UNIVERSITY OF
EXETER
XFi Centre for Finance and Investment

Determinants of Voluntary Corporate Disclosures by UK Companies

By

Santhosh Abraham*
S.Abraham@napier.ac.uk

Phil Darby*
P.Darby@napier.ac.uk

And

Ian Tonks**
I.Tonks@ex.ac.uk

*School of Accounting, Economics and Statistics, Napier University, Edinburgh
**Xfi Centre for Finance and Investment, University of Exeter, Exeter

Paper Number: 07/16

November, 2007

Determinants of Voluntary Corporate Disclosures by UK Companies

Abstract

This paper models the arrival rate of voluntary news announcements made by UK firms, and investigates whether the UK's new regulatory regime following the establishment of the Financial Services Authority's affected the pattern of corporate news disclosures. We also investigate whether a firm's earnings environment affects the volume of news announcements that the firm releases to the stock market. Our results show that firms make more voluntary disclosures, at those times when the firm's actual earnings per share are less than the earnings expected by the market but that we find no conclusive evidence that the new regulatory regime had any impact on disclosure practices.

I Introduction

This paper investigates voluntary disclosure practices by UK firms, and examines whether the regulatory regime introduced under the Financial Services and Market Act (FSMA) 2000 had an impact on disclosure practices. We also study whether the forthcoming release of a negative earnings surprise affects managerial disclosure practices.

Annual report disclosure practices by managers have been extensively examined in the literature (Cooke and Wallace, 1990; Meek, Gray and Roberts, 1995; Ahmed and Courtis, 1999; O'Sullivan, 2000; Adams, 2002; Camfferman and Cooke, 2002; Stanton and Stanton, 2002; Watson, Shrives and Marston, 2002).. However, research into the release of other more timely forms of communications, such as outlook statements, is an emerging area in the UK which offers useful insights into factors that affect disclosure practices more generally (Dedman, 2004). The importance of outlook statements has been highlighted by previous work that has shown significant market reactions to the announcements of these outlook statements (Collet, 2004; Helbork and Walker, 2003, Clare, 2004). In addition, there is evidence that these statements are predictors of the economic outlook of a country (Clare, 2004), and therefore important in macroeconomic policy choices.

Research on US firms into the managerial motivation for disclosures, points toward managers facing an asymmetric loss function in their earnings disclosure practices: managers are keen to pre-empt a negative earnings surprise while the same is not observed when the earnings surprise is positive. An earnings surprise is defined as a situation when the actual earnings released by a company is different from the consensus analyst forecast of the expected earnings. Reasons put forward for the asymmetric loss function include the litigation costs (Skinner, 1994; Francis and Schiper, 1999; Soffer et al, 2000), investor reputation (Skinner, 1994; Kasnik and Lev, 1995) and the effect of not disclosing information on stock prices (Soffer et al , 2000). While the US and UK share a number of similar features such as legal systems, share ownership patterns and sound investor protection systems (La Porta et al, 1998, 1999 and 2000), researchers have questioned whether US based findings can be generalised in a UK context (Hudaib and Cooke, 2005; Beattie, 2006). For instance

though the legal system is similar in both countries, the threat of litigation is much stronger in the US than it is in the UK (Elliot and Jacobson, 1994, Dedman, 2004).

The UK Listing Authority (UKLA) first issued its guidelines on the dissemination of price sensitive information in 1994, and since then there have been changes in the regulatory framework with the Financial Services Authority (FSA) taking over responsibility for the UKLA from the London Stock Exchange in 2000 and the introduction of tougher US style penalties for non-disclosure of price sensitive information through the Financial Services and Market Act (FSMA) of 2000.

Under the FSA guidelines (FSMA, 2000) UK company directors are required to disclose price sensitive information immediately to the stock market. Price sensitive information is defined as. when there is a change in the financial or operating condition of a business that is not currently reflected in stock prices. However managers may exercise their discretion in deciding whether the information is price sensitive (Collet, 2004) and the guidelines on the dissemination of price sensitive information does not give clear guidelines on what constitutes a significant impact on stock prices. Since managers have to exercise their judgement in the disclosure of outlook statements we classify these as voluntary disclosures. Collet (2004) provides a descriptive review of the content and market reaction of trading statements released by companies, but does not focus specifically on examining managerial motives for disclosure. Helbrok and Walker (2003) focus only on the profit warnings area of disclosure and provide evidence on factors which contribute to the release of profit warnings. We extend this literature by examining director motivation for disclosure of all outlook statements using a broad sample of listed companies in the UK and split our sample to incorporate the time period surrounding the imposition of stricter penalties for non disclosure of price sensitive information. [1]

Our classification of news announcements differs from some of the extant literature. Previous work that has examined earnings related disclosure uses a subjective content

---

[1] Examples of outlook statements include those released on the 4th of September 1996 by Cadbury-Schweppes with the heading "the outlook for the year as a whole is good" and issued by BP on the 14th of February 1995 with the heading "Pressure on Margins - Depressed refining margins are likely to continue into 1998". Additional details are typically provided to enhance the statement.

analysis approach to classify the announcements into negative, neutral or positive statements. While such an approach has the advantage of enabling readers to appreciate the type of announcement (quantitative or qualitative) as well as the broader context of the announcement, it does require a subjective decision making process (see Beattie et al, 2004 for a further discussion of the problems involved in content analysis).[2] Instead our approach classifies all news statements as negative, neutral or positive based on the impact of the disclosure of the statement on market prices, hence using a more objective market based measure of disclosure. Our paper also responds to Dedman (2004) in examining the effect of litigation on disclosure practices by breaking our sample into the periods before and after the FSA enacted the financial services and market act (FSMA, 2000).

We do find evidence of a linear increase in disclosure over time but do not find evidence that regulation by the FSA was associated with a change in disclosure behaviour. After controlling for company size, analyst following and gearing we find evidence of increased disclosure of outlook statements when companies have negative news (earnings information) to disclose to the market.

The rest of the paper is divided into the following sections. Section 2 describes the regulatory environment applicable to the disclosure of news information and the hypothesis associated with that. Section 3 develops the testable hypotheses concerning managerial behaviour and disclosure practices. In section 4 we describe the data used in the study, section 5 presents the results and discussion of the results. Finally, our conclusions are summarised in section 6.

