2005). *Financial Reporting and Analysis*. New York etc.: McGraw-Hill/Irwin.

Guiral-Contreras, A., J. Gonzalo-Angulo & W. Rodgers (2007). Information content and regency effect of the audit report in loan rating decisions. *Accounting and Finance* 47:2, 285–304.

Gul, F. (1987). The effects of uncertainty reporting on lending officers' perceptions of risk and additional information required. *Abacus* 23:2, 172–181.

Gul, F., C. Chen & J. Tsui (2003). Discretionary accounting accruals, managers' incentives, and audit fees. *Contemporary Accounting Research* 20:3, 441–464.

Gul, F. & J. Tsui (1998). A test of the free cash flow and debt monitoring hypotheses: Evidence from auditing pricing. *Journal of Accounting and Economics* 24:2, 219–237.

Gul, F. & J. Tsui (2001). Free cash flow, debt monitoring, and audit pricing: further evidence on the role of director equity ownership. *Auditing: A Journal of Practice & Theory* 20:2, 72–84.

Gul, F., S. Lynn & J. Tsui (2002). Audit quality, management ownership and the informativeness of accounting earnings. *Journal of Accounting, Auditing and Finance* 17:1, 25–49.

Hammersley, J., L. Myers & C. Shakespeare (2008). Market reactions to the disclosure of internal control weaknesses and to the characteristics of those weaknesses under Section 302 of the Sarbanes Oxley Act of 2002. *Review of Accounting Studies* 13:1, 141–165.

Hay, D. & D. Davis (2004). The voluntary choice of an auditor of any level of quality. *Auditing: A Journal of Practice and Theory* 23:2, 39–55.

Hay, D., R. Knechel & N. Wong (2006). Audit fees: a meta-analysis of the effect of supply and demand attributes. *Contemporary Accounting Research* 23:1, 141–191.

Healy, P. & K. Palepu (1990). Earnings and risk changes surrounding primary stock offers. *Journal of Accounting Research* 28:1, 25–48.

Healy, P. & K. Palepu (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics* 31, 405–440.

Herbohn, K., V. Ragunathan & R. Garsden (2007). The horse has bolted: revisiting the market reaction to going concern modifications of audit reports. *Accounting and Finance* 47:3, 473–493.

Higson, A. (2003). *Corporate Financial Reporting – Theory & Practice.* London: Sage Publications Ltd.

Hogan, C. (1997). Costs and benefits of audit quality in the IPO market: a self-selection analysis. *The Accounting Review* 72:1, 67–86.

Hoitash, R., U. Hoitash & J. Bedard (2008). Auditing, internal control quality and audit pricing under the Sarbanes-Oxley Act. *Auditing: A Journal of Practice and Theory* 27:1, 105–126.

Holder-Webb, L. & M. Wilkins (2000). The incremental information content of SAS No. 59 going-concern opinions. *Journal of Accounting Research* 38:1, 209–219.

Hong, G. & S. Sarkar (2007). Equity systematic risk (Beta) and its determinants. *Contemporary Accounting Research* 24:2, 423–466.

Houghton, K. (1983). Audit reports: their impact in the loan decision process and outcome. An experiment. *Accounting and Business Research* 14:53, 15–20.

Huddart, S. & B. Ke (2007). Information asymmetry and cross-sectional variation in insider trading. *Contemporary Accounting Research* 24:1, 195–232.

IFAC (2003). Handbook of international audit, assurance, and ethics pronouncements – 2003 edition. *International Federation of Accountants*, 819 p.

Jayaraman, S. (2008). Earnings volatility, cash flow volatility and informed trading. *Journal of Accounting Research* 46:4, 809–851.

Jegadeesh, N. & J. Livnat (2006). Post-earnings-announcement drift: the role of revenue surprises. *Financial Analyst Journal* 62:2, 22–34.

Jensen, M. (1983). Organization theory and methodology. *The Accounting Review* 58:2, 319–339.

Jensen, M. (1986). Agency costs of free cash flow, corporate finance and takeovers. *American Economic Review* 76, 323–329.

Jensen, M. (1989). Eclipse of the public corporation. *Harvard Business Review* 5, 61–74.

