Research Journal of Finance and Accounting
ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online)
Vol.7, No.15, 2016

Risk Disclosures in Italian IPO Prospectuses: A Comparison of Manufacturing and IT Companies

Marco Papa
Department of Economics, Management, and Business Law,University of Bari Aldo Moro
Largo Abbazia Santa Scolastica 53, 70124, Bari, Italy

Abstract
Although the disclosure of corporate risks is considered as key information for sound investors' decision making, recent research has shown that companies' reporting practices are unhelpful, as they are generic and boilerplate. The current empirical evidence is based mainly on the information provided in the annual reports of listed companies, whereas research on risk disclosures in initial public offerings (IPOs) is still limited. This paper performs a quantitative and qualitative analysis of risk reporting within IPO prospectuses for a sample of six manufacturing and six information technology (IT) Italian companies. The aim is to provide further empirical evidence meaningful to regulators and accounting standard setters to: i) define 'best practice' for risk reporting and ii) to assess the extent to which industry affects risk disclosures. The level of risk information is measured by carrying out a detailed content analysis, based on a coding instrument comprising 76 risk categories and two type attributes (time and quantitative orientation), with each aspect of the risk information expressed in terms of lines. The findings indicate that prospectuses place significant emphasis on external risks, but neglect other sources of uncertainties. The comparison between the two industries shows that they share similar disclosure practices, with the IT companies disclosing significantly higher proportions of forward-looking and external risk information than the manufacturers.
Keywords: Disclosure, risk reporting, IPO prospectuses, content analysis

1. Introduction

In recent years, companies' risk disclosures have gained worldwide attention among regulators and investors. Several accounting standards and regulations (e.g., IFRS 7, FFR No. 48, GAS 5) and professional guidelines (ACCA, 2014; CICA, 2006; ICAEW, 1997, 1999, 2002) have been issued to enhance risk reporting. At their simplest, forward-looking disclosures of financial and non-financial risks are regarded as key information necessary to understand how a firm is managed, to determine its value drivers, and, finally, to support investors' sound decision making (Cabedo & Tirado, 2004; Courtis, 1999; Schrand & Elliott, 1998; Solomon, Solomon & Norton, 2000; Wallman, 1996). Given the increasing attention in the field, most research has sought to examine the quality and usefulness risk disclosures (ICAEW, 2011). Recent studies have shown that current reporting practices are rather vague, offering only historically oriented information and limited quantifications of risk exposure (Abraham & Shrives, 2014; Beretta & Bozzolan, 2004; Kajüter, 2006; Lajiliand & Zéghal, 2005; Linsley & Shrives, 2006). On the other hand, there is also some indirect evidence of the information content and usefulness of risk disclosures (Campbell, Chen, Dhaliwal, Lu, & Steele, 2014; Linsmeier, Thornton, Venkatachalam & Welker, 2002; Rajgopal, 1999; Schrand, 1997).

Despite the widespread interest in risk disclosure, few studies have examined risk disclosures in Initial Public Offering (IPO) prospectuses (Deumes, 2008; Hill & Short, 2009). The current empirical evidence is based mainly on the information provided in the annual reports of listed companies. At the same time, there is a general view that IPO prospectuses are important vehicles of risk information. ICAEW (1999) shows that prospectuses provide extensive risk disclosures that can be used as a benchmark for defining disclosure best practices. Deumes (2008) supports this view, demonstrating that Dutch IPO risk warnings can successfully predict the volatility of companies' future stock prices. Yet, only in the UK, Hill and Short (2009) have investigated the content and the characteristics of IPO risk warnings. The present study extends this evidence, by examining risk disclosures of Italian IPO companies. The main aim is to inform the current debate surrounding the content and the quality of risk reporting. In general, Italian companies entering the stock market should be keen on addressing the information needs of potential investors in order to mitigate the problem of information asymmetry and, in turn, to reduce the cost of capital (Botosan, 1997; Elliott & Jacbson, 1994) and the underpricing of IPO shares. An Italian IPO prospectus contains extensive information ranging from an operating and financial review to detailed information on directors and executive officers (e.g., senior management conflicts of interests, remunerations and benefits, pending arbitrations, etc.). As far as risk information is concerned, the first pages of a typical prospectus warn the reader against the primary uncertainties that may affect the company's performance.