II The Regulatory Framework for the dissemination of price sensitive information

In recent years in the UK there have been a number of regulatory changes in relation to the disclosure of material information to shareholders. Prior to 1994 there were few specific guidelines on the disclosure of non-mandatory corporate information. UK companies were and still are dominated by institutional investors, and pre-1994 used

---

[2] Collet (2004) provides examples of the problems involved in the subjective classification which include disagreement among users, insignificant details provided for classification (pg 8), categories being positive on one aspect and negative on other aspects making classification problematic (pg 26)

private channels to transmit price sensitive information to shareholders (Holland, 1997, Helbork and Walker, 2002). In 1994 the United Kingdom Listing Authority (UKLA) published guidance on the dissemination of price sensitive information. Under these rules listed companies are under an obligation to ensure that any price sensitive information which comes from itself, its advisors or agents with the listed company's authority, be presented to the market as a whole and must be sufficient, accurate and not misleading[3]. The UKLA defines price sensitive information as information which may or would be likely to lead to a substantial movement in the price of the company's listed securities. This definition depends on a variety of factors such as size, sector, and recent developments. Examples of these factors include dividend announcements, board appointments or departures, profit warnings, share dealings by directors or substantial shareholders, acquisitions and disposals above a certain size, annual and interim results, preliminary results, rights issues and details of other issues of securities. Directors of companies have ultimate responsibility for the dissemination of the news announcements, though it is expected that they would delegate such functions within the firm. Companies usually submit news announcements to a regulatory news service. A Regulatory Information Service is a service that receives regulatory information from listed companies (and other entities), processes that information and disseminates it to Secondary Information Providers.

In May 2000 the Financial Services Authority (FSA) took over supervision of the UKLA from the London Stock Exchange. The establishment of the FSA was announced in 1997, with the intention of strengthening financial services regulation in the United Kingdom, and was given its market powers by the Financial Services and Market Act of 2000 (FSMA).[4] The FSMA required the FSA to publish a code to supplement the statutory provisions defining market abuse providing more guidelines than was previously available. The code known as the "Code of Market Conduct" or

---

[3] Listing rules paragraph (9.1) states that "a company must notify the company announcement office (cao) without any delay of any new major development within its sphere of activity which are not public knowledge.."
[4] The establishment of a super-regulator followed a series of high profile financial scandals during the eighties and nineties including Barlow-Clowes, 1988, Bank of Credit and Commerce International (BCCI),1991, Barings,1995, Blue Arrow (1987, Guinness, 1986. In 1997 the new Labour Government proposed the establishment of the FSA as a new super-regulator, that would subsume in one regulatory organization a number of previously existing financial regulators.

the "Code" came into effect on 1st December 2001. Both the FSMA and the Code set out new frameworks for tackling market abuse in prescribed markets expected to be those operated by the seven UK recognized investment exchanges[5]. Transparency and disclosure of information by companies is one of the cornerstones of the market abuse regime focusing on three key areas, misuse of information, false or misleading impression and market distortion. The FSMA states that

> *"Any person who does not act or engages in any course of conduct which creates a false or misleading impression as to the market in or the price or value of any relevant investments is guilty of an offence if he does so for the purpose of creating that impression and of thereby inducing another person to acquire, dispose of, subscribe for or otherwise those investments or to refrain from doing so or to exercise, or refrain from exercising, any rights conferred by those investments (FSMA, 2000, s.397, cited in Dedman, 2004)"*

One of the policy effects of the FSMA was the introduction of civil penalties (fines and suspensions) for market abuse which run parallel to criminal offences and which requires a lower burden of proof[6]. Prior to the code the toughest penalty that could be imposed was a public censure while currently indefinite exclusion or an unlimited fine can be levied. For instance in 2000/01 the enforcement division of the FSA imposed 79 penalties with a total value of £5,847,748. For the year 2001/02 that number decreased to 76 but the value of the penalties increased to £10,062,597[7].

In research that examines the effect of the UKLA's 1994 guidance on disclosure Helbrok and Walker (2002) note an increase in the frequency of profit warnings by listed companies after 1994. Holland (1994, 1996) also provides evidence of a change in disclosure policies after 1994 suggesting that the guidance notes has had a real effect on disclosure practices. Holland (1999) notes that whilst private information channels still serve as an important source of communication between companies and

---

[5] For a more detailed description of the measures which the FSA has taken to prepare for taking on full responsibility as the single regulator of financial services see 'The Financial Services Authority: A short guide to our preparations for the new regulatory regime'.
http://www.fsa.gov.uk/pubs/policy/P28.pdf

[6] See sections 118-123 of the FSMA 2000
[7] More details on the FSA's enforcement policies can be found at
http://www.fsa.gov.uk/Pages/doing/regulated/law/focus/

institutional investors, companies are keen to disclose price sensitive information through public channels first before further discussions with institutional investors.

Helbrok and Walker (2003) using a sample of 345 companies over the time period 1992-1995 show that the introduction of guidelines on the dissemination of price sensitive information led to an increase in the frequency of trading statements released by companies. Our sample extends into the period after the FSA took over responsibility for the UKLA from the London Stock Exchange and thereby offers the opportunity of examining the impact of the threat of litigation on disclosure practices.

The first period in our study covers the time period (1994-1997), after the introduction of the UKLA guidance on price sensitive information, but before the establishment of the FSA. The second period covers the three years period after the FSMA was implemented and the threat of litigation for the non-disclosure of price sensitive information was tightened. The first hypothesis that we test in the paper is

Hypothesis 1: The increased threat of litigation after the establishment of the FSA resulted in an increase in voluntary disclosures by companies

By focusing on the two time periods before and after the implementation of the FSMA, following Dedman (2004), this paper investigates the effect of the threat of litigation on disclosure practices in UK companies.

III Managerial Behaviour and Disclosure Practices

In an early study that examined managerial motives for the voluntary disclosure of earnings news, Truman (1986) argues that managers release information voluntarily as a means of signalling their ability to anticipate future earnings changes. Ajiinkya and Gift (1984) examined the hypothesis that managers dislike any large earnings surprises, and therefore disclose more information regardless of whether the news carried positive or negative information in line with Truman (1986). Their study along with McNichols (1989), Pownall, Wasley and Waymire (1993) show a stock market reaction close to zero when voluntary news announcements are released suggesting no earnings bias in voluntary disclosure. Other studies show that managers have a

tendency to disclose more good news forecasts than bad news forecasts (Patell, 1976; Penman, 1980; Lev and Penman, 1990).

More recent studies however show a bias in the opposite direction, and find that managers disclose more bad news forecasts than good news forecasts. Skinner (1994, 1997) argues that managers are faced with an asymmetric loss function in their voluntary disclosure practices. Managers are faced with large costs only when investors are surprised with negative news. Two additional arguments for an asymmetric loss function have been proposed. The first is related to legal liability costs as a result of the US Securities and Exchange Commission's rule 10b-5 which makes it unlawful for managers to omit or state a material fact. By pre-disclosing the information, managers reduced the risk of being sued by investors for withholding information. Secondly Skinner argues that managers pre-disclose negative earnings news in order to avoid reputation costs. Managers who develop a history of earnings surprises tend to be followed less by the money management community, which would adversely affect the price and liquidity of the stock. Skinner's findings are confirmed by other US based studies (Kaznik and Lev, 1995; Soffer et al, 2001) that find that managers are conservative in their disclosure practices. Libby and Tan (1999) in their survey of financial analysts found that analysts perceived managers who provided early warning signals as having more integrity and that analysts tend to follow stocks of companies that were more forthcoming with their disclosures. Matsumoto (2002) argues that managers can broadly use two techniques to avoid a negative earnings surprise. These are to manage the actual earnings or the expectations of earnings. Managing expectations of earnings would be easier due to the presence of boards and auditors (Matsumoto, 2002).