Jensen, M. & W. Meckling (1976). Theory of a firm: managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics* 3:4, 305–360.

Jensen, M. & K. Murphy. (1990). Performance pay and top-management incentives. *Journal of Political Economy* 98:2, 225–264.

Johnson, D., K. Pany & R. White (1983). Audit reports and the loan decision: Actions and perceptions. *Auditing: A Journal of Practice and Theory* 2:2, 38–51.

Johnson, W. & T. Lys (1990). The market for audit services. *Journal of Accounting and Economics* 12:1–3, 281–308.

Jones, F. (1996). The information content of the auditor's going concern evaluation. *Journal of Accounting and Public Policy* 15:1, 1–27.

Kausar, A., R. Taffler & C. Tan (2009). The going-concern market anomaly. *Journal of Accounting Research* 47: 1, 213–239.

Kim, O. & R. Verrecchia (1991). Trading volume and price reactions to public announcements. *Journal of Accounting Research* 29:2, 302–321.

Knechel, R., V. Naiker & G. Pacheco (2007). Does industry specialization matter? Evidence from market reaction to auditor switches. *Auditing: A Journal of Practice and Theory* 26:1, 19–45.

Krishnamurthy, S., J. Zhou & N. Zhou (2006). Auditor reputation, auditor independence, and the stock-market impact of Andersen's indictment on its client firms. *Contemporary Accounting Research* 23:2, 465–490.

Lakonishok, J. & I. Lee (2001) Are insider trades informative? *Review of Financial Studies* 14:1, 79–111.

Lang, L. & R. Stulz (1994). Tobin’s Q, corporate diversification and firm performance. *Journal of Political Economy* 102:6, 1248–1280.

Lang, L., R. Stulz & R. Walking (1991). A test of the free cash flow hypothesis: the case of bidder returns. *Journal of Financial Economics* 29:2, 315–335.

LaSalle, R. & A. Anandarajan (1997). Bank loan officers’ reactions to audit reports issued to entities with litigation and going concern uncertainties. *Accounting Horizons* 11:2, 33–40.

Lee, T. (1972). Company auditing: concepts and practices. Edinburgh: ICAS.

Lennox, C. (1999). Audit quality and auditor size: an evaluation of reputation and deep pockets hypotheses. *Journal of Business Finance & Accounting* 26:7–8, 779–805.

Lennox, C. (2005). Management ownership and audit firm size. *Contemporary Accounting Research* 22:1, 205–227.

Lennox, C. & C. Park (2006). The informativeness of earnings and management’s issuance of earnings forecasts. *Journal of Accounting and Economics* 42:3, 439–458.

Lev, B. (1989). On the usefulness of earnings and earnings research: lessons and directions from two decade of empirical research. *Journal of Accounting Research* 27:3, 153–192.

Libby, R. (1979). The impact of uncertainty reporting on the loan decision. *Journal of Accounting Research* 17: supplement, 35–57.

Limperg, T. (1932). *Theory of Inspired Confidence*. University of Amsterdam.

Lin, Z., Q. Tang & J. Xiao (2003). An experimental study of users’ responses to qualified audit reports in China. *Journal of International Accounting, Auditing and Taxation* 12:1, 1–22.

Littleton, A. (1933). *Accounting Evolution to 1900*. American Institute Publishing Co. New York.

Livnat, J & P. Zarovin (1990). The incremental information content of cash-flow components. *Journal of Accounting and Economics* 13:1, 25–46.

Livnat, J. & C. Tan (2004). Restatements of quarterly earnings: evidence on earnings quality and market reactions to the originally reported earnings. *Working paper,* NYU.

Loudder, M., I. Khurana, R. Sawyers, C. Cordery, C. Johnson, J. Lowe & R. Wunderle (1992). The information content of audit qualifications. *Auditing: A Journal of Practice and Theory* 11:1, 69–82.

McMullen, D., K. Raghunandan & K. Rama (1996). Internal control reports and financial reporting problems. *Accounting Horizons* 10, 67–75.

Melumad, N. & A. Ziv (1997). A theoretical examination of the market reaction to auditors' qualifications. *Journal of Accounting Research* 35:2, 239–256.