We examine the IPO risk disclosures of six manufacturing and six information technology (IT) Italian companies. The choice to focus on these industries responds to the recent call for industry-focused research on risk disclosures (Linsley & Shrives, 2006). It is widely believed that industry membership is a key driver in

shaping companies' risk profiles (Beattie, McInnes, & Fearnley, 2004a). However, there is limited empirical evidence on how risk disclosures vary across industries.

To address the above issue, internet and software providers and manufacturing companies have been selected to represent industry different extremes with regard to degrees of competition, technology challenges, and growth prospects. Given the shifting regulations, the rate of technological obsolescence, and the level of competition faced by internet and software firms, do these firms provide fuller risk information? If so, does this correspond to a higher level of quality? This cross-sector comparison has two objectives. First, it seeks to examine the content and dimensions of the risk information disclosed during an IPO. Second, it tests the extent to which industry membership affects the level and content of disclosure.

The paper has the following structure: In the second section, the relevant literature on risk disclosure is examined, and this review shapes the study hypotheses. The third section explains the methodology. The last section illustrates the findings and suggests implications for further studies.

2. Literature review and hypotheses development

The empirical literature on risk reporting includes two main streams of research. Most studies focus exclusively on financial risk reporting, as mandated by specific standards or regulations (FRR 48), to investigate its information content and usefulness for investors (Campbell et al., 2014; Linsmeier et al., 2002; Rajgopal, 1999; Schrand, 1997). The other body of research comprises several studies that examine companies' risk reporting practices to assess the determinants and the quality of disclosures. This research employs content analysis to identify risk information and measure its characteristics. Risk disclosures are generally classified into several main categories based on a model proposed by professional bodies and practitioners (Abid & Shaiq, 2015; Beretta & Bozzolan, 2004; Kajüter, 2006; Linsley & Shrives, 2006). The quality of disclosures has, instead, been measured using different indicators relating to: i) the quantity of information (Abraham & Cox, 2007); ii) the number of risk categories covered (Miihkinen, 2012); and iii) the characteristics of the disclosures (Beretta & Bozzolan, 2004; Linsley & Shrives, 2006).

Lajili and Zéghal (2005) have examined the contents of the risk disclosures of TSE 300 Canadian companies, considering both mandatory and voluntary information. They find that: (1) the sampled companies report primarily descriptive information of financial, commodity, and market risks; (2) the information concerns only down-side risks; (3) risk assessment and sensitivity analyses are not disclosed. Overall, the results show limited voluntary risk disclosure, without exploring possible determinants. Along the same lines, Linsley and Shrives (2006, 2005) find minimal disclosures of quantified risk information in the annual reports of 79 non-financial UK companies. Once again, the disclosures consist of generalized statements of risk policy. Apart from a positive relationship with company size, specific company determinants are not tested.

Beretta and Bozzolan (2004), who produced a framework to analyze the quality of risk information disclosed by Italian listed companies at the end of 2001, adopt a different approach. Assuming that the quality of a disclosure depends on the quantity of information disclosed and the richness of its content, they develop a disclosure index obtained as a simple arithmetic mean of four indices: relative quantity (RQT); density (DEN), which is used to measure how risk information is diluted into the mass of other pieces of information; depth (DPT), which is used to identify risk type attributes (e.g., forecast information and quantitative forecast information); and standardized outlook profile (OPR), which is used to capture risk management information. Beretta and Bozzolan (2004) find that their index is not influenced by either company size or industry differences, which are the two main factors identified in the literature as powerful determinants of disclosure behaviour of listed companies (Ahmed and Courtis 1999). With regard to the characteristics of risk disclosure, they find that the majority of disclosures comprise non-quantified information related to actions or decisions already taken in order to face risks.

