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Improving the relevance of risk factor disclosure in corporate annual reports

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Improving the relevance of risk factor disclosure in corporate annual reports

Abstract

This research develops a model for assessing the quality of risk disclosures and applies the proposed model to four companies in the food production and processing sector. We contribute to the literature by extending prior work on risk disclosure quality using a longitudinal approach to assess the quality of risk reporting. While previous studies have described disclosure practices, this paper adopts a normative approach to disclosure. By suggesting a way of improving risk reporting disclosures, the paper provides guidance for current and future company managers. In line with previous research, this paper identifies certain problems with existing risk disclosures. Results suggest that company managers prefer providing disclosures that are symbolic rather than substantive. We argue that institutional factors and proprietary costs contribute towards and can explain this behaviour. In suggesting a way forward we highlight the role that stakeholders including managers, users, regulators and auditors can play in improving the quality of risk reporting. Flexibility in reporting could be maintained by adopting a properly monitored ‘comply or explain’ approach.

Keywords:

Voluntary disclosure

Risk reporting

Corporate guidance

1. Introduction, objectives and contribution

A number of studies have examined risk reporting, yet the topic is still very much in its infancy. Although risk reporting is potentially of interest to a wide range of user groups, recent research has indicated that current risk reporting is unhelpful and does not convey real meaning (Campbell & Slack, 2008; Moxey & Berendt, 2008; Davies, Moxey, & Welch, 2010).

There is now an increasing focus on forward-looking information in corporate annual reports, for example, from regulation (Companies Act 2006), best practice statements such as the International Accounting Standards Board Management Commentary (IASB, 2010) and the Accounting Standards Board's (ASB) reporting statement on the operating and financial review (ASB, 2006), together with pressure from various stakeholder groups wishing to improve transparency in the post credit crisis era (Institute of Chartered Accountants in England and Wales - ICAEW, 2011). Evidence suggests an increase in the amount of narrative information provided by companies over time (ASB, 2007 & 2009; Campbell & Slack, 2008). However, despite this increase, there appears to be limited interest among professional users of this information due to concerns about the quality/usefulness of this form of disclosure (Campbell & Slack, 2008). Where disclosure is non-specific, boilerplate, or merely describes a risk management policy (Linsley & Shrives, 2006), its use is limited.¹

Traditionally, studies often look at the quantity of information disclosed by companies, yet over the years research has served to remind readers that the *quality* of information is more important than the quantity (for example, Marston & Shrives, 1991; Beretta & Bozzolan, 2004; Hasseldine, Salama, & Toms, 2005; Beck, Campbell, & Shrives, 2010; Hooks & van

Staden, 2011). Within the risk reporting literature the majority of studies examine the quantity of disclosure, typically measured using words/sentences or some form of disclosure checklist. One strand of research within this literature examines the particular type of risk disclosure or the quality of disclosure, (for example descriptive or quantitative risk disclosure) and these include Woods and Marginson (2004); Beretta and Bozzolan (2004, 2008); Dobler, Lajili and Zéghal (2011); Lajili and Zéghal (2005); Linsley and Shrives (2006) and the Accounting Standards Board (2007 & 2009). These studies highlight concerns relating to brief, very general and not sufficiently forward-looking risk disclosure practices. All these studies have one thing in common, namely they indicate a lack of progress in risk reporting.

The overall objective of this paper is to discuss how best to improve reporting of principal risk factors by public listed companies. The outcome of this research suggests three questions that preparers need to address in their disclosures. This study employs a longitudinal approach to assess the quality of risk reporting using four companies within the food production and processing industry. This industry has been chosen because readers are likely to be familiar with its activities and also because of a number risk related issues in this sector. These include food safety concerns (Knowles, Moody, & McEachern, 2007), regulatory investigations over anti-competitive practices (Office of Fair Trading, 2011), change in raw material prices, changes in legislation, brand reputation damage and shifts in consumer preferences (Financial Times, 2005, 2007). Beattie, McInnes, and Fearnley (2004) also focus on this sector as part of their detailed study on narrative disclosures.

This study contributes to this literature by extending prior work on risk disclosure quality using a longitudinal approach to assess the quality of risk reporting. While previous studies

have described disclosure practices, this paper adopts a normative approach to disclosure. This study extends and develops the research on risk reporting quality in three ways. First, two complementary theoretical frameworks are utilised to explain the current (problematic) state of risk reporting. Second, risk issues are often dynamic, yet previous studies which focus on only one year of reporting, fail to encapsulate movements in risk reporting. Third, our study provides a model (depicted pictorially) based around three questions which managers and others can use for both preparing and assessing the quality of annual report risk reporting. We provide a fresh perspective to assessing the quality of risk disclosure by moving away from the counting of words and sentences.

This paper proceeds as follows. Theoretical perspectives are discussed and linked to themes; data and method used are then described followed by a discussion of the results. Proposals for improving the quality of risk reporting are provided. Theoretical perspectives are discussed in the light of the results, followed by policy implications and suggestions for further research.

2. Analysing theoretical perspectives on risk reporting

A comprehensive theory of discretionary disclosure which clearly identifies the determinants of disclosure does not yet exist.² The selection of the theory appears to depend on the area of discretionary disclosure selected for study and even then practice is inconsistent and “unifying ... empirical findings within a theoretical framework remains a challenge” (Cormier, Magnan, & van Velthoven, 2005, p. 6). A multi-theoretic approach is often thought to be appropriate where no one dominant theory is operating. This is very much the case throughout the disclosure literature. For instance, Cormier et al. (2005) suggest using

“wider conceptual lenses” (p. 8) to make sense of different findings in environmental disclosure research and this observation is equally applicable to risk reporting. Although agency theory is often applied in voluntary disclosure studies, it is sometimes criticised for its limitations (Band, 1992). For instance, Lubatkin, Lane, Collin and Very (2007) believe it fails to capture real world views and this “engenders an under-socialized view of agents and principals, thereby reducing the model’s relevance” (p. 43). Notwithstanding that other theories are occasionally useful, this study privileges institutional theory alongside proprietary costs theory. These two theories are selected for several reasons. First, they provide a way of explaining and understanding the current problematic state of risk reporting. Second, the theories work particularly well both in concert and individually where they can also capture different aspects of risk reporting. Third, the theories can help understand the processes at work which result in limited and general disclosures which bear little or no relation to the risk identification and management processes within organizations. Finally, the mimetic aspect of institutional theory may also be helpful in envisioning a solution to current limitations of risk reporting. Using these selected complementary and intersecting theories provides greater insight than utilising just a single economic theory, such as agency theory, because “they explicitly recognize that organizations evolve within a society that encompasses many political, social and institutional frameworks” (see Cormier et al., 2005, p. 7 and related discussion).

2.1 Proprietary costs theory

Proprietary costs theory can explain why current risk disclosure practice may be unhelpful to users of financial information. This theory embodies the costs and benefits of disclosure. Company managers may be unsure of which standpoint to adopt in relation to risk disclosure. In particular, while most companies are likely to have detailed risk management systems, they may be reluctant to disclose information which they feel is commercially or

politically sensitive (Marshall & Weetman, 2007). This is because “outside parties (may) use the information in ways that are harmful to its interests (e.g., competitors, pressure groups)” (Cormier et al., 2005, pp. 8–9). Thus, there may be a mismatch between items which appear in internal documents such as company risk registers and information that company managers are willing to disclose externally. Therefore managers have a dilemma; how much and what sort of information to disclose? If they are too secretive their risk management systems may be perceived as weak or non-existent and investors may feel frustrated that the company’s disclosures are limited. If the risk disclosures are too transparent and reflect the risk registers and other management tools used in the control of risks (sometimes referred to as an ‘inside out’ approach – ICAEW, 2004), then managers may feel that they will incur proprietary costs. Thus, “... in choosing a disclosure strategy, managers have to trade off the benefits from expanded disclosure against the costs of disclosing potentially damaging information. Prior evidence in financial reporting does suggest that information costs are a critical determinant of corporate financial disclosure decisions” (Cormier et al., 2005, p. 9).