Menon, K. & D. Williams (1991). Auditor credibility and initial public offerings. *The Accounting Review* 66:2, 313–332.

Menon, K. & D. Williams (1994). The insurance hypothesis and market prices. *The Accounting Review* 69:2, 327–342.

Merton, R. (1987). A simple model of capital market equilibrium with incomplete information. *Journal of Finance* 42, 483–510.

Miller, J., S. Reed & R. Strawser (1993). Bank loan officers' perceptions if the new audit report. *Accounting Horizons*, March 1993, 39–52.

Mitra, S. & W. Cready (2005). Institutional stock ownership, accrual management, and information environment. *Journal of Accounting, Auditing and Finance* 20:3, 257–286.

Mittelstaedt, H., P. Regier, E. Chewing & K. Pany (1992). Do consistency modifications provide information to equity markets? *Auditing: A Journal of Practice and Theory* 11:1, 83–98.

Moody's Investor Service (2004). Special comment: Section 404 reports on internal control. Moody's Investor Service, New York.

Mutchler, J. (1984). Auditor's perceptions of the going-concern opinion decision. *Auditing: A Journal of Practice and Theory* 3:2, 17–30.

Mutchler, J. (1985). A multivariate analysis of the auditor's going-concern opinion decision. *Journal of Accounting Research* 23:2, 668–682.

Myers, S. (1977). Determinants of corporate borrowing. *Journal of Financial Economics* 5:2, 147–175.

Naser, K., R. Nuseibeh & A. Al-Hussaini (2003). Users' perceptions of various aspects of Kuwaiti corporate reporting. *Managerial Auditing Journal* 18:6–7, 599–617.

Ng, D. (1978). An information economics analysis of financial reporting and external auditing. *The Accounting Review* 53:4, 910–920.

Ng, T. & H-T. Tan (2003). Effects of authoritative guidance availability and audit committee effectiveness on auditors' judgments in an auditor-client negotiation context. *The Accounting Review* 78:3, 801–818.

Nichols, D. & D. Smith (1983). Auditor credibility and auditor changes. *Journal of Accounting Research* 21:2, 534–544.

Nikkinen, J. & P. Sahlström (2004). Does agency theory provide a general framework for audit pricing? *International Journal of Auditing* 8:3, 253–262.

Ogneva, M. & K. Subramanyam (2007). Does the stock market underreact to gong concern opinions? Evidence from the U.S. and Australia. *Journal of Accounting and Economics* 43:1, 439–452.

Ogneva, M., K. Subramanyam & K. Raghunandan (2007). Internal control weakness and cost of equity: evidence from SOX Section 404 disclosures. *The Accounting Review* 82:5, 1255–1297.

O'Reilly, D., R. Leitch & B. Tuttle (2006). An experimental test of the interaction of the insurance and information-signaling hypothesis in auditing. *Contemporary Accounting Research* 23:1, 267–289.

Ou, J. & S. Penman (1989). Financial statement analysis and the prediction of stock returns. *Journal of Accounting and Economics* 11:4, 295–329.

Palmrose, Z-V., V. Richardson & S. Scholz (2004). Determinants of market reactions to restatement announcements. *Journal of Accounting and Economics* 37:1, 59–89.

PCAOB (2004). *Auditing Standard No. 2* – An audit of internal control over financial reporting performed in conjunction with an audit of financial statements. Public Company Accounting Oversight Board, Bylaws and Rules – Standards – AS2, March 9, 2004.

Piotroski, J., D. Roulstone (2004). The influence of analysts, institutional investors, and insiders on the incorporation of market, industry and firm-specific information into stock prices. *The Accounting Review* 79:4, 1119–1151.

Pucheta, M., A. Vico & M. Garcia (2004). Reactions of the Spanish capital market to qualified audit reports. *European Accounting Review* 13:4, 689–711.

Robertson, J. (1988). Analysts' reactions to auditors' messages in qualified reports. *Accounting Horizons,* June 1988, 82–89.

Ross, S. (1973). The economic theory of agency: the principal's problem. *American Economic Review* 63, 134–139.

Ryan, P. & R. Taffler (2004). Are economically significant stock returns and trading volumes driven by firm specific news releases? *Journal of Business Finance and Accounting* 31:1–2, 49–82

Ryan, P. (2005). The market impact of directors' trades: relationship to various measures of a firm's information environment. *The British Accounting Review* 37, 319–337.