By examining a mandatory regime, the German Accounting Standard on risk reporting (GAS 5), Kajuter (2006) finds a significant increase in risk disclosures among German listed companies: from 6 to 11 references over a five-year period from 1999 to 2003. However, risk reports remain rather vague, focusing on external risks instead of internal risks. In terms of risk drivers, Abraham and Cox (2007) examine the determinants of risk reporting among the UK FTSE 100 companies. They break down the risk information into three main categories, based on regulatory definitions: a) business risk reporting; b) financial risk reporting; c) internal control risk reporting. Then, they examine the effects of ownership and corporate governance on the extent of risk disclosure. They find that there is a positive relationship between disclosure and board size and a negative relationship with share ownership by long-term institutions, concluding that, whereas independent directors fulfill a monitoring function, the long-term institutional owners have a preference for firms with lower risk profiles.

From the above review, it appears that the extant literature has focused mainly on risk disclosure practices addressed in companies' annual reports. The principal evidence is that directors avoid quantifying risk, tend to disclose information concerning past risks, withhold information on future activities, and prefer to

disclose positive risk news. This study investigates the ways in which companies report risk information during their IPOs to offer a benchmark against which to compare current reporting practices. Namely, the study has two objectives: i) to examine the content and characteristics of IPO risk disclosures, focusing on the time orientation and quantification of risk declarations; ii) to test whether there are differences in IPO risk disclosure practices across the industries selected.

With regard to the first objective, disclosure theory (Healy and Palepu, 2001) and empirical evidence (Bukh, Nielsen, Gormsen, & Mouritsen, 2005; Cordazzo, 2007) suggest that, during the IPO stage, managers may be keen to provide forward-looking and quantitative information about risk to fulfill the information needs of potential investors. Yet, managers may be reluctant to reveal such information because of the proprietary costs associated with the release of sensitive information to competitors (Guo, Lev, & Zhou 2004; Verrechia, 2001) and the litigation costs determined by inadequate or misleading information discloses in the IPO (Richardson, 2001). Hill and Short (2009) find that UK IPO companies provide greater percentages of forward-looking information, though they avoid quantifying their risk exposure. Consistent with this empirical evidence, we posit the following hypotheses:

H_1: The quantity of forward-looking risk disclosure will be higher than non-forward-looking information (i.e., past, present or non-time-specific information).

H_2: The quantity of quantitative risk disclosure will be lower than that of qualitative risk information.

With regard to the second objective, disclosure studies indicate that voluntary disclosures are affected by the sector variable (Ahmed & Courtis, 1999; Haniffa & Cooke, 2002). Specifically, in the case of risk disclosures, it can be expected that the competitive and industry environments significantly shape companies' risk profiles. Bukh et al. (2005) examine IC disclosures in prospectuses and find significant differences in the levels of disclosure of high-tech and low-tech companies, with the former disclosing far more information related to intellectual capital than the latter. The expectation is that high-technology companies disclose more information than low-technology firms because of their faster technological changes, higher degrees of competition, and potentially larger operational risks. In a similar vein, we expect that the quantity of disclosed forward looking and quantitative risk information will be higher for IT companies. Thus, we posit that:

H3: Traditional firms report less extensively on risk information than knowledge-intensive companies.

H4: Traditional firms report less forward looking/quantitative risk information than knowledge intensive companies.

3. Methodology

3.1 Sample selection

Our sample includes 12 companies from the 87 newly listed companies on the Milan Stock Exchange from January 2000 to December 2005. The IT industry was chosen because of its high level of competition and potential growth opportunities, and the manufacturing industry was selected to represent the other extreme. In order to construct our sample of companies, the following four sectors were chosen from the Datastream industrial classification at the sixth level: i) durable household producers (DHP), ii) industrial machinery (IM); iii) the Internet (INT); and iv) software and computer services (S&CS). The largest three companies from each sector in terms of market capitalization on their first trading day were selected and clustered into two main groups, each consisting of six companies, referred to hereafter as the manufacturing and IT groups. Table 1 reports the company names and other characteristics.