Proprietary costs theory, as developed by Verrecchia (1983), suggests that the decision to disclose information is a function of the consequential costs. Costs are incurred by the company when any reduction in future cash flow results from a particular disclosure and can arise in a number of different ways. A typical view is that disclosure of ‘bad news’ results in a cost because investors and potential investors are discouraged. However, if the disclosure of ‘bad news’ prevents potential competitors entering the market or a particular subsection of the market, future cash flows may increase as a result. The opposite is true for the disclosure of favourable news. Although favourable news is likely to result in positive future cash flows by making the company more attractive to outside investors, it may also serve to encourage

competitors and potential competitors to enter the market, thereby reducing those future cash flows.

Clearly managers may try to manipulate their disclosures (for example restrict or provide boilerplate) to minimise any proprietary costs. Skinner (1994) and Healy, Hutton, and Palepu (1999) suggest that companies (or their managers) need to incur some ‘upfront’ proprietary costs in order to enhance their reputation as a ‘quality (or credible) discloser’ (see also discussion in Cormier et al., 2005).

2.2 Institutional theory

Disclosure may not be purely an economic decision, particularly when social and political aspects also need to be considered. Institutional theory (DiMaggio & Powell, 1983; Oliver, 1991) can clarify our thinking about disclosure in a number of different ways. First, because of the cost/benefit uncertainties of disclosure, understandably, managers may consider mimicking other companies’ disclosures (Dillard, Rigsby, & Goodman, 2004), particularly companies with good reputations. By mimicking information in their disclosures, companies can signal that their risk management systems are equivalent to the industry standard. Although some risks will apply industry-wide, the ways in which they affect individual companies may differ depending on the firm characteristics (range of business activities, location of activities, factors concerning customers and suppliers and plans in place to address business risks and so on). Other risks may be specific to a company. Ideally, these characteristics should be reflected in disclosures. If companies only provide disclosures similar to other companies’, they are likely to be general and non-specific. These general disclosures (referred to by Day & Woodward, 2004, as symbolic rather than substantive) will be of limited use to readers and, unlike analysts, they may find it difficult to obtain more

information about the companies in order to assess the risks faced, appreciate the risk profile and evaluate the risk appetite. In the longer term, disclosures will be ignored as they are seen as unhelpful.

Second, “institutional pressures can drive organizations to engage in routine social actions” (Cormier et al., 2005, p. 13). This suggests that once managers have decided on their risk disclosures, however they are derived, they become reluctant to make changes to existing disclosures, particularly where the consequences of those extra or altered disclosures are unclear. As such, organizations use standardised disclosures which involve little incremental disclosure costs, either from an internal cost perspective or from a propriety costs viewpoint. Managers of companies may take the view that if the disclosures are ‘tried and tested’ they should be retained, as any variations are likely to attract unwelcome attention. Although in the short term the disclosures may appear acceptable and appear to ‘tick a box’, the contents of that box are unlikely to be sustainable. Risks are fluid and likely to change, either in their existence or intensity.

Writing of either generalised risk disclosures or repeating risk disclosures from previous years may be akin to cargo cult science. Spence, Husillos, & Correa–Ruiz (2010) in the context of environmental accounting refer to the work of the anthropologist Kirk Huffman who used the term ‘cargo cult’ while studying the behaviour of islanders on Vanuatu (Raffaele, 2006). Cargo cults refers (for example) to the apparent practice of South Sea Islanders trying (in vain) to attract aircraft supposedly loaded with cargo (westernised goods) by constructing false landing strips complete with bamboo antennae and coconut radios. The antennae and radios do not function, despite having the appearance of doing so. Consequently no aircraft land and no cargo is ever received. Similarly, risk disclosures

which are general or routine may have the appearance of valid disclosures but in actuality no information content is provided and readers do not find them useful. Their construction is undeniable but they are effectively content-free. The aircraft do not land and the risk disclosures do not inform. In fact, this sort of risk disclosure may actually detract from other useful information (ICAEW, 2011).

This leads on to a third aspect of institutional theory. In cargo cult science, the runways and control towers are not functional and effectively do not exist. In risk reporting, while the disclosures seem non-specific, this is not necessarily because the organization has failed to identify specific risks. In other words, the company is likely to have proper systems to identify risks but these may be decoupled from the disclosures.

Institutional theory is congruent with proprietary costs theory in three different ways. First, it predicts disclosures will be symbolic rather than substantive in nature. Second, as discussed above, there is also a danger that those general disclosures may be decoupled from the actual risk management practices (Irvine, 2008). Third, disclosure will become routine and not change much over time. Even where detailed disclosures are provided, they may merely be an exercise in reputation risk management. All these factors may increase costs for investors (Rubinstein, 2001).

3. A model to assess the quality of risk reporting

These theories help to explain why earlier research has found that risk disclosure is of poor quality and lacking in relevance. From these theories it is possible to derive themes which are relevant to an assessment of the quality of risk disclosures and can also help to identify the characteristics of good risk disclosure. Although the theories can relate to a number of

themes, this section of the paper identifies the particular theory which is most useful in deriving the specific theme. In addition to the two theories identified, we also draw on relevant literature, legislation and best practice guidelines that relate to risk disclosure to develop our model.

Proprietary costs theory suggests that companies have a tendency to report general disclosures similar in content to those of other companies. Those generic disclosures could apply to any company and would also tend to be routine in nature. That sort of disclosure is unlikely to be useful to readers but research suggests that it is the type of disclosure which occurs in practice. In contrast, this research suggests that disclosures should be specific to the company concerned and should be regularly revisited to make sure they are still relevant. This leads us to the first theme:

3.1 Theme 1: Disclosure information should be both specific to the company and regularly updated

The Companies Act (2006), the *Reporting Statement on the Operating and Financial Review* (ASB, 2006; 2003; 1993) and the *IASB Management Commentary* (IASB, 2010) require or recommend that companies report information on risk factors that are considered significant to the business. Section 417 of the Companies Act 2006 requires a Business Review within the directors' report. This includes the requirement for 'a description of the principal risks and uncertainties facing the company' (S 417 (3) (b)). The ICAEW's various reports on risk reporting (see for example 1999 and 2011) also highlight the importance of prioritising principal risks within annual reports and highlighting current concerns. This emphasis on reporting only the significant risk factors is further commented on by the ASB stating, "companies looking to improve should take care to avoid too many risks to all be 'principal'

(as well as) generic risks that could easily be cut and pasted into any report” (ASB, 2009, p. 6).