Share price impact is another factor that may motivate managerial disclosure decisions. Brown at al (1987) show that managers have strong incentives to avoid negative earnings surprises because it leads to negative price reactions. Skinner and Sloan (2001) show that the absolute magnitude of the price response to negative surprises exceeds the price response to positive earnings surprise. Payne and Robb (2001) show that firms who pre-manage news disclosure have greater abnormal returns.

For UK companies, Collet (2004) conducts a study of trading statements using data from FTSE All Share Companies for the time period 1995-2001 and confirms that the releases of trading statements have a significant impact on stock prices, with a bigger reaction to the release of negative updates. Helbrok and Walker (2003) using a sample of 345 companies over the time period 1992-1995 report that the introduction of guidelines on the dissemination of price sensitive information led to an increase in the frequency of trading statements released by companies. In examining the impact of market expectation on the disclosure of trading statements Helbrok and Walker (2003) show that managers release trading statements in order to avoid negative earnings surprise.

While this paper maintains the sprit of Helbrok and Walker (2003), our sample includes all companies in the FTSE All Share category (734 in all). This covers a larger cross section of companies, and enables us to examine differences in disclosure patterns across stocks that are components of different indices. Within the FTSE All Share index, stocks may be grouped into three sub-indices based on stcok market liquidity: FTSE 100, FTSE 250 and FTSE Small. Collet (2004) finds that the market reaction to trading statements is greater for companies in smaller indices. He attributes this to these companies having a lower analyst following. This serves as our motivation for examining disclosure practices across stocks grouped by index which also acts as a measure of stock market liquidity.

Our second hypothesis examined is whether managers are influenced by the forthcoming release of an earnings surprise in choosing their disclosure practices and whether the direction of the earnings surprise biases disclosure decisions

Hypothesis 2: There is no relationship between the value of the forthcoming release of an earnings surprise and disclosure practices of companies.

The level of voluntary disclosure may systematically vary across firms due to other factors than the regulatory regime, and the earnings environment, so our study also controls for size, analyst following and gearing. Firm size has been one of the key characteristics consistently noted in previous research as being positively related to the volume of corporate disclosure. For example, Ahmed and Courtis (1999) in their

meta-analysis of corporate characteristics and annual report disclosure levels between 1968 and 1997 analyzed 29 papers, which included 2,473 annual reports. The meta-analysis concluded that evidence for links between the various economic variables and disclosure were mixed with strong support only for size, listing status and leverage (all of them positive). Larger firms release more information due to the scale of their operations and the financial capability to do so. When more analysts follow a company there will be more demands for information from the company (Healey and Palepu, 2001) and therefore it can be expected that firms with a larger analyst following will disclose more information to satisfy analysts' information demands.

Dedman and Lin (2002) and Helbok and Walker (2003) show that the capital structure of a company can have an influence on its disclosure practices. Their studies find that firms with higher gearing ratios disclose less price sensitive information to the markets. Ahmed and Courtis (1999) on the other hand find a positive relationship between gearing and annual report disclosure.

All of these control variables have been used in prior work on the disclosure of outlook statements (Skinner, 1994; Kaznik and Lev, 1995; Soffer et al, 2002; Ahmed and Courtis, 1999; Collet, 2004). One drawback of previous studies that have examined the effect of litigation on disclosure practices is the lack of control for time-specific factors which affect corporate disclosure practices (see Fried 1976; Stigler, 1964; Beaston, 1973; Collet 2004). Our study addresses this issue by incorporating a background increase in news announcements, as Figure 1 demonstrates that throughout the period there has been a gradual increase in disclosures, and this might be unrelated to the introduction of the FSMA (2000).

IV Data

Our dataset comprises the complete set of news announcements made by the FTSE All share firms for the accounting base years 1994-1997 and 2000-2002 to cover the period after the guidance notes on the disclosure of price sensitive information were released in 1994, but before the establishment of the FSA, and the period after the FSA was given market powers. Data on the type of Regulatory News Service

Announcements as well as the date of the news and earnings announcement made by the FTSE All Share Companies was obtained from Hemscot Premium Services.[8] Table 1 contains preliminary descriptive results for the frequency counts of Regulatory News Service (RNS) statements released by the FTSE All Share companies over the two time periods: pre-FSA and post-FSA. Despite having a shorter observation period in the post-FSA period (3 years as opposed to 4 years in the pre-FSA period), there is a substantial increase in the number of RNS announcements in the post-FSA period. The total number of news items in the first period is 14,759 while in the second it is 28,708. This is an increase of 159% news items per year between the two sub-periods.

All RNS statements made by the FTSE All-Share companies have been broken down into six categories, summarised in Table 1. It can be seen that the 11,928 RNS outlook statements are the largest category of news types. Outlook statements issued by companies are the main focus of this study as these have the characteristics of a voluntary corporate disclosure (Collet, 2004) and relate to the future trading environment of a company. The pattern in total numbers of outlook statements and the number of outlook statements per company is given in Figure 1. Both curves show a steady upwards trend.

In our analysis we concentrate on the outlook statements released in the six months prior to the announcement of the year-end earnings per share. This allows us to focus on final year-end earnings related voluntary disclosures, rather than semi-annual interim earnings releases. This enables us to align our measure of market expectations (based on forecasts made in the six months prior to the year-end earnings release) with the release of RNS outlook statements. Otherwise there is some confusion as to whether the outlook statement in the first half of the accounting year relates to the disclosure of the interim earnings announcement or the final year-end earnings. Table 1 also provides information on the total number of RNS statements made six months prior to the release of the year end earnings announcement.

---

[8] Hemscot which provides business and financial news obtains regulatory news service announcements from the London stock exchange

We categorise outlook statements as positive or negative following the market reaction to the announcement, using methods of statistical process control. (Montgomery, 2004). Statistical Process Control, or SPC, is an approach to monitoring series gathered over time. The relevance of new data is compared the historical distribution of results gathered earlier. In process control applications any result outside three standard deviations from the mean indicates that a significant event had occurred.[9] A full SPC approach would also include rules for trends and repeated observations on the same side of the mean in addition to extreme value screening. We use a simpler rule which classifies an adjusted return as important if it is outside one standard deviation from the mean. The mean and standard deviations were calculated monthly for each stock to account for variations in volatility over time. Under an assumption of normality we would expect 15.9% of announcements to be flagged as negative and positive by chance alone using a one standard deviation window. If news releases contain price sensitive information, then there should be an association between days on which extreme values are observed, and days on which RNS statements are released.