Table 1: Sample Characteristics

	Size[1] ML euro	Gearing[2]	Subsidiaries[3]	Market-to-book ratio[4]
Panel A - Manufacturing companies				
Saeco (DHP)	480.80	0.40	15	2.7
De Longhi (DHP)	1,475.30	0.60	31	0.96
Lavorwash (DHP)	82.70	0.45	2	2.1
Biesse (IM)	385.93	0.58	16	1.7
Procomac (IM)	N/A	N/A	N/A	N/A
Fidia (IM)	56.80	0.44	4	2.6
Average	496.31	0.5	13.6	2.0
Panel B - IT companies				
Freedomland (INT)	380.40	0.09	0	4.2
I.Net (INT)	199.50	0.23	1	11.2
Dada (INT)	98.10	0.11	0	5.5
Datamat (S&CS)	303.60	0.30	5	3
Engineering (S&CS)	249.90	0.38	1	3.6
Inferentia (S&CS)	53.80	0.17	2	5.3
Average	214.22	0.2	1.5	5.5

1. Size is measured as total assets (Worldscope item 2999). 2. Gearing is measured as total debt/total assets (Worldscope items [(3251+3101)/2999]. 3. Subsidiaries are the no of wholly owned companies. 4. Market-to-book ratio is measured as market capitalization at first day of trading/total shareholders' funds [Borsa Valori item/Worldscope (3995+34226)].

3.2 Narrative material analyzed

In Italy, companies making IPOs of securities must comply with the requirements of Legislative Decree no. 58/1998: Consolidated Law on Financial Intermediation (the Decree) and CONSOB (the Italian Stock Exchange Commission) Regulation no. 11971/1999 (the Regulation). The latter specifies the content of IPO prospectuses and provides a template with a list of items for inclusion. Although the Regulation provides a defined framework, it contains only general mandatory requirements, which allow companies a degree of discretion with regard to the specific items to be disclosed and the level of detail to be provided. In consequence, the information provided in the IPO prospectus can be assumed to be semi-voluntary and, hence, to depend on managers' incentives, even in the presence of the prospectus regulations.

The analyzed prospectus narratives are those disclosures that may refer, either directly or indirectly, to some risk categories contained in the unaudited sections of the IPO prospectuses. The excluded sections, in addition to the pro-forma financial statements, were the second section (Information on the Shares Offered) and the third section (Information Regarding the Offer). Additional items were excluded due to being highly regulated by the Italian Consolidated Law on Financial Intermediation (Testo Unico della Finanza) or fairly standard in nature. These included corporate governance statements, directors' remuneration reports, information on main shareholders, and lists of group companies. Figure 1 reports the Italian IPO template with the analyzed narratives.

A		Cover
B		Index
C		Warnings to investors
D		Summary information concerning the issuer and the offer
		SECTION I - Information on the Issuer
E	I	Information on the business
	1.1	History and development of the business
	1.2	Business overview
	1.3	Property, plants, and equipment
	1.4	Significant events affecting the information disclosed from item 1.2. to item 1.3
	1.5	Description of the organizational structure
	1.6	Additional information
	1.6.1	Key directors and employees
	1.6.2	Investments
	1.6.3	Research & development
	1.6.4	Legal proceedings
	1.6.5	Taxation
	1.7	Information concerning the issuer's group
F	II	Information on the administrative, management, and supervisory bodies
G	III	Information on the ownership structure
H	IV	Information on the issuer's financial position and economic performance
I	V	Information regarding recent developments
L	VI	Summary information regarding the issuer and share capital
		SECTION II - Information on the Offered Shares
M	VII	Information concerning the shares
N	VIII	Information on recent negotiation of shares
		SECTION III - Information on the Offer
O	IX	Information concerning the issuer
P	X	Information concerning the coordinators and underwriters
Q	XI	Information concerning the offer
R	XII	Information concerning the listing
S		Appendices and documents available to the public
T		Information regarding the audit company and the legal consultants

Figure 1: Information items in Italian IPO prospectus template. The analyzed narratives are highlighted in grey. Source: Consob Regulation no. 11971/1999.

3.3 Coding unit, development of the coding instrument, and text preparation

This study adopts a comprehensive content analysis based on multi-dimensional coding to quantify the level of risk disclosure and its characteristics. A first choice was made between disclosure index and frequency of risk item occurrence. These two options represent two alternative ways through which content analysis has been historically used to measure the volume of voluntary and/or mandatory disclosures in annual reports.