Schrand and Elliot (1998) quote from US Statement of Position 94–6, *Disclosure of Certain Significant Risks and Uncertainties* that the central feature of risk “disclosure requirements is selectivity: specified criteria to screen the hosts of risks and uncertainties that affect every entity so that required disclosures are limited to matters significant to a particular entity” (American Institute of Certified Public Accountants (AICPA), 1994, p. 1). In discussing significant risk factors, the US guidelines also emphasise disclosure that is not generic in nature. Item 503 (c) of regulation S–K specifies that risk factor disclosure should clearly state the risk and specify how the particular risk affects the particular registrant, noting that “registrants should not present risks that could apply to any registrant” (Securities Exchange Commission (SEC), 2010, Section 6294). Schrand and Elliot (1998) criticise the disclosure of very general risk factors by companies and note, “disclosures of certain risks in particular industry–wide risks are so boilerplate that they actually reduce the informativeness of the set of risk disclosures by obfuscating important risks” (p. 280). Further, based on evidence collected from institutional investors, Solomon, Solomon, Norton, and Joseph (2000) highlight the importance of disclosing detailed company-specific information rather than general statements on risk factors. Specific information is much more likely to change from year to year rather than general information which might apply to any one year or indeed to all years. This suggests that company managers need to revisit risk disclosure regularly deciding which disclosures are still relevant and which need to be replaced with new information. Proprietary costs theory suggests that managers prefer the safety of general routine disclosures which do not change from year to year and hence do not need to be evaluated. While this behaviour is understandable, such disclosures will be of limited use

and so this theory enables us to identify the second theme in providing quality risk disclosures:

3.2 Theme 2: Company managers should evaluate risk disclosures on a regular basis within annual reports

The SEC comment letters on risk reporting within the narratives emphasise the importance of evaluating risk disclosures on a regular basis (SEC, 2010). Disclosure of this evaluation provides investors with important information on the changing nature of risk factors. The ASB notes in its review of narrative reporting, “A best practice report should also provide some context for the risk – is it increasing or decreasing and some idea of the impact of a risk crystallising” (ASB, 2009, p. 6), a view echoed in a recent publication on risk reporting by the ICAEW (2011). Recommendations from a survey of investors on governance reporting by Independent Audit (2006) also note, “companies should focus on current, relevant issues to avoid year-on-year repetition of these disclosures” (p. 4). They comment that, “annual repetition with little change in the text can leave users with a feeling that not much effort has gone into the report” (p. 4). The importance of a regular review of risk information has also been highlighted by the Financial Reporting Council (FRC) in its review of the Turnbull internal control guidelines (Solomon, 2010). If the position of a company over the year regarding its risk factor(s) remains stable, as evaluated by its top management, then this should be explicitly stated with clear reasons. This provides investors with assurance that management has evaluated the risk factor(s) disclosures even though they appear to be unchanged.

Together, Themes 1 and 2 lead to Research Question 1:

(1) Is risk information specific to the company and are there changes to reported risks in risk factor statements over time?

Specifically we examine:

- i. whether managers have disclosed information that is general in nature or specific to the company;
- ii. whether the same information is disclosed over the time period examined (i.e., to what extent information remains unaltered in annual reports from one year to the next);
- iii. whether managers have disclosed how a particular risk factor is relevant to both the financial year under review and the company's future strategy; and
- iv. whether, in the risk factor list, an explanation is provided as to why risk factors have been added to or removed.

Institutional theory helps identify our third theme. A key aspect of institutional theory indicates that decoupling may occur, which in this context means that real risks are not reflected in company disclosures. Thus, because disclosures do not reflect reality, managers may not feel the need to revisit them in the light of risk events which have taken place. In contrast, a normative approach would suggest that risk disclosures should be amended over time because risks are likely to require regular revisiting and reassessment. Risk experiences need to be discussed in annual reports in the light of previous disclosures to confirm their coherence and authenticity. Disclosures which do not change or do not appear to be discussed in annual reports are likely to be decoupled from the company's actual risk management processes and experiences. This accords with the third theme discussed in this research:

3.3 Theme 3: Disclosures within annual reports should incorporate the discussion of actual risk experiences

Woods and Marginson (2004) note within the context of risk disclosure that, “relevance requires information to have predictive or confirmatory value, and to be reliable it must also be a faithful representation of reality” (p. 376). Therefore, if forward-looking information is accurate, some of the risks should crystallise. Solomon (2010) also comments on the importance of predictive discussions within the context of internal control risk reporting. Another issue relates to companies focusing on risk events that have occurred over the financial year and incorporating them into their risk factor statement review. Schrand and Elliot (1998) highlight two advantages of reporting historic risk information. They note that such disclosures provide information on the nature of a company’s risk management system and “can implicitly provide information about the joint nature of risks within a firm” (p. 281). The most recent ICAEW report on risk reporting (2011) also highlights the importance of firms reporting on their risk experience. It argues, “firms can report on their risk experiences over the past year, discuss how far it matches their previous risk reporting, and explain what lessons they have learnt” (p. 44).

Theme 3 leads to Research Questions 2 and 3:

(2) Are significant events identified in prior risk factor statements?

This question is answered in two stages. First, we identify significant events that affect the performance of the company. Information that leads to extreme share price changes is defined here as a significant event. Our focus on extreme price movements ensures that we collect value-relevant information which is of interest to investors and other capital market participants (Ryan & Taffler, 2004). Second, we examine the risk factor statements of companies in the years prior to the event to find out whether the companies have identified

the events in the risk factors in their earlier reporting. If risk factor statements are to serve their purpose of informing investors of the principal risk factors then it would be expected that the statements would provide some *ex ante* indication of the event.

(3) Are significant observed events discussed in subsequent risk factor statements?

We examine the risk factor statements to find out if companies have discussed the event and made changes to their risk disclosure after the event. If companies are engaging with the risk factor statements we would expect to see significant real incidents reflected in these statements. Where events occur it is reasonable to argue that they, in turn, will have some bearing on future risks and therefore should be discussed in subsequent annual reports.³

The links between theory and themes (and subsequent research questions) are also summarised in Table 1. Table 1 demonstrates how the components of each theory lead to the themes but also indicates how the two theories act in concert to explain current practice.

<Insert Table 1 here>

Our model is depicted in Figure 1 together with the specific research questions used to assess the relevance of risk factor disclosures:

<Insert Figure 1 here>

4. Data and method

4.1 Sample

The risk factor disclosure in this study is based on annual reports of companies that belong to the Food Producers and Processors sector (NMX3570) and were part of the FTSE 100 as listed on Northcote⁴ in July 2008. There were four companies that met these criteria: Cadbury PLC⁵, Tate and Lyle PLC, Associated British Foods (ABF) PLC and the Unilever Group. In order to assess how risk disclosures changed over time, annual reports for the financial years 2002 to 2007 were collected.

4.2 Content analysis

Content analysis (Bowman, 1984; Krippendorff, 2004) was used to identify the risk factors within annual reports. Smith and Taffler (2000) highlight two alternative forms of content analysis; form oriented (objective) and meaning oriented (subjective) analysis. While a meaning oriented analysis involves a higher level of subjectivity it enables a richer analysis of the data (Smith & Taffler, 2000). Factors that can affect the future cash flows of the company and are explicitly highlighted as risk information in the narrative section of annual reports are considered as risk factors.

In examining whether risk factor information is specific to the company, we use a concept from the work of Day and Woodward (2004). They categorise employee disclosures into substantive and symbolic groups. In analysing the risk disclosures, we similarly divide the information into two broad groups:

- (1) Factors that are general in nature which apply to any business or any business within the industry (symbolic)

(2) Factors that are company specific (substantive)

Issues exist with disclosing information that is common to any business or general industry related information, where there is no discussion of how the factor(s) will affect the particular company. Table 2 includes illustrative examples of general and specific information from annual reports.