We follow standard practice and calculate earnings surprise by comparing the realised earnings per share (EPS) with analyst forecast earnings per share for the company. More precisely, an earnings surprise is calculated as the difference between the consensuses forecast six months prior to the release of the EPS and the actual EPS standardised by the share price six months prior to the release of the EPS. We follow Kaznik and Lev (1995) and define good news as a positive earnings surprise and bad news as a negative earnings surprise. The mean market capitalisation over the year is used as a proxy for the size of the company. Gearing is calculated as a firm's total debt divided by total assets and analyst following is calculated as the number of analysts who issued earnings forecasts during the year for a firm on the I/B/E/S

---

[9] In a manufacturing situation the SPC rules used will depend on the effort available to respond to SPC failures. A large number of control charts would result in an unmanageable task. Results as extreme as three standard deviations from the mean occurs only 0.27% of the time. This contrasts to the 5% level level of significance often encountered in statistics. As Montgomery (2004) explains, to detect shifts and trends in an underlying distribution, a full SPC approach would also include rules for trends and repeated observations on the same side of the mean in addition to extreme value screening.

database. Year-end earnings per share, market capitalisation, price, analysts' median consensus forecasts, gearing, analyst following were all extracted from Datastream.

V Results

Descriptive Information

Table 2 contains some descriptive statistics on the average number of outlook statements released per company per year by index category. Outlook statements have also been classified into positive, neutral and negative statements over the two sub-periods, based on the stock market reaction on the day of the announcement, and p-values have been calculated for the differences between positive and negative statements. As expected companies in the most liquid index (FTSE 100) have the highest disclosure rate. The results show that the number of negative statements issued by the FTSE 100 companies are significantly higher than the number of positive statements in both the pre-FSA (p-value of 0.00%) and the post-FSA periods (p-value of 0.03%). There are no significant results on the differences between the two categories on the other index categories. These results suggest that companies in the most liquid index are biased toward disclosing news which the market perceives to be negative and this is the case in both sub-periods. Though not statistically significant, the point estimates show that smaller companies disclosed more positive news in the pre-FSA period but the proportion of negative news is higher in the post-FSA period.[10] The results also show an increased trend in all categories of disclosure for all the index categories in the second period.

We also examined whether there are any time effects involved in the increased disclosure. Figure 2 provides information on the timing of the news announcements in the months leading up to the earnings release. While the frequency of news announcements increased in the post-FSA period, it appears that there is little difference in the timing of the news announcements with the highest occurrence one month prior to the earnings release which is when we expect managers to have the

---

[10] The results over a one year period are similar in magnitude to the six month results except that smaller companies disclosed significantly more positive news in period 1.

most accurate information about the final earnings numbers. The next section examines the market reaction to the release of these outlook statements.

Market Reaction

Daily returns around each of the outlook statements made by the companies were obtained from Datastream. Excess returns and cumulative abnormal returns are calculated using market adjusted returns

$$AR_{it} = R_{it} - R_{Mt}$$

Where R_{it} is the return on the stock i for day t and R_{Mt} is the return on the market portfolio using the FTSE All-Share index as the proxy for the market portfolio. We calculate returns prior and post the news announcement by using an 11 day window (-5 to -1 and +1 to +5 with 0 being the event date). Examining periods prior to the release of the news announcements enables us to determine whether there is any evidence of leakage of price sensitive information prior to the public announcement of the news. Cumulative Abnormal Returns (CAR) are calculated for days -5 to -1 and days +1 to +5, as well as the average return on day 0.

Table 3 provides information on the CAR prior to the announcement, on the day of the announcement and after the announcement, for negative, neutral and positive price sensitive information. The table is broken down into two sections to reflect the time periods before and after the introduction of the FSMA 2000, in Panels A and B respectively. Results are provided for the FTSE 100, FTSE 250 and FTSE Small category as well as for the full sample. Comparative CAR results are also given for days on which no news announcement was made, which are also divided into Negative, Neutral and Positive price changes. The P-values report a test for differences in mean returns between news and no news days for the negative, neutral and positive price changes.

The results show that the market reaction on announcement day to the news is asymmetric with a larger reaction to negative news releases than to positive news announcements. In Panel A for the pre-FSA period, the mean announcement-day return for negative OTL announcements was -4.7%, and for positive OTL

15

announcements was +3.83%. Both of these mean returns are significantly different from the mean returns for negative and positive prices changes around non-news days. In Panel B, for the post-FSA period, the mean return was -8.39% and for positive announcements was 5.97%. This confirms previous findings in Skinner (1994), Kasnik and Lev (1995) and Collet (2004). The returns are higher in the post-FSA period which may reflect the higher stock market volatility associated with that period.

In the pre-FSA period there is no evidence of leakage of price sensitive information prior to the information disclosure. However post-FSA, there is some evidence of price movements prior to the release of significant negative news among the FTSE All Share firms. Examination of the different index categories shows that this is due to leakage among the FTSE 250 group of companies. In this group the mean excess return was -0.59 before bad news was released but 0.55 if no news was released and the excess returns were negative. There were no differences seen in the FTSE 100 and the FTSE Small group of firms.

Mean CAR for the five days after the release of significant negative news statements are insignificant for both the full and the sub samples which provide no evidence of a delayed market reaction with respect to negative news announcements. On the other hand for significant positive news statements there is evidence of a positive and significant CAR's for the total sample in both Panels A and B over the five days after the release of news statements. This finding provides support to news hypothesis in De Bondt and Thaler (1985) that the market tends to under react to good news.

Holland (1997) notes that companies hold meetings with institutional investors after the public release of news statements. If these meetings do provide value relevant information then the results suggest that companies with poor future earnings information to disclose, make full disclosure (perhaps to deter litigation and for reputation reasons), but those companies with positive news are not fully forthcoming in their public disclosures and therefore the private meeting serve as a forum to provide more value relevant information in the disclosure of good news,

16

The results also show that for both negative as well as for positive news announcements, the market reaction increases as the firm liquidity is reduced: the stock market reaction is larger for firms in FTSE 250 and FTSE Small indices. This confirms the results obtained in Collet (2004) and adds to the evidence that news announcements of smaller firms produce bigger surprises. Collet (2004) notes that this is might be because large companies have other ways of disclosing news information to investors prior to the public release of the news. However, the results on the period prior to the announcement do not support this theory. Another possible explanation is that the large external coverage received by firms in the larger indexes leads to better anticipation of the news compared with firms in the smaller indexes hence leading to bigger reactions among the smaller companies.