We deemed the disclosure index to be incapable of meeting the objective of this study, which is to capture the level of risk disclosure and to examine its nature and characteristics. To mitigate the potential loss of information implied by a simple binary code, and treating equally a company that makes only one disclosure with a company that makes several disclosures (Beattie & Thomson, 2007, p. 20; Marcus & Adler, 1998, p. 242) concerning a specific risk category, we use sentences as the coding unit and the number of lines as the measurement unit. We acknowledge that word or text units have been used to quantity risk disclosure (Marcus & Adler, 1998); however, their coding to different risk categories without reference to the sentence/paragraph as a whole may limit the coding reliability. In other words, risk information may be correctly interpreted only within the context of a sentence or paragraph.

In the first stage, the selected narrative text was examined. A reference—that is, a sentence—was detected as risk-relevant if it allowed the reader to be better informed about past and potential threats or opportunities arising from external or internal variables (Linsley & Shrives, 2005, p. 295). At the same time, each risk disclosure was coded according to 76 risk categories, drawing upon the Arthur Andersen Model (1998). This model has already been used used to analyse risk information in annual reports by the ICAEW (1999) and, in accommodated form, by Linsley and Shrives (2005, 2006) for UK public companies, thus enhancing the validity of the coding analysis (Weber, 1985 p.12). Figure 2 details the risk categories used in the analysis.

Main risk categories (7)	Code	Risk sub-categories (76)	Code
Environment risk (13 categories)	ENV	Country and political	COUN
		Legal	LEGAL
		Regulatory	REG
		Social and demographic	SOC
		Climatic and catastrophic	CATA
		Industry structure	IS
		Competitor	COMP
		Customer	CUS
		Technological Innovation	TECH
		Capital availability	CAP
		Sensitivity	SENS
		Shareholder relations	SHARE
Operational risk (17 categories)	OP	Customer satisfaction	SAT
		Human resource	HUMAN
		Knowledge gap capital	KNOW
		Product development	PROD
		Efficiency	EFFI
		Capacity	CAPY
		Performance gap	PERGAP
		Cycle time	CYCLE
		Sourcing	SOURCE
		Channel effectiveness	CHAN
		Partnering	PART
		Compliance	REGCOMP
		Business interruption	BUSINTER
		Product/service failure	PRODFAIL
		Environmental	ENVCOM
		Employee health & safety	EMPSAFE
		Trade mark/brand erosion	BERO
Financial risk (12 categories)	FIN	Interest rate	PINTER
		Currency	PCUR
		Equity	PEQUITY
		Commodity	PCOM
		Financial instruments	PIN
		Cash flow	LICASH
		Opportunity cost	LIOP
		Concentration	LICON
		Default	CREDE
		Credit concentration	CRECON
		Settlement	CRESET
		Collateral	CRECOL
Empowerment risk (6 categories)	EP	Leadership	LEAD
		Authority	AU
		Outsourcing	OUTS
		Performance incentives	INCENS
		Communications	COMS
		Change readiness	MGCH
Information technology risk (4 categories)	INPRO	Integrity	INTEG
		Access	INAC
		Availability	INA
		Infrastructure	ITS
Integrity risk (5 categories)	INTEG	Management fraud	MGTF
		Employee/third part fraud	EMPF
		Illegal acts	IA
		Unauthorized use	UNAUTHOR
		Reputation	REPU
Information decision making risk (13 categories)		Pricing	PRI
		Contract commitment	CONTRACT
		Operation measurement	OMEAS
		Alignment	ALIGN
		Environment scan	ENVSCAN
		Business portfolio	PORTSTRA
		Planning	PLAN
		Strategic valuation	VALUSTRA
		Performance measurement	PERMEAS
		Organization structure	ORGAN
		Resource allocation	RESAL
		Life cycle	LCYCLE
		Regulatory reporting	FREG
		Budget and planning	BUDGET
		Accounting information	AINFO
		Financial reporting evaluation	REVALU
		Taxation	TAX
		Pension fund	PENF
		Investment evaluation	IEVALU

Figure 2: Risk categories

The analysis was taken one step further by examining two characteristics: the quantitative/non quantitative nature and the time orientation of the risk information. Each item was coded as quantitative whenever it provided quantifiable financial or non-financial information. It can easily be argued that this type

attribute is contingent upon topic, implying that quantitative information is not always better than qualitative information. However, the UK Reporting Statement on the Operating and Financial Review (ASB, 2005) includes different disclosure examples for key performance indicators based on quantitative measures (e.g., IG Examples 12 to 14, 17, and 18). The second coding, instead, was designed to distinguish between future and past/non-time-specific risk information. Thus, risk items that directly specified future uncertainties were coded as forward-looking all others were coded as non-forward-looking.