<Insert Table 2 here>

In order to evaluate changes over time to the risk factor disclosures, we examined risk factors that are common to each company over the time period. Our evaluation focused on changes to the substance of the discussion. We also use the Ferret copy detector software (Lane, 2013) to examine for similarities in the wording of the risk factor disclosure over time within the common risk factors.⁶ The software is used to locate duplicate text in more than one document. It computes a similarity measure (from zero to one) based on trigrams (a group of three letters representing one sound) found within the documents under comparison (Lane, 2013; Nelson & Pritchard, 2007).

4.3 Determination of significant events (Research Questions 2 and 3)

In order to identify significant events, we focus on news events associated with economically significant price changes over a five year period for the companies in our sample. Daily market adjusted share price returns for the time period 2003 to 2007 were calculated with the FTSE All-Share index as a proxy for the market portfolio. Share price data was obtained from Thomson DataStream. The mean and standard deviations were also calculated monthly for each stock to account for variations in volatility over time. We classify an adjusted return as important if it is outside one standard deviation from the mean.⁷ Over the period 2003 to

2007, the dates on which the five most important positive and negative share price changes occurred were considered as significant. We then searched the *Financial Times*' database to identify company-specific news announcements over a five-day event window, two days prior to the event date and three days after the event date⁸, following the approach used by Ryan and Taffler (2004). If the news clearly related to the share price change this was noted against the event.⁹ News items gave both general reasons (such as an earnings announcement) as well as specific reasons (such as a particular product line not performing as expected) for the price movement. By associating a news event with the share price change, we reduce the probability, of other factors (noise) being responsible for the change in price. Our approach followed the methods of Statistical Process Control or SPC used to identify variations in a series of data (Montgomery, 2004). SPC is used in a number of settings related to quality control and process improvement where there is a need to identify unusual variations as is the case in our study.¹⁰ Ryan and Taffler (2004) show that corporate news events drive a major portion of firms' economically significant price changes. Focusing on significant price movements enabled us to avoid the potential for picking up substantial amounts of random market activity and therefore concentrate on events that are of most importance to investors and other capital market participants (Ryan & Taffler, 2004; Beneish, Lee & Tarpley, 2001).

Price movements reflect changes in the market consensus opinion as a result of news releases (Beaver, 1968). Share price changes associated with a news announcement can be, "a function of both the changes in expected cash flows as well as the risk or volatility of future cash flows" (Henricks & Singhal, 2005, p. 36). Our tests do not separate the effect of changes in expected cash flows from the volatility of future cash flows but at the same time there is evidence that major news events associated with significant price changes have an

impact on the equity risk of a firm (Hendricks & Singhal, 2005; Healy & Palepu, 1990; Fargher & Wilkins, 1998). It is also important to point out that if the markets are considered efficient, price changes will only occur as a reaction to news that was not anticipated by market participants.

Following the approach taken in Bhamornsiri and Schroeder (2004), we also conducted a key word search of the entire annual report. The key word search is based on the significant events that have affected the performance of the company. For example, the disappointing performance of Tate and Lyle's premier product SPLENDA[®] Sucralose was associated with a share price decline of 27.5% in January 2007. In addition to examining explicit risk sections we searched for 'SPLENDA[®] Sucralose' in all prior annual reports. We used the same approach to identify risk disclosure after the significant events.

The news announcements are classified based on risk categories published by the ICAEW (ICAEW, 2002, Appendix I and II, pp. 55–58) that were developed by an accountancy firm. Since we focus on the top and bottom five significant price changes, we have 20 negative and 20 positive price changes for the four companies. We were able to specifically identify 14 news events associated with negative price changes and 11 associated with positive price changes. Thus, 62.5% of the price changes can be linked to publicly available information (70% negative and 55% positive). We note that there is a difference in the source of information in relation to the type of news events (see Table 3.1). A detailed breakdown of the events is provided in Table 3.2.

<Insert Table 3.1 here>

<Insert Table 3.2 here>

5. Results

We begin the discussion of the results by providing an overview of the risk factor statements; this is followed by a discussion of the specific questions. By way of illustration we provide examples of risk disclosure from annual reports in line with the approach used by Day and Woodward (2004).

5.1 Overview of Risk factor statements

Each of the four companies had a clearly identified risk factor section in the annual report narrative with headings such as ‘Risk Factors’, ‘Risk Management Review’ and ‘Risk Management’. However, Tate and Lyle (TATE) and Associated British Foods (ABF) did not have an explicit risk factor statement prior to the reporting year 2005 and 2006. Table 4 provides information on the number of principal risk factors disclosed by the companies over the time period examined. Cadbury is the only company that added significantly to the number of risk factors over time (from 11 in 2004 to 17 in 2007) while Tate and Lyle decreased the number of risk factors reported (from 19 in 2005 to 13 in 2007).

<Insert Table 4 here>

5.2 Discussion of Question 1: Are there changes in reported risks in risk factor statements over time?

Information within each of the risk factors was examined to ascertain whether the content was general in nature or specific to the company. The figures within Table 4 provide information on the number and type of risk factors disclosed. They show numbers of general risk factors with those figures in brackets representing specific risk factors. In the majority of

cases, risk factor information appears symbolic reflecting general factors that can affect any type of large-scale business or common industry related factors. In general the information is qualitative in nature, with little evidence of managers trying to quantify the impact of each risk factor. There are nine factors that are common to at least three companies: product quality, legal and regulatory factors, business partners, recruiting and retaining employees, geographic spread and economic instability, raw material and commodity costs, competition, reputation and pension liabilities. Other than raw material and commodity costs the other factors do not appear to be industry-specific but rather general factors that can impact any type of large-scale business.

<Insert Table 5.1 here>

Table 5.1 indicates the percentage of risk factors where similar information is reported over the time period examined. This is calculated by dividing the number of risk factors where there was no change to the substance of the discussion by the total number of common risk factors for each company. It is apparent that in the majority of cases the discussion remains the same with no substantial changes to reflect the changing nature of risk factors. Two examples highlight this and are shown in the tables below (Question 1: Examples 1 and 2).

Question 1: Example 1
Non-compliance with legislation can lead to financial and reputational damage. The Group is aware of the importance of complying with all applicable legislation affecting its business activities and of the potential damage to reputation and financial impact which can result from any breach.
Source: Tate and Lyle Annual Reports 2005 (p. 26), 2006 (p. 24), 2007 (p. 30)

Question 1: Example 2

Other Risks: Unilever's businesses are exposed to varying degrees of risk and uncertainty related to other factors including:

Competitive pricing, consumption levels, physical risks, legislative, fiscal tax and regulatory developments, terrorism and economic, political and social conditions in the environments where we operate. All of these risks could materially affect the Group's business, our turnover, operating profit, net profit, net assets and liquidity. There may be risks which are unknown to Unilever or which are currently believed to be immaterial.

Source: Unilever Annual Reports 2005 (p. 32), 2006 (p. 10), 2007 (p. 14)

However, there are a few cases of companies reflecting on the changing nature of risk factors and Question 1: Example 3 illustrates this.

Question 1: Example 3**Price and supply of raw materials and commodities contracts**

Where appropriate, we purchase forward contracts for raw materials and commodities, almost always for physical delivery. We may also use futures contracts to hedge future price movements; however, the amounts are not material. With the adoption of IFRSs from 1 January 2005, we are required to recognise financial derivatives (which include forward contracts) at their fair value on the balance sheet.

Price and supply of raw materials and commodities contracts

Prices of raw materials and commodities increased significantly throughout 2006, adversely impacting margin where we were unable to pass on increased costs. To mitigate such risks, and where appropriate, we purchase forward contracts for raw materials and commodities, almost always for physical delivery. Where appropriate we also use futures contracts to hedge future price movements; however, the amounts are not material.