Regression Analysis

The hypotheses in this study are also tested using a regression model. The number of statements issued by a company can only take integer values (i.e. 0, 1, 2, 3 etc. news announcements per year). A Poisson model is more appropriately fitted to this data than the more usual linear regression[11]. Of central interest to our tests are the relationships between the disclosure of outlook statements and both the regulatory environment and the nature of the earnings surprise. The following Poisson model is used to examine these relationships.

$$\Pr_{i,t}\left(n=r\right)=\frac{\lambda^r e^{-\lambda}}{r!}, \quad r=0,1,2,3\ldots$$

$$\lambda=\beta_0+\beta_1 DFSMA_t+\beta_2\ ESurprise_{i,t}+\beta_3 No\_Analysts_{i,t}+\beta_4 MarketCap_{i,t}+\beta_5 Gearing_{i,t}+\beta_6 Year_t$$

Pr_{i,t}(n=r) is the probability that for company *i* in year *t,* the observations (n) is equal to 0, 1 , 2 3, etc. The quantity λ contains terms that include the explanatory variables.

DFSMA =1 if *Year* is 2000-2002, and 0 otherwise. This dummy variable allows us to identify the effect of the introduction of the FSMA (2000) on disclosure practices. According to Hypothesis 1 we would expect an increase in the probability of news

---

[11] OLS was explored and similar results were obtained.

disclosures in the post-FSA period, and therefore the coefficient on this variable should be significantly positive.

ESurprise$_{i,t}$ is the difference between the consensuses forecast for company *i* in year *t* six months prior to the release of the EPS and the subsequent actual EPS standardised by the share price six months prior to the release of the EPS. This is the forecast error, and allows us to classify companies as being in a good news or bad news earnings environment. According to Hypothesis 2, there is no relationship between the earnings environment and the number of disclosures, and we would expect this variable to be insignificant in determining the probability of a disclosure.

No_Analysts$_{i,t}$ is the number of analysts who issued earnings forecasts for company *i* during the year *t* and which is obtained from the I/B/E/S database. This variable controls for the demand for corporate information by analysts.

MarketCap$_{i,t}$ is the mean market capitalisation over the year for the company, and controls for the size of the company, since we would expect that larger companies have more pieces of information to release.

Gearing$_{i,t}$ is a firm's total debt divided by total assets for year t, and we would expect the capital structure to have an effect on disclosures, though the previous literature has suggested that the sign of this relationship is ambiguous.

Year$_t$ is an indicator variable for the year in which the earnings were announced, and represents a time trend in the model. Including a time trend as well as a dummy variable for the introduction of the FSA, allows us to identify the incremental effect of the FSMA, over and above a general increase in disclosures.

A summary of the modes for total news is given in the first columns of Table 4. As expected the frequency of outlook statements is positively and significantly related to the size of a company and the number of analysts following the company. The estimated coefficient in the regression on gearing is positive and significant at the 1% level which provides evidence for a positive relationship between disclosure of outlook statements and gearing. There is evidence of disclosure increasing over time

18

as shown by the positive and significant coefficients of *Year*. However the results do not provide any evidence of a significant increase in disclosure in the post-FSA period as seen by the insignificant coefficients on the dummy variable *DFSMA*.

The centre and final columns of Table 4 incorporate the quality of the news announcement as perceived by the market into the model. The model is fitted by replacing the total six month outlook frequency with the frequency of negative (centre columns) and positive news announcements (last columns). The results show that there is a negative and significant association between the frequency of significant negative news disclosure and the earnings surprise variable, i.e. when analysts predict earnings per share in excess of actual values, companies disclose more bad news to the market. The sign of the coefficients on the control variables are similar to those for total news and are in line with expectations. The coefficient of *Year* is positive, but is not significant at the 10% level. (though significant at the 13% level). The coefficient of *DFSMA* is not significant and therefore even though the results provide evidence of an asymmetry in disclosure practices there is no evidence to suggest that that managerial conservatism increased in the post-FSA period.

The model for significant positive news shows that the coefficients on *Surprise, MarketCap, Gearing* and *DFSMA* are all insignificant. These results suggest that the early disclosure of positive news is not an important factor explaining managerial disclosure decisions. The *Year* variable is the only variable that is positive and significant this along with the previous results suggests an increase in general disclosure pattern over time. In models for both negative and positive news the coefficients of gearing are not significant which suggests that even though firms who have more debt in their capital structure disclose more information generally they do not exhibit a preference for a particular type of disclosure i.e. negative or positive news.

Discussion

Several aspects of the results reported in the previous tables are worthy of further comment. First of all the results reported in earlier studies are also evident in our research i.e. disclosure being related to size, analyst following and gearing and the

predicted sign on the variables adds to our confidence that we have controlled for other important factors that affect disclosure in our model.

Overall the results provide us with evidence to reject Hypothesis 2 that managers are not affected by market expectations in choosing their disclosure practices. Indeed the results show that managers are biased in their disclosure practices in that there is a tendency to disclose more negative news when market expectations of earnings are higher than the realised year end earnings. However results from Table 3 point to a clear size effect i.e. firms in the FTSE 100 are observed to release more significant negative news than positive news, this is also supported by results in the regression model which show that there is a significant and positive relation between the disclosure of negative news and size while the same is not observed for the disclosure of positive news. While there is evidence of increased disclosure in the post-FSA period, after controlling for a linear increase in news, our results does not provide any evidence of statutory sanctions increasing the flow of timely voluntary disclosure and we therefore fail to reject Hypothesis 1. Previous work that examines the disclosure of earnings related news in the UK (Collet, 2004; Helbrok and Walker, 2003) focus on two primary factors affecting managerial disclosure practices, the litigation argument and the reputation argument. Our results provide strong support for the latter over the former, particularly because we observe that the predominance of negative news disclosure is more frequent among the larger firms that have a larger institutional investor base, larger analyst following and larger media coverage than other categories of the FTSE firms. Non-disclosure of price sensitive news particularly negative news is more costly for directors in larger companies given the larger institutional base, analyst following and media coverage.

VI Conclusions

Our paper examines whether managerial disclosure practices are influenced by market expectations of a forthcoming earnings announcement. The imposition of substantial civil and criminal penalties for the non-disclosure of price sensitive information in relation to the Financial Services and Market Act (2000) also provides us with an excellent opportunity to test whether corporate disclosure strategy is affected by legislation.

Our dataset comprises outlook statements released by constituent firms of the FTSE All Share Index over the time period 1994-1997 and 2000-2002. We use a market based SPC approach to classify news announcements into negative, neutral and positive statements. After controlling for the size, analyst following and capital structure of a company, our findings show that managers increase the frequency of disclosure when faced with the prospect of a negative earnings surprise while the same is not observed when managers are faced with a positive earnings surprise. Though the total number of news announcements has been constantly rising over the periods of study we do not find any evidence of an increase in disclosure associated with the specific period after penalties for non-disclosure were tightened. Our findings leads us to suggest that reputation reasons play a bigger part than litigation as a driver of disclosure policy, this might be because unlike in the US launching a class action suit has been more difficult (Dedman, 2004) in the UK.