As the final step, the identified sentences were expressed in terms of their numbers of lines to measure the overall amount of disclosure for each risk item. Using the number of lines as a unit of measurement provides a complete and meaningful way of undertaking further analysis when sentences are used as a coding unit. Markus and Adler (1998, p. 243) advocate the use of sentences for both coding and measuring social and environmental disclosures within annual reports, although they recognized that, once the content has been coded, quantification may be done in a number of different ways.

A preliminary coding of two prospectuses was undertaken in order to assess and refine the coding process. Three main issues arose and were examined by a second coder familiar with content analysis. Firstly, the IPO prospectuses were different in terms of font size, characters and margins. It was decided that such differences would be eliminated by converting the original format (PDF format) to a standard text format file. Furthermore, following Hussainey and Walker (2006), we removed all images, charts, pictures, and graphics. After converting the IPO prospectuses, the final text format included only those references that had already been coded off screen. On average, six working days were necessary to code each prospectus and to perform this conversion.

Secondly, it was noted that the risk items did not always represent fully mutually exclusive categories. For example, disclosures concerning the development of new products could be coded either as COMP: Actions and Plans to meet competition within a market segment or as PROD: Product Development Objectives. Following Beattie, McInnes, & Fearnley (2004b, p. 218), we decided that the appropriate code for any reference should be the most specific one. Thus, whenever it became clear from the context that an item referred to an action for enhancing a company's market position, the item was coded as COMP. All of the conflicts were resolved following this specificity principle, and flags and examples were added to the coding instrument (Boyatzis, 1998, p. 31). Appendix 3 presents an extract of the developed coding instrument.

3.4 Reliability assessment

There are three types of reliability tests that can be used to ensure that a coding process achieves unbiased data to allow the drawing of valid inferences (Krippendorff, 2004, pp. 214-216): stability, which refers to the extent to which a coder replicates the same results over time; reproducibility, which assesses the extent to which two or more coders apply the same recording rules consistently; and accuracy, which compares a coding process with a given standard. The most commonly adopted test is the second one (Beattie et al., 2004b, p. 214), since stability is a weak measure that considers only individual inconsistencies and the development of a coding standard to test accuracy is still an open issue, especially in the context of risk disclosure.

The coefficient used to measure the reproducibility of the coded data was that developed by Scott (1995), which adjusts the simple coefficient of agreement—that is, the ratio of pairwise interjudge judgements to the total number of pairwise judgements—taking into account the agreement achieved by chance.

A sample of 97 references from both the largest and the smallest companies was randomly selected and analyzed by the second coder. Three coefficients of agreement were calculated for each dimension of the coding instrument. At the risk category level, the coefficient was equal to 81%; at the risk item level, it was 71.1%; for the time dimension, it was 89%; and for the quantitative/qualitative dimension, it was 92%. Scott's pi was 79% at the risk category level and 69% at the risk item level. Except for the latter coefficient, which was slightly below the cut-off level deemed acceptable by the literature (Boyatzis, 1998, p. 156; Guthrie & Matthews, 1985, p. 261), the test produced highly satisfactory results.

4. Findings and analysis

The amount of risk disclosure and its distribution, according to content and type attributes, are presented in Table 2. The absolute volume of identified total disclosures equalled 6,635 lines in the manufacturing sample and 5,039 lines in the IT sample. Although the manufacturing companies were smaller in size, in terms of market capitalization, they disclosed a 32% higher volume of risk information than the IT companies. Total risk disclosure (TRD) ranged from 709 to 1,502 lines for manufacturers and from 613 to 998 lines for IT companies. Scaling our variable of interest (TRD) by the total number of risk lines present in each prospectus, the obtained percentages reveal that the IT companies had, on average, relatively higher risk disclosures than the manufacturers (36.86% versus 32.00%).