Price and supply of raw materials and commodities contracts

We faced significant increases in the cost of various commodities and raw and packing materials throughout the year. We have been able to substantially mitigate these through a combination of price increases, supply chain savings and mix improvements. We see a trend of increasing commodity prices going into 2008. In addition to our on-going actions to mitigate these risks, and where appropriate, we purchase forward contracts for raw materials and commodities. Where appropriate, we also use futures contracts to hedge future price movements, however, the amounts are not material.

Source: Unilever Annual Report, 2005 (p. 32), 2006 (p. 10), 2007 (p. 14)

<Insert Table 5.2 here>

As a second step, we also use the Ferret copy detector software (described above) to examine for similarities in the wordings of the risk factors over time within the common risk factors. Lane (2013, p.4) notes that, "similarity scores above 0.04 are likely to reveal significant copying". Table 5.2 shows that the average similarity score ranges from 0.23 to 0.78. We note that the Ferret similarity scores understate the similarities when companies have made minor changes to their reporting practices. In Example 4 below, the software produced a similarity score of 0.6 for the following risk factor disclosures when the substance of the discussion remains essentially the same.

Question 1: Example 4

Competition and demand

Both the beverages and confectionery industries are highly competitive. In our major markets, we compete with other multinational corporations which have significant financial resources to respond to and develop the markets in which both we and they operate. These resources may be applied to change areas of focus or to increase investments in marketing or new products. This could cause our sales or margins to decrease in these markets. Furthermore, consumer tastes are susceptible to change. If we are unable to respond successfully to rapid changes in consumer preferences, our sales or margins in individual markets could be materially adversely affected.

Competition and demand

Both the beverage and confectionery industries are highly competitive. We compete with other multinational corporations which have significant financial resources to respond to and develop the markets in which both we and they operate. These resources may be applied to change areas of focus or to increase investments in marketing or new products. Furthermore, consumer tastes are susceptible to change. If we are unable to respond successfully to rapid changes in demand or consumer preferences, our sales or margins could be adversely affected.

Source: Cadbury Annual Report 2005 (p. 24) and 2006 (p. 38)
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These examples illustrate very general or non-specific disclosures which could apply to any company in this or a similar industry. The fact that they remain unchanged over time indicates disclosure inertia and as a consequence the information is unlikely to be particularly useful to any of the identified constituents. We do not find evidence in any case of companies reflecting on risk factors in relation to information provided in prior risk factor

statements. Moreover, in cases where a risk factor is dropped or added to the list no explanation has been provided for the change in any of the risk factor statements examined.

5.3 Discussion of Question 2: Are significant events identified in prior risk factor statements?

We do not find evidence of significant events being reported by companies as risk factors for positive or negative events prior to the significant price change in any of the companies within our sample. As discussed earlier, while companies have provided very general discussions of risk factor statements, there is no evidence of specific information that relates to the significant events that affected the performance of the company. We use two examples to illustrate this.

Unilever saw a significant fall in share price after the release of its quarterly earnings announcement in 2003. The share price fell by 10% on the 2nd of May 2003. One of the reasons for this was that Unilever's key product SlimFast[®] had not performed as expected and had experienced falling sales. Unilever's 2002 risk factor statement discusses branded products in Question 2: Example 1a.

Question 2: Example 1a
Our brands: A key element of our Path to Growth strategy is the development of a small number of global, leading brands. Any adverse event affecting consumer confidence or continuity of supply of such a brand would have an effect on the overall business.
Source: Unilever Annual Report 2002, p. 40

While the company has identified brands as a risk factor on a general level, the company has not provided any specific information on the key brands within this statement. In other

sections of the report the company discusses SlimFast® in a positive light and how it has contributed to growth within the company (see Question 2: Example 1b).

Question 2: Example 1b
In 2002, we continued to meet the growing consumer demand for healthy food products, in both industrialized and developing markets. New additions to the SlimFast® range helped consumers to manage their weight healthily with food that fits into their daily lives. SlimFast® sales grew 10.8%, with a range extending from meal replacement drinks and bars to soups. It continued to expand beyond its US heartland, in the UK, Germany and the Netherlands. SlimFast® continues to focus on the health and wellness consumer hotspot and is well positioned in relation to emerging concerns about obesity.
Source: Unilever Annual Report 2002, p. 27

In the case of Tate and Lyle, two significant events were associated with the company in 2007, both resulting from profit warnings. On the 23rd of January 2007 its market-adjusted share price fell by 15.7% and by 27.5% on the 28th of September 2007. A number of reasons accounted for this including the underperformance of one its key products, SPLENDA® Sucralose. Within the 2006 risk factor statements the company provides a general discussion of factors that could affect demand for their products (see Question 2: Example 2).

Question 2: Example 2
Changes in consumer dietary requirements and preferences or new scientific evidence could decrease demand for our products.
A decline in consumption of one or more product categories could occur in the future due to a variety of factors (such as concerns about obesity and diabetes resulting in a consumer preference for lighter, lower calorie beverages and foods) or could occur in the future if new scientific research or studies were to raise material issues regarding the adverse safety or health effects of food products which are currently considered safe and healthy. Although our product offering contains alternative products to meet these preferences and concerns we may not be able to adapt our production and research and development as rapidly as market changes occur in the mix of products used. If there were found to be any long-term detrimental effects to any of Tate and Lyle's products this could impact the Group's future profitability.
Source: Tate and Lyle Annual Report 2006, p. 24

SPLENDA® Sucralose is mentioned 45 times in the 2006 annual report. The Chairman’s statement and the CEO’s review discuss the positive impact SPLENDA® Sucralose has had on the company and how the product forms part of the key strategy for growth, with the financial review stating that “demand for SPLENDA® Sucralose is expected to remain strong during calendar year 2006” (Source: Tate and Lyle Annual Report 2006, p. 29).

5.4 Discussion of Question 3: Are the significant observed events discussed in subsequent risk factor statements?

We do not find any evidence of changes in the risk factor statement to reflect real incidents that have affected the value of the company. As discussed earlier, information under each risk factor seldom changes between reports and this is the case even after significant events have affected their performance. However, we did find evidence of significant events being discussed elsewhere in the annual report after the events. The following examples have been provided in relation to the significant events identified above. Example 1 is connected to Examples 1a and 1b in Question 2. In its 2004 annual report Unilever discusses SlimFast® 23 times and refers clearly to the fall in demand:

Question 3: Example 1

SlimFast® has been heavily affected by changing consumer tastes and dieting choices. We have responded with the launch of a range of new products in the second half of the year, and a relaunch of the brand at the start of 2004. We remain confident of the longer-term growth opportunity, based on our leadership of this large growth market and the proven approach of SlimFast® to healthy weight management underpinned by clinical studies and continued strong endorsement from the medical profession.

Turnover of SlimFast® declined by 21% as the entire weight-loss category was hit by an unprecedented shift in consumer preferences towards low-carbohydrate products. The impact was especially pronounced in the US, the largest market for SlimFast®. SlimFast® has responded by focusing on the SlimFast® Plan as a proven and effective weight-loss programme with an expanded range of products, including pasta and soups. Low-carbohydrate and high-protein products were also launched at the end of 2003.

Source: Unilever Annual Report 2004, pp. 26 and 39

In its 2007 annual report Tate and Lyle describes the performance of SPLENDA[®] Sucralose in a number of sections. The following example (Question 3: Example 2) refers to the Chairman's Report and is connected to Question 2: Example 2 in the previous section.