We caution against concluding that the increased threat of litigation has not led to a significant change in disclosure practices. The short time period since the introduction of statutory sanctions is one limiting factor in this study. Nonetheless the evidence we have does not suggest a change in disclosure practices after the change in supervision of the UKLA. Future research can consider a longer time period to examine whether disclosure practices have changed in relation to new initiatives encouraged by the FSA such as the Transparency Directive.

Figure 1: Pattern in number of total outlook statements 1994 to 2002
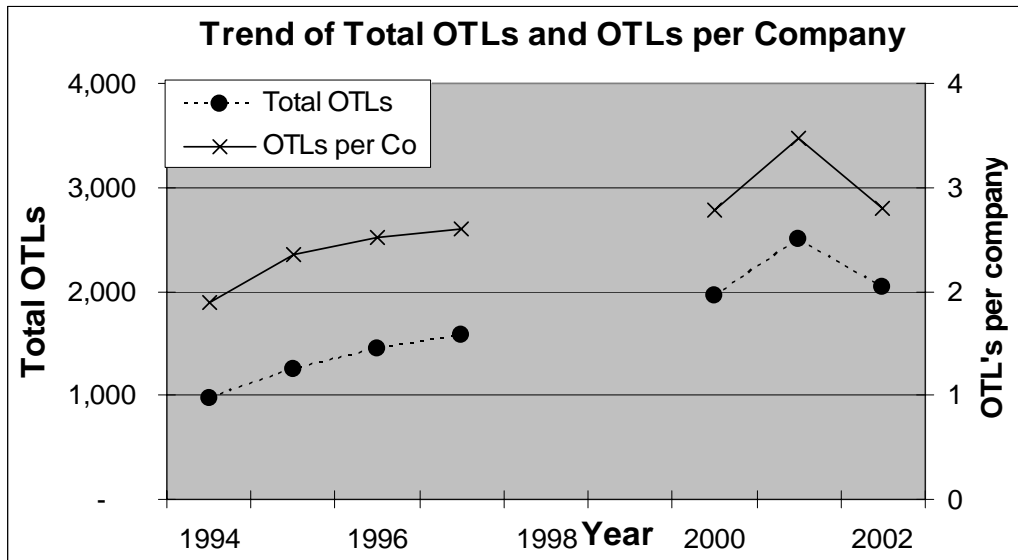
Figure 2: Pattern in the number of outlook statements per company in the months before the earning announcement date
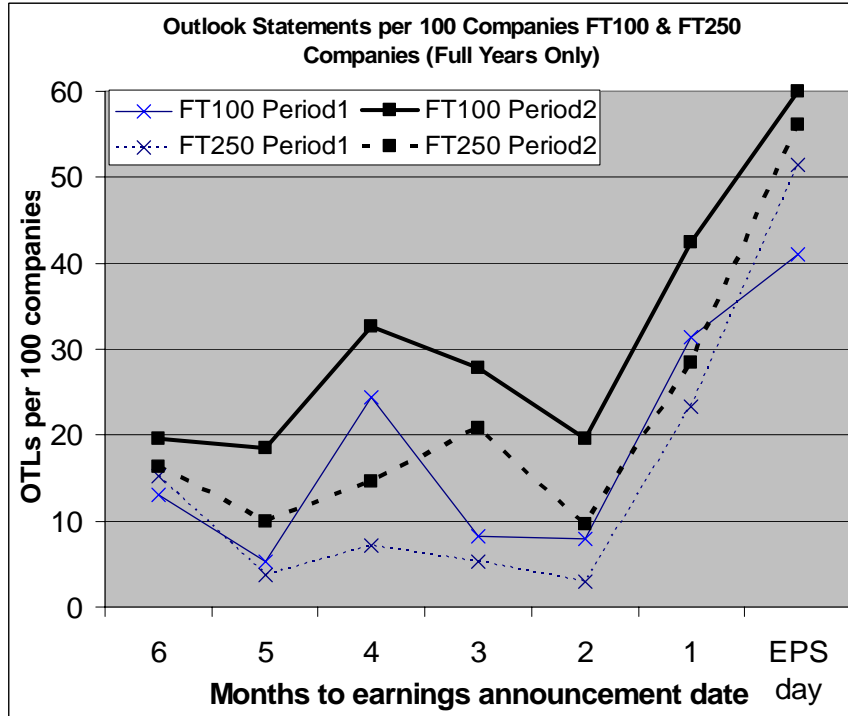
EPS day refers to number of news items on the day of the eps announcement

Table 1: Distribution of news types by period

RNS Type	All news announcements			News announcements in the six months prior to earnings announcement		
	Pre-FSA	Post-FSA	Total	Pre-FSA	Post-FSA	Total
Outlook Statements	36.2%	23.0%	11,938	20.8%	14.8%	2,958
Business Event	15.7%	24.0%	9,198	20.1%	27.8%	4,492
Acquisitions, Mergers & Disposals	22.5%	17.4%	8,331	29.9%	19.4%	4,026
Capital changes	4.4%	21.8%	6,903	4.5%	23.3%	3,071
Board changes	20.1%	12.8%	6,626	23.3%	13.6%	2,951
Company advisor & name changes	1.1%	1.1%	471	1.4%	1.1%	213
	14,759	28,708	43,467	5,940	15,055	17,711

News types are sorted by the overall frequency of occurrence
The percentage of news items are shown as a fraction of the total for each period
Pre-FSA covers the years 1994-1997 and Post-FSA covers the years 2000-2002 after the FSA was given its market powers.

Table 2: Summary of the total outlook statements and outlook statements per company by period and index for both negative, neutral, and market reaction

Period	Index	Total		Percentage			OTL's per company			Difference	p-val
		N	OTLs	Neg	Ntrl	Pos	Neg	Ntrl	Pos	(Pos-Neg)	
Pre-FSA	FT100	358	265	21.9%	64.9%	11.7%	0.16	0.48	0.09	**-0.075**	**0.00**
	FT250	807	386	17.6%	64.5%	17.6%	0.08	0.31	0.08	0.000	1.00
	Other	1,260	468	15.0%	66.0%	19.0%	0.06	0.25	0.07	0.015	0.16
	All	2,425	1,119	17.5%	65.2%	16.8%	0.08	0.30	0.08	-0.003	0.70
Post-FSA	FT100	308	420	19.3%	67.6%	13.1%	0.26	0.92	0.18	**-0.084**	**0.03**
	FT250	749	634	18.6%	63.4%	17.4%	0.16	0.54	0.15	-0.011	0.62
	Other	912	622	19.8%	63.3%	16.9%	0.13	0.43	0.12	-0.020	0.255
	All	1,969	1,676	19.2%	64.4%	16.1%	0.16	0.55	0.14	**-0.026**	**0.042**

The Pre-FSA Period Covers the years 1994-1997 and the post-FSA period covers the years 2000-2002 after the FSA was given market powers.