Schaub, M. & M. Highfield (2003). On the information content of going concern opinions: the effects of SAS numbers 58 and 59. *Journal of Asset Management* 4:1, 22–31.

Scientific Theory (2010). In Encyclopædia Britannica. Retrieved February 10, 2010, from Encyclopædia Britannica Online: http://search.eb.com/eb/article-9066294.

SEC (1980). Regulation S-X. U.S. Securities and Exchange Comission.

Sengupta, P. (1998). Corporate disclosure quality and the cost of debt. *The Accounting Review* 73:4, 459–474.

Seyhun, N. (1986). insiders' profits, costs of trading, and market efficiency. *Journal of Financial Economics* 16:2, 189–212.

Shleifer, A. & R. Vishny (1989). Management entrenchment: the case of manager-specific investments. *Journal of Financial Economics* 25:1, 123–139.

Sloan, R. (1996). Do stock prices fully reflect information in accruals and cash flows about future earnings? *The Accounting Review* 71:3, 289–315.

Smith, J., W. Clifford & J. Warner, (1979). On financial contracting: an analysis of bond covenants. *Journal of Financial Economics* 7:2, 117–161.

Soltani, B. (2000). Some empirical evidence to support the relationship between audit reports and stock prices – The French case. *International Journal of Auditing* 4:3, 269–291.

SOX (2002). *The Sarbanes-Oxley Act of 2002*. United States House of Representatives, Public Law 107–204 [H.R. 3763]. Washington D.C.

Taffler, R., J. Lu & A. Kausar (2004). In denial? Stock market underreaction to going-concern audit report disclosures. *Journal of Accounting and Economics* 38, 263–296.

Titman, S. & B. Trueman (1983). Information quality and the valuation of new issues. *Journal of Accounting and Economics* 8:2, 159–172.

Tookes, H. (2008). Information, trading, and product market interactions: cross-sectional implications of informed trading. *The Journal of Finance* 63:1, 379–413.

Verrecchia, R. (2001). Essays on disclosure. *Journal of Accounting and Economics* 32:1–3, 97–180.

Wallace, W. (1980). The economic role of the audit in free and regulated markets. The Touche Ross and Co. Aid to Education Program. Reprinted in *Auditing Monographs* (New York Macmillan Publishing Co., 1985. Available on the internet at: <http://raw.rutgers.edu/raw/wallace/homepage.html>.

Wallace, W. (1987). The economic role of the audit in free and regulated markets: a review. *Research in Accounting Regulation* 1, 7–34.

Wallace, W. (2002). Delay in accounting harmonization: evidence on auditor selection and cost-of-capital effects. *Research in Accounting Regulation* 15, 39–68.

Wallace, W. (2004). The economic role of the audit in free and regulated markets: a look back and a look forward. *Research in Accounting Regulation* 17, 267–298.

Warfield, T., J. Wild & K. Wild (1995). Managerial ownership, accounting choices, and informativeness of earnings. *Journal of Accounting and Economics* 20:1, 61–91.

Watts, R & J. Zimmerman (1979). The demand for and supply of accounting theories: the market for excuses. *The Accounting Review* 54:2, 273–306.

Watts, R & J. Zimmerman (1986). The demand of and supply for accounting theories. *The Accounting Review* 54:2, 273–305.

Watts, R & J. Zimmerman (1986). *Positive accounting theory*. Englewood Cliffs, New Jersey: Prentice-Hall

White, H. (1980). A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrics* 48:3, 817–838.

Willenborg, M. (1999). Empirical analysis of the economic demand for auditing in the initial public offerings market. *Journal of Accounting Research* 37:1, 225–238.

Wright, M. & R. Davidson (2000). The effect of auditor attestation and tolerance for ambiguity on commercial lending decisions. *Auditing: A Journal of Practice and Theory*, 19:2, 67–81.

Yeo, G., P. Tan, K. Ho and S.-S. Chen (2002). Corporate ownership structure and the informativeness of earnings. *Journal of Business Finance and Accounting* 29:7–8, 1023–1046.