Question 3: Example 2

<p>As stated in our announcement on 23rd of January 2007, the SPLENDA[®] Sucralose business achieved only modest growth in the year, a disappointment in what was otherwise a successful year for the Group. A number of factors caused the slower than anticipated acceleration of uptake from our major customers: Product development life-cycles returning to more normal levels following the Atkins diet period; the depletion of customers' security stocks of SPLENDA[®] Sucralose in response to our new capacity coming on stream; and volumes to the US carbonated soft drink sector not meeting our expectations.</p>
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Source: Tate and Lyle Annual Report 2007, p. 6.
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While it would be unlikely that risk factors always coincide with events the two should be linked in some way by the company. Ideally, these events should be related back to the original risk statements and the risk statements revised as appropriate. These events would provide evidence of whether the original risk factors or statements were realistic or whether they needed revising in the light of events.

5.5 Discussion

The disclosure of risk factors tends to be quite general and routine and is typical of the type of disclosure predicted by both theories. Proprietary cost theory helps us comprehend how initial disclosures are inadequate and institutional theory helps us understand the evolution of disclosure over time (Cormier et al., 2005). For the most part, prior disclosures are often seen as tried and tested and thus can be safely disclosed without raising questions from shareholder and stakeholder groups. As discussed earlier (see Section 5.2), if some sort of explanation is provided as to why they are still relevant then the information is likely to be

useful. In contrast, if the disclosure does not alter from year to year then it is unlikely to be helpful and effectively becomes boiler-plate. In some cases, it is difficult for readers to link risk items together. The onus is on readers to 'join the dots' and make sense of the picture, almost effectively having to design their own risk reports. For instance, in the case of Unilever readers are informed that 'brands' may be a risk factor but are given no information as to which brands might be at risk. In the 2002 annual report all appears well with SlimFast®. However, following the growth of the fashionable 'low-carb' diet, SlimFast® sales declined the following year. Readers may not have anticipated this but could, in the future, examine the brands and discern which might be at risk, subject to market trends. In essence, this means constructing their own risk register. The fact that Unilever has decided to focus on a 'small number of global brands' alerts readers that Unilever may be exposed if one or more of these brands suddenly declines, but they are effectively required to reach this conclusion by themselves.

A similar situation appears to have occurred with Tate and Lyle's product SPLENDA®. Readers may be unaware of the exposure for that particular product and consequently may have been surprised that the share price fell by significant amounts in 2007 (15.7% and 27.5%), something not predicted in 2006. Again, in the subsequent annual report, a change in market conditions is cited for the decline in demand (such as the growth of the 'Atkins' diet). These events do not seem to cause any change in the risk factors for the following year.

Company managers do not appear to signal good risk management systems via comprehensive disclosures and appear to prefer general, routine information which is non-specific and could apply to any company within the same industry. This is consistent with

institutional theory (Dillard et al., 2004; Oliver, 1991) and is also in line with proprietary costs theory, as managers arrange matters and disclosures to suit themselves and do not wish to disclose valuable/sensitive information, which might be exploited by others including industry competitors. Managers may prefer to disclose sensitive information to large shareholders or potential investors through other, more private, reporting mechanisms such as special meetings (Solomon, Solomon, Norton, & Joseph, 2011). Alternatively, they may view risk information as something which is useful for internal management only. This may signify that managers prefer to provide information which is symbolic, provides a 'tick in the box' in relation to risk reporting which is not useful or substantive. The implication for readers is that they must read between the lines to identify the risks for themselves if they are to avoid surprises. The information is provided in annual reports but not in an accessible or straightforward manner and users should consider creating their own risk registers.

If agents can obtain the information from private meetings this lack of disclosure is understandable but it may be seen as unfair on other shareholders and indeed other stakeholders. Such private exchange may also be seen as no longer justifiable with modern communication methods. The UK Corporate Governance Code Section E (FRC, 2010) suggests that meetings with institutional shareholders should take place with the Board and it is perhaps conceivable that risk issues could be added to other discussions related to governance or strategy. However, although the Code articulates that this should not override the requirements of law to treat shareholders equally, it may be problematic to enforce. It seems unlikely that any request to discuss risks and risk appetite would ever be denied. Proprietary costs theory may also explain the lack of disclosure. If shareholders can obtain the information elsewhere (perhaps via a private meeting see Holland, 1998) it will be in their interests for external disclosure to be minimal or of a general nature. Institutional

theory may explain why companies seem to disclose in a similar fashion and also highlights that these disclosures appear to be decoupled from reality (Oliver, 1991). Thus, risk disclosures are unlikely to reflect company internal documents such as a risk register.

6. Conclusions and policy implications

There is agreement among the academic community that current risk disclosures in annual reports are general and therefore of little use to investors looking to match their own risk appetites (Solomon et al., 2000; Lajili & Zéghal, 2005; Linsley & Shrive, 2006; Abraham & Cox, 2007; ASB, 2009). Our findings show that disclosures tend to be general, they change little and they seem to bear limited or no relation to the actual risks faced by companies. The current disclosures can be seen as “symbolic window dressing” (Carruthers, 1995, p. 315) which exist “without the organization’s following through” (Irvine, 2008, p. 128) and are decoupled from the real risks organizations face (Oliver, 1991; Cormier et al., 2005). Symbolic disclosures are unlikely to be useful to readers of financial statements who may be attempting to balance their investments with their own risk appetite. Despite this there appears to be increasing demand for improved risk reporting (ICAEW, 2011). As companies need sophisticated information to manage their own risk portfolios, this strongly suggests that useful risk information is being withheld by companies. The precise reasons for this and the extent of non-disclosure are not totally clear (Marshall & Weetman, 2002, 2007). While, managers should want to disclose information in order to signal good risk management practices thereby reducing the cost of capital, in practice it appears that proprietary costs (or their perception) may cause disclosure to be restricted. Managers may choose to disclose information privately to fill this disclosure gap, but invariably for others it creates information void.

We contribute to the literature by using theory to understand current practice and by developing a model which can be used to evaluate the quality of risk disclosure over time. The model is based around three questions which help to assess disclosure and indicate how disclosure can be improved in the future. The model is also particularly useful to preparers who can use it to influence the design of their own disclosures.

Hitherto studies in this area have been somewhat inconsistent in their use of theory with some papers ignoring theory altogether. The authors maintain that proprietary costs theory and institutional theory are particularly useful in understanding the issues involved. The initial problem of risk disclosure can be understood by the issues posed by proprietary costs theory and the continuing paucity of risk disclosure is also explained by institutional theory. It is possible that the solution may also lie with institutional theory. If bellwether companies can be encouraged to improve the design and content of their disclosures, it is possible that others will follow their lead. The question is how to start the improvement process. There may exist a 'tipping point' at which certain companies become prepared to improve their disclosures and are willing to withstand some level of proprietary costs. Once this process has begun others may feel obliged to mimic their behaviour.

In considering how the relevance of risk factor statements can be improved, parallels can be drawn with international financial reporting standard IFRS 8 (Operating Segments). To comply with IFRS 8, companies have to report the same information used internally for decision making in their annual reports. Empirical research that examines the impact of the equivalent US statement of financial accounting standard SFAS 131 (Disclosures about Segments of an Enterprise and Related Information) shows that, in general, this management approach leads to improved disclosure (Street, Nichols, & Gray, 2000; Ettredge, Kwon,

Smith, & Stone, 2006). Consideration of the three questions outlined above, alongside the information required for internal management purposes, forms a creditable basis for discussion on appropriate risk disclosures.