N is the number of company years, and OTLs is the average number of outlook statements in each period and index. Based on the stock market reaction on the announcement of an OTL, the OTLs are divided into three groups: negative, neutral, positive. Mean is the mean price reaction for the days with OTL/no OTL by market reaction. Percentage is the fraction of the total number of outlook statements in each period and index

Neg represents the most negative price reaction on day of the announcement; Ntrl represents a neutral price reaction on day of the announcement; and Pos represents the most positive price reaction on day of the announcement

Difference = Difference between the number of positive and negative outlook statements per company

p-val is the probability that the difference in the number of positive and negative is as extreme as that observed. Significant values for difference are highlighted in bold.

Table 3: Summary of market reactions to news announcements

Panel A: Pre-FSA Period

				Average Excess Returns						
				Event day			1-5 days prior		1-5 days post	
Index	OTL	SPC	Number	Mean	p-val	Mean	p-val	Mean	p-val	
All	No	Neg	70,350	-1.75		0.18		0.02		
		Ntrl	395,620	-0.05		0.00		0.02		
		Pos	73,397	1.96		-0.11		-0.13		
	Yes	Neg	1,232	-4.7	**<.001**	0.40	0.65	-0.26	0.36	
		Ntrl	2,548	-0.07	0.99	0.16	0.56	0.16	0.75	
		Pos	1,538	3.83	**<.001**	0.08	0.67	0.49	**<.001**	
FTSE 100	No	Neg	10,321	-1.70		0.39		0.32		
		Ntrl	53,699	-0.03		0.00		0.01		
		Pos	10,829	1.82		-0.33		-0.31		
	Yes	Neg	297	-3.16	**<.001**	0.36	1.00	-0.11	0.31	
		Ntrl	454	-0.03	1.0	0.16	0.94	0.01	1.00	
		Pos	249	2.78	**<.001**	-0.53	0.96	0.24	0.13	
FTSE 250	No	Neg	21,842	-1.69		0.06		0.02		
		Ntrl	120,542	-0.06		-0.08		-0.08		
		Pos	22,710	1.83		-0.18		-0.12		
	Yes	Neg	403	-4.32	**<.001**	0.48	0.41	-0.11	0.99	
		Ntrl	829	-0.13	0.62	-0.29	0.74	-0.16	1.00	
		Pos	483	3.35	**<.001**	0.05	0.88	0.49	**0.02**	
FTSE Small	No	Neg	38,187	-1.80		0.19		-0.06		
		Ntrl	221,379	-0.05		0.03		0.08		
		Pos	39,858	2.07		-0.01		-0.08		
	Yes	Neg	532	-5.84	**<.001**	0.35	0.99	-0.45	0.56	
		Ntrl	1,265	-0.05	**<.001**	0.45	0.06	0.41	0.25	
		Pos	806	4.45	**<.001**	0.29	0.64	0.56	**0.01**	

Panel B: Post-FSA Period

Index	OTL	SPC	Number	Event day Mean	p-val	1-5 days prior Mean	p-val	1-5 days post Mean	p-val
				Average Excess Returns					
All	**No**	**Neg**	64,675	-3.28		0.67		0.64	
		Ntrl	348,178	-0.03		0.18		0.10	
		Pos	65,056	3.65		-0.50		-0.30	
	Yes	**Neg**	1,628	-8.39	**<.001**	0.05	**0.04**	0.65	1.00
		Ntrl	3,106	0.13	0.03	0.53	0.22	0.95	**<.001**
		Pos	1,810	5.97	**<.001**	-0.41	1.00	1.43	**<.001**
FTSE 100	**No**	**Neg**	9,389	-3.47		0.88		1.01	
		Ntrl	46,820	-0.04		0.05		-0.02	
		Pos	9,505	3.66		-0.92		-0.81	
	Yes	**Neg**	280	-5.74	**<.001**	0.19	0.57	0.29	0.54
		Ntrl	616	0.03	0.98	-0.23	0.91	0.12	1.00
		Pos	314	5.18	**<.001**	-0.66	0.99	1.31	**<.001**
FTSE 250	**No**	**Neg**	23,071	-3.36		0.55		0.72	
		Ntrl	120,509	-0.03		0.09		-0.02	
		Pos	23,072	3.68		-0.66		-0.33	
	Yes	**Neg**	638	-8.75	**<.001**	-0.59	**0.00**	0.84	1.00
		Ntrl	1,130	0.20	**0.02**	0.84	**0.01**	1.09	**<.001**
		Pos	687	5.91	**<.001**	0.16	0.08	1.46	**<.001**
FTSE Small	**No**	**Neg**	32,215	-3.17		0.70		0.47	
		Ntrl	180,849	-0.02		0.26		0.21	
		Pos	32,479	3.62		-0.26		-0.13	
	Yes	**Neg**	710	-9.12	**<.001**	0.57	1.00	0.61	1.00
		Ntrl	1,360	0.12	0.65	0.61	0.78	1.19	**0.00**
		Pos	809	6.33	**<.001**	-0.78	0.63	1.45	**<.001**

The pre-FSA period covers the years 1994-1997 and the post-FSA period covers the years 2000-2002 after the FSA was given market powers. OTL is whether an outlook statement released on the day of interest. SPC is the market reaction on the announcement day, and by ranking these reactions the announcements are divided into three groups: negative, neutral, positive. Mean is the mean price reaction for the days with OTL/no OTL by market reaction. We computes the difference between the mean stock return on the days with an OTL compared to the mean stock return on the days with no OTL, conditioned on whether the market reaction is negative, neutral or positive. This difference tests whether the market reaction was significantly different for days on which there was an OTL compared to days where there was no OTL. P-val is the probability that the difference is as extreme as that observed. Significant values for difference are highlighted in bold. 5-days prior (post) = Excess return for 5 days before (after) the day of concern.

Table 4: Summary of Poisson model parameters

	Total		Negative		Positive	
Parameter	**B**	**p-val**	**B**	**p-val**	**B**	**p-val**
Intercept	**-1.20**	**0.00**	**-2.60**	**0.00**	**-2.80**	**0.00**
DFSMA	0.07	0.52	-0.15	0.33	0.05	0.77
ESurprise	**-22.00**	**0.01**	**-60.00**	**0.00**	**31.40**	**0.01**
No_Analysts	**0.028**	**0.00**	**0.023**	**0.00**	0.009	0.23
MarketCap	**6.50**	**0.00**	5.80	0.07	4.77	0.21
Year	**0.065**	**0.00**	**0.150**	**0.00**	**0.069**	**0.02**
Gearing	**0.0007**	**0.01**	0.0004	0.40	-0.001	0.16
R-sq	0.02		0.01		0.002	

No of Analysts is the number of analysts who issued earnings forecasts during the year for a firm on the I/B/E/S database. Market Cap is the mean market capitalisation over the year for the company
Year is the year in which the earnings were announced. ESurprise is the difference between the consensuses forecast six months prior to the release of the EPS and the actual EPS standardised by the share price six months prior to the release of the EPS. Gearing is a firm's total debt divided by total assets for a year. *DFSMA* is a dummy variable to indicate the second period.