Table 2: Risk Disclosure in IPO prospectuses

Panel A - Total Risk Disclosure (TRD)			
	Manufacturing	**IT**	
	(n=6)	(n=6)	
TRD - Mean	1,105.83	839.83	
TRD - Std. Dev.	267.15	157.10	
TRD - Percentage	**32.00%**	**36.86 %**	
TRD - Minimum	709	613	
TRD - Maximum	1,502	998	
TRD - Total risk disclosure	**6,635**	**5,039**	
Total IPO narratives	20,731	13,671	
TRD - Manufacturers/IT			32%
Panel B - Type of Information: Qualitative (QL) vs Quantitative (QN) Risk Disclosure			
	Manufacturing	**IT**	
	(n=6)	(n=6)	
QL - Mean	678.50	544.00	
QL - Std. Dev.	238.00	81.17	
QL - Percentage	**61.36%**	**64.78%**	
QL - Total	4,071	3,264	
Wilcoxon significance test	0.05	0.05	
QN - Mean	427.33	678.50	
QN - Std. Dev.	116.81	238.00	
QN - Percentage	**38.64%**	**35,22**	
QN - Total	2,564	1,775	
Wilcoxon significance test	0.05	0.05	
Panel C: Time Orientation: Non-Forward-Looking (NFL) vs Forward-Looking (FL)			
	Manufacturing	**IT**	
	(n=6)	(n=6)	
NFL- Mean	810.50	481.67	
NFL - Std. Dev.	224.90	160.60	
NFL - Percentage	**73.29%**	**57.35%**	
NFL - Total	4,863	2,89	
Significance Wilcoxon test	0.05	0.05	
FL- Mean	295.33	358.17	
FL - Std. Dev.	107.65	68.15	
FL - Percentage	**26.71%**	**42.65%**	
FL - Total	1.772	2,149	
Significance Wilcoxon test	0.05	0.05	
Panel D: Rask categories			
	Manufacturing	**IT**	
	(n=6)	(n=6)	
ENV- Mean	468.67	473.67	
ENV - Std. Dev.	71.74	129.74	
ENV - Percentage	**42.38%**	**56.40%**	
ENV - Total	2,812	2,842	
OP - Mean	442.33	267.50	
OP- Std. Dev.	146.12	86.31	
OP - Percentage	40.00%	**31.85%**	
OP - Total	2,654	1,605	
FIN - Mean	72.33	39.00	
FIN - Std. Dev.	19.81	19.87	
FIN - Percentage	**6.54%**	**4.64%**	
FIN - Total	434	234	
EP - Mean	14.33	3.50	
EP - Std. Dev.	14.26	5.431	
EP - Percentage	**1.30%**	**0.42%**	
EP - Total	86	21	
INPRO - Mean	5.33	12.00	
INPRO - Std. Dev.	11.22	14.87	
INPRO - Percentage	**0.48%**	**1.43%**	
INPRO - Total	32	72	
INTEG - Mean	0	3.33	
INTEG - Std. Dev.	0	3.88	
INTEG - Percentage	0	**0.40%**	
INTEG - Total	0	20	
DM - Mean	102.83	40.83	
DM - Std. Dev.	54.50	31.24	
DM - Percentage	**9.30%**	**4.84%**	
DM - Total	617	244	

Panel B of Table 2 reveals two issues related to the types of information disclosed within the IPO prospectuses. First, the majority of data were qualitative for both types of companies: about 61.36% (64.78%) of the analyzed volume for the manufacturers (IT companies). These findings are consistent with previous empirical evidence (e.g., Linsley & Shrives, 2006), and they show the directors' reluctance to quantify risk information. On the other hand, a different pattern emerges concerning the time orientation of the risk disclosures. Although both types of companies were cautious in providing information relating to the future, the IT companies disclosed a larger proportion of forward-looking disclosures: 42.65%, compared to 26.71% for manufacturers. This difference could be related to the greater level of intangibles, or intellectual capital (IC), associated with high-tech companies, thus supporting the proposition that risk reporting is a promising way to provide non-accounting, forward-looking information to investors (ICAEW, 1999, p. 33). To highlight the potential significance of intangibles in relation to risk disclosures, Table 1 indicates, among other context variables, the market-to-book ratios for each company at the first trading date. For the IT sample, the ratio was, on average, 5.5; for the manufacturing sample, the ratio was only 2.0.