There is recent evidence of interest from the investment community and the auditing profession on the possibility of auditors providing assurance on the management commentary within annual reports (Fraser & Pierpoint, 2011; Fraser, Pierpoint, Collins & Henry, 2010). Risk factor reporting, in particular, is seen by auditors as an area where there is scope to offer assurance that goes further than their limited current involvement. Fraser et al. (2011, p. 11) notes that, “proposals for a new form of corporate reporting may be juxtaposed with a new audit reporting model”. Similarly, ICAEW’s Chief Executive, writing in the Institute’s journal ‘Economia’, also discusses how auditing can be “repurposed” for the 21st century by adopting a new auditing approach which better meets society’s needs (Izza, 2012, p. 26). Our series of questions provides a basis for improved risk reporting that can be used as a guide by auditors in providing assurance on risk factor disclosures. Auditors could confirm that the managers have (at the very least) addressed the three questions and provided related disclosures.

In addition, companies which fail to supply the information could be asked to provide an explanation following the approach taken in the UK’s Corporate Governance Code. That approach would depend on investors being prepared to ask questions if they are unsatisfied with either the disclosures or the explanation given by the directors. The success or otherwise of this approach could be monitored, *inter alia*, by a financial reporting regulator such as the FRC in the UK. At this juncture, this is (arguably) a reasonable way to proceed and should help increase attention on the quality of risk disclosures rather than the quantity.

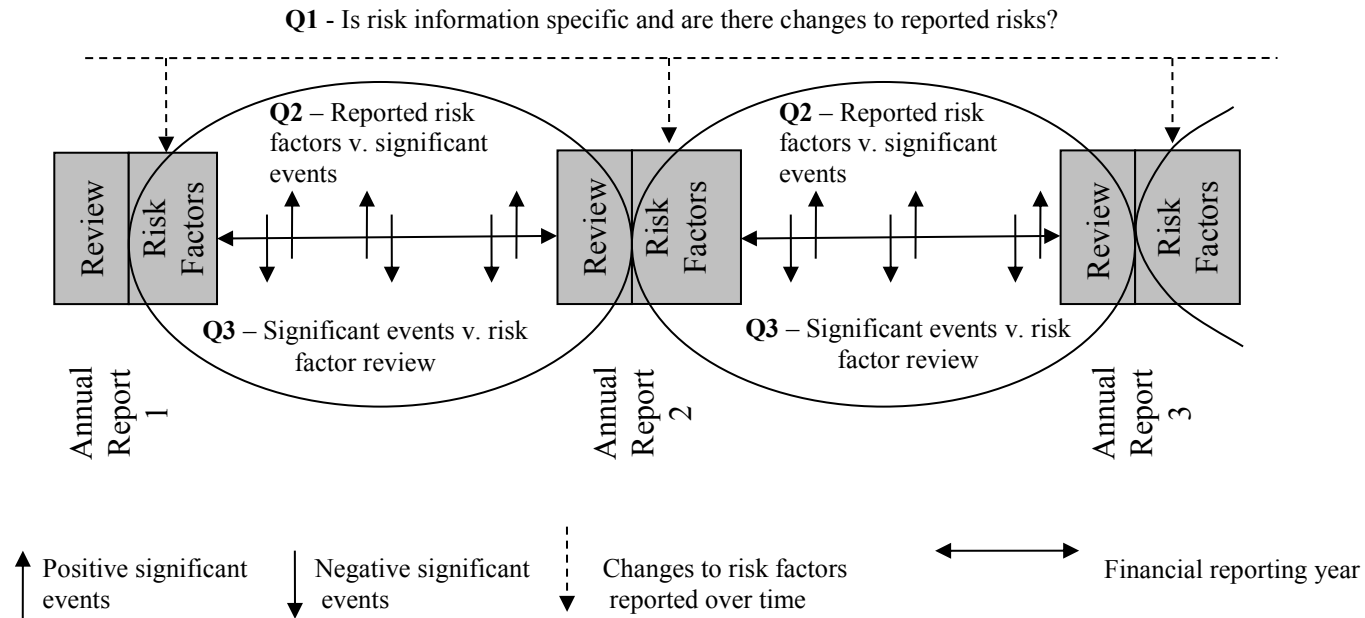
Increasing the quantity of general risk disclosures is unlikely to provide investors with the information they require. This discussion also has implications for companies in emerging markets where the IASB's *Management Commentary* (2010) is expected to have a greater impact. Our findings show that general guidelines on reporting risk information are unlikely to improve the quality of risk information disclosed.

This research suggests that managers should consider three questions in relation to risk disclosures. These are not necessarily the only questions that need to be answered but if disclosures address these questions, the quality of reporting will be improved. It is suggested that the investment, professional and academic communities review these questions to determine whether the essence of risk reporting is captured therein. If managers address these questions the issues raised by the theoretical and practical problems will be answered without compromising the flexibility that companies should have in creating appropriate and bespoke disclosures. For instance, by addressing Question 1 and ensuring reported risks change over time, managers will avoid the trap of providing standardised routine disclosures. By discussing their risk experience (ICAEW, 2011) in Question 3 they will ensure that the disclosures are authentic and relevant. A 'comply or explain' approach could be adopted, but as with the UK's Corporate Governance Code, the success or otherwise of that would depend on active engagement by investors or an appropriate enforcement system.

The companies examined in this study may not necessarily be representative of all listed companies but the study provides a useful contribution in the depth of analysis provided. Further work involving preparers and users of annual reports will be required to examine the viability of the approaches suggested in this paper. In particular, fieldwork in the form of detailed case studies could help identify better quality disclosures which answer some of the

issues raised in this paper. Research carried out in other countries may also be useful especially where good practice can be identified. Different stakeholders need to consider the part they can play in improving disclosures. For preparers a focus on tailored information which answers the three questions identified in this paper is helpful. It is important not to be over-prescriptive, but the three questions provide a useful initial framework. Shareholders need to challenge the inclusion of boiler-plate or routine repeated information in annual reports and regulators need to be willing to support investors in questioning mediocre disclosures. Auditors need to consider the part they play too and resist safe but boiler plate disclosures. All groups need to consider the characteristics of good disclosures and how best these can be encouraged.¹¹

Figure 1: A model to assess the quality of risk reporting based on three research questions



Research Question 1: Is risk information specific to the company and are there changes to reported risks in risk factor statements over time?

Research Question 2: Are significant events identified in prior risk factor statements? [*Ex ante* identification]

Research Question 3: Are significant observed events discussed in subsequent risk factor statements? [*Ex post* discussion]

Table 1: Linking themes to theoretical lenses

Theoretical lens	Themes	Link between theory, theme and prior literature
Proprietary costs theory	(1) Disclosure information should be both specific to the company and regularly updated	These themes consider whether risk reporting alters over time. Proprietary costs theory indicates company managers have concerns about disclosures which fall into the hands of competitors. Accordingly they may keep their disclosures bland and uninformative (Marshall & Weetman, 2007). Managers may be concerned about the information costs (Cormier et al., 2005). This may indicate that risk disclosure is incomplete (Woods & Marginson, 2004) and becomes routine.
	(2) Company managers should evaluate risk disclosures on a regular basis within annual reports	Managers feel reluctant to change significantly disclosures made in prior years for fear of drawing attention to difficult issues faced by the company. Institutional pressures also predict routine disclosures (Cormier et al., 2005). While risks may change from year to year (either topic wise or in intensity), managers may not alter or evaluate disclosures as they are unrelated to actual events. Thus, theory and recent literature suggest that risk factor disclosure may exhibit inertia.
Institutional theory	(3) Disclosures within annual reports should incorporate the discussion of actual risk experiences	<p>Risk research has indicated that risk disclosures tend to be concerned with risk policies (Linsley & Shrives, 2006) or be backward looking (Dobler et al., 2011). Thus, previous research would suggest that the occurrence of significant events have not been ‘predicted’ in prior risk statements or discussed in subsequent risk factor statements.</p> <p>Institutional theory suggests that companies are unlikely to disclose information where others fail to do so. Disclosures are likely to be decoupled from actual risk events that occur and are likely to include policy statements of a routine nature.</p>
Note: Although proprietary costs theory and institutional theory are shown separately in this table, they often work together in militating against good disclosure. Both proprietary costs and institutional factors encourage the continuation of routine disclosures which fail to take account of actual events.		