References

Adams, A., C (2002) Internal organisational factors influencing corporate social and ethical reporting: Beyond current theorising *Accounting, Auditing and Accountability Journal* 15**,** 223 - 250

Ahmed, K. and Courtis, J. K. (1999) Associations between corporate characteristics and disclosure levels in annual reports: a meta-analysis. *The British Accounting Review,* 31**,** 35-61.

Beattie, V. and Mciness, B. (2006) Narratives in UK and US Annual Reports: A comparison of best practice guidelines versus mandatory requirements. *Presented at the Financial Reporting and Business Communication Conference, Cardff,* July 2006.

Beattie, V., Mcinnes, B. and Fearnley, S. (2004) A methodology for analysing and evaluating narratives in annual reports: a comprehensive descriptive profile and metrics for disclosure quality attributes. *Accounting Forum* 28**,** 205-236.

Brown, L., Griffin, P., Hagerman, R. and Zmijewski, M. (1987) Security analyst superiority relative to univariate time-series models in forecasting quarterly earnings. . *Journal of Accounting and Economics. ,* 9 61–87.

Camfferman, K. and Cooke, T., E. (2002) An analysis of disclosure in the annual reports of U.K. and Dutch companies. *Journal of International Accounting Research,* 1**,** 3.

Clare, A. (2001) The information in UK company profit warnings. *Bank of England Quarterly Bulletin,* Spring**,** 104-109.

Collett, N. (2004) Reactions of the London Stock Exchange to Company Trading Statement Announcements. *Journal of Business Finance and Accounting,* 31**,** 3-35.

Cooke, T., E. and Wallace, R. S. O. (1990) Financial disclosure regulation and its environment: A review and further analysis. *Journal of Accounting and Public Policy,* 9**,** 79-110.

Dedman, E. (2004) Discussion of Reactions of the London Stock Exchange to Company Trading Statement Announcements. *Journal of Business Finance and Accounting,* 31**,** 37-47.

Dedman, E. and Lin, S. (2002) Shareholder wealth effects of CEO departures: Evidence from the UK. *Journal of Corporate Finance,* 8**,** 81-104.

Elliot, R. K. and Jacobson, P. D. (1994) Costs and benefits of business information disclosure. . *Accounting Horizons. .* 8**,** 80-96.

Francis, J. and Schipper, K. (1999) Have Financial Statements Lost Their Relevance? . *Journal of Accounting Research,* 37**,** 319-352.

FSA (2006) United Kingdom Listing Authority listing rules. *Available online at http://fsahandbook.info/FSA/html/handbook/LR.*

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

Helbok, G. and Walker, M. (2003) On the willingness of uk companies to issue profit warnings: regulatory, earnings surprise permanance and agency cost effects *Working Paper (SSRN).*

Holland, J. (1997) *Corporate Communications with institutional shareholders: Private disclosures and financial reporting*, The Institute of Chartered Accountants of Scotland.

Hudaib, M., Cooke, T. E. and Wallace, R. S. O. (2005) The impact of managing director changes and financial distress on audit qualification and auditor switching. . *Journal of Business Finance and Accounting. ,* 32 1702-1739. .

Kasznik, R. and Lev, B. (1995) To warn or not to warn: management disclosures in the face of an earnings surprise. *Accounting Review,* 70**,** 113-134.

La Porta, R., Lopez-De-Silanes, F., Shleifer, A. and Vishny, R. W. (1998) Law and Finance. *Journal of Political Economy* 106**,** 1113-55.

La Porta, R., Lopez-De-Silanes, F., Shleifer, A. and Vishny, R. W. (1999) Corporate ownership around the world. . *Journal of Finance. ,* 54 471-517.

La Porta, R., Lopez-De-Silanes, F., Shleifer, A. and Vishny, R. W. (2000) Investor protection and corporate governance. . *Journal of Financial Economics. ,* 58 3-27.

Lev, B. and Penman, S. H. (1990) Voluntary Forecasts Disclosures, Nondisclosure and Stock Prices. . *Journal of Accounting Research. ,* 28.**,** 49-76.

Libby, R. and Tan, H. (1990) Analysts reactions to warnings of negative earnings surprise. . *Journal of Accounting Research* 37**,** 415-435.

Matsumoto, D. A. (2002.) Management's incentives to avoid negative earnings surpises. . *The Accounting Review* 7**,** 483-514.

McNichols, M. (1989) Evidence of international asymmetries from management earnings forecasts and stock returns. *The Accounting Review,* 64**,** 1-27.

Montgomery, D. (2004) *Introduction to statistical quality control* Hoboken, N.J., John Wiley and Sons.

O'Sullivan, N. (2000) The impact of board composition and ownership on audit quality: evidence from large uk companies. *The British Accounting Review,* 32**,** 397-414.

Patell, J. M. (1976) Corporate forecasts of earnings per share and stock price behaviour: Empirical tests. *Journal of Accounting Research. ,* 14**,** 246-76.

Payne, J. L. and Robb, S. W. G. (2001) Earnings management: The effect of ex ante earnings expectations. . *Journal of Accounting, Auditing and Finance. ,* 15**,** 371-392. Penman, S. H. (1980) An Empirical Investigation of the voluntary disclosure of corporate earnings forecasts. . *Journal of Accounting Research. ,* 18**,** 132-60.

Pownall, G., Wasley, C. and Waymire, G. (1993) The stock price effects of alternative types of management earnings forecasts. *The Accounting Review* 68**,** 896-912.

Roberts, C., Gray, S. J. and Meek, G. K. (1995) International Capital Market Pressures and Voluntary Annual Report Disclosures by US and UK Multinationals. *Journal of International Financial Management and Accounting,* 6**,** 43-68.

Skinner, D. J. (1994) Why firms voluntarily disclose bad news. *Journal of Accounting Research* 32**,** 38-60.

Skinner, D. J. (1997) Earnings Disclosures and Stockholder Lawsuits. *Journal of Accounting and Economics,* 23**,** 249-282.

Skinner, D. J. and Sloan, R. (2002) Earnings Surprises, growth expectations and stock returns. *Review of Accounting Studies,* 7**,** 289-312.

Soffer, C., L., Ramuthiagarajan, S. and Walther, B., R. (2000) Earnings Preannouncement Strategies. *Review of Accounting Studies,* 5**,** 5-26.

Stanton, P. and John, S. (2002) Corporate annual reports: research perspectives used *Accounting, Auditing and Accountability Journal* 15**,** 478 - 500

Watson, A., Shrives, P. and Marston, C. (2002) Voluntary disclosure of accounting ratios in the UK. *The British Accounting Review,* 34**,** 289-313.