Other valuable insights into the characteristics of risk information emerged from the analysis of the content of the information provided. Panel D reports the distribution of risk disclosures across risk categories by sector. This distribution reveals that, with some differences between the two samples, overall disclosures concentrated on environment risk (ENV) and operational risk (OP). The IT companies seemed to provide a higher proportion of information related to external risks (56.40%) than the manufacturers did (42.38%), though the absolute volumes were similar (2,842 lines versus 2,812 lines). By contrast, the manufacturing companies appeared to place a higher emphasis on operating risks (40.00% versus 31.85%) and decision-making risks (9.30% versus 4.84%), with marked differences in absolute terms (2,654 versus 1,605 lines for the former risk category and 617 versus 244 lines for the latter risk category).

Surprisingly, the information disclosed for the other components of risk was minor or even absent. Risk related to the companies' financial positions (FIN) accounted for only about 6.54% (4.64%) of total lines reported by manufacturers (IT companies), representing 434 (234) lines in absolute terms. Empowerment risk (EP) comprised only 86 lines in the manufacturing sample and 21 lines in the IT sample. Information processing and technology risk (INPRO) was addressed in only 72 lines in the IT sample and 32 lines in the manufacturing sample. Finally, only two IT companies provided information concerning integrity risk (INTEG).

The median differences test between the type attributes indicates that NFL and QL information is significantly more prevalent than FL and QN information for the two subsamples - manufacturers and IT companies. This finding supports H2. As for the differences between sectors, the Mann-Whitney test reveals (Table 3) that the IT companies disclosed relatively more future-oriented information and more ENV disclosures than manufacturers. In general, this evidence provides partial support for H3 and H4, since industry appears to affect disclosure with regard to the environmental risk category and its time orientation.

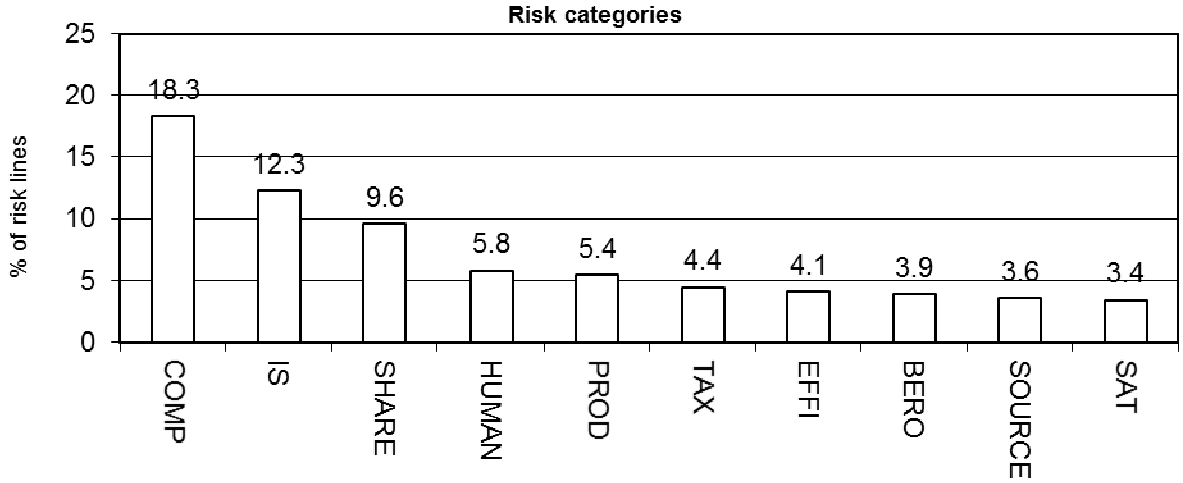
Table 3: Sector Differences in IPO Risk Disclosures