Table 2: Examples of general and specific disclosures

Disclosure Type	Disclosure	Source
General Disclosure	The Group's operations are also subject to the risks and uncertainties inherent in doing business in numerous countries.	Cadbury Schweppes Report and Accounts and Form 20-F 2003, p. 12.
Specific Industry Disclosure	Despite safety measures adopted by the Group, our products could become contaminated. We use many ingredients in manufacturing beverages and confectionery, which increases the risk of contamination, either accidental or malicious. While we believe that incidents of this type are generally localised, any contamination may be expensive to remedy, and could cause delays in manufacturing and adverse effects on our reputation and financial condition.	Cadbury Schweppes Report and Accounts and Form 20-F 2003, p. 173.
Specific Company Disclosure	The sensitivity analysis below shows forward-looking projections of market risk assuming certain adverse market conditions occur. This is a method of analysis used to assess and mitigate risk and should not be considered a projection of likely future events and losses.	Cadbury Schweppes Report and Accounts and Form 20-F 2003, p. 42.

Table 3.1: Sources of significant news

	Frequency	
	Negative news	Positive news
Interim announcement (half yearly and quarterly)	8	3
Final announcement	1	0
Trading update	3	1
External news source (media)	2	6
Analyst	0	1
Total	14	11

Table 3.2: News events

Negative Events	Frequency
Key product sales lower than expected	6
Competitor actions	3
Regulatory action	3
Information for decision making:	
Integration	2
Budgeting and planning	1
Taxation	1
Environmental scan	2
Subtotal	6
Commodity price increases	4
Exchange rates	2
Brand name erosion	1
Operations (distribution)	1
Sovereign/Political	1
Macro-economic	1
Total	28
Positive Events	
Key product sales higher than expected	3
Increase in emerging market sales	2
Leadership	2
Regulatory	2
Strategic investment	2
Information for decision making:	
Environmental scan	1
Subtotal	1
Financial markets (low valuations)	1
Expectation of an increase in sales	1
Total	14

Note: The total negative news events (28) is more than the total of identified negative news events (14) because in a number of cases more than one news event is associated with a particular significant price change (for example earnings may have fallen because of a key product not performing as expected but also due to a rise in raw material prices). The same applies to positive news events.

Table 4: Number of general and specific principal risk factors

	2002	2003	2004	2005	2006	2007	Average
Cadbury PLC	8 (3)	11 (2)	9 (2)	9 (1)	15 (0)	14 (3)	11 (2.0)
Tate and Lyle PLC	*	*	*	16 (3)	11 (1)	13 (0)	13 (1.0)
Associated British Foods PLC	**	**	**	**	5 (2)	7 (1)	6 (2)
Unilever PLC	10 (5)	8 (4)	6 (4)	7 (2)	8 (1)	8 (1)	8 (3.0)

The figures in brackets indicate the number of risk factors in each year that are specific in nature.

*Tate and Lyle did not have an explicit risk factor statement until 2005

**ABF did not have an explicit risk factor statement until 2006

Table 5.1 Percentage of risk factors where the substance of the discussion remains the same over time

	2002-2003
Cadbury PLC (2002-2007)	71 %
Tate and Lyle PLC (2005-2007)	100 %
Associated British Foods PLC (2006-2007)	57 %
Unilever PLC (2002-2007)	60 %

The percentage is calculated by dividing the number of common risk factors where there was no change to the substance of the discussion by the total number of common risk factors for each company.

Table 5.2 Risk factor resemblance score

	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	Average
Cadbury PLC	0.8	0.5	0.42	0.5	0.15	0.47
Tate and Lyle PLC				0.83	0.73	0.78
Associated British Foods PLC					0.24	0.24
Unilever PLC	0.37	0.74	0.23	0.83	0.72	0.58

The resemblance scores are obtained using the Ferret copy detector. The Ferret copy detector software computes a similarity measure based on trigrams (a group of three letters representing one sound) found within the documents under comparison. This measure is a number from zero (no copying) to one (everything copied). The scores in the table represent risk factor similarity measures for each company across two consecutive years. For example, in the case of Cadbury PLC, 0.8 is the similarity score based on comparing common risk factors in 2002 and 2003 and 0.47 represents the average score across the time period examined.

Notes

¹We do not necessarily argue that boilerplate disclosure is useless and there may be some circumstances where it can serve a purpose (see Spira & Page, 2010 who argue that in the case of internal control boilerplate disclosures the fact of disclosure may be more important than the content). However, in the case of risk disclosures the authors believe that the fluidity of risk situations is such that disclosures require regular reflection.

² Research on risk disclosure often refers to different theories. Our research indicates that in excess of ten theories have been used in prior risk disclosure literature (including agency, attribution, contingency, impression management, information costs, information relevance, institutional, legitimacy, modern portfolio, proprietary costs and signalling). Some studies make reference to a large number of theories (for example, Linsley, Shrives, & Crumpton, 2006; Marshall & Weetman, 2007; Lopes & Rodrigues, 2007) but it is not always clear how the specific theories identified relate to the variables discussed. Surprisingly, a large proportion of studies make no explicit reference to theory at all (Collins, Davie, & Weetman, 1993; Dunne et al., 2004; Lajili & Zéghal, 2005).

³ During the drafting of our questions we consulted four stakeholder groups with an interest in financial reporting practices, who attested to the suitability of the questions. These include three investment analysts, two independent directors of listed companies, two academics (in addition to the authors) and a UK professional accountancy body.

⁴ Northcote Internet Ltd is a free online research tool that provides financial information on UK listed companies. Information is available by sector and by index (www.northcote.co.uk).

⁵ Cadbury PLC was acquired by Kraft Foods in February 2010.

⁶ We are most grateful to one of the referees for suggesting the use of this software. Although one of the authors has previously made use of ‘Turnitin’ software (see Turnitin.com or submit.ac.uk) in their research, Ferret software was particularly suited to the current task because it enabled straightforward comparison of a specific risk disclosure and subsequent years’ disclosure, without for example, unnecessary comparison with other internet sites.

⁷ We obtain similar results if we use two standard deviations.

⁸ In the majority of cases, the news was reported on the day after the event.

⁹ The analysts that we spoke to readily identified a number of these significant events.

¹⁰ See Reeve and Philpot (1998) for a discussion of the application of SPC in financial management process improvement. The use of standard deviations to identify extreme observations such as price changes is common in the financial economics literature. See Melvin and Taylor (2009) for a paper that uses this concept to identify significant currency exchange rate changes following the financial crisis of 2007-2008.

¹¹ The authors are most grateful for various useful suggestions made by the two anonymous reviewers, the editors and the associate editor. We should also like to thank Professor Niamh Brennan of University College Dublin for her helpful insightful comments, Brian Singleton-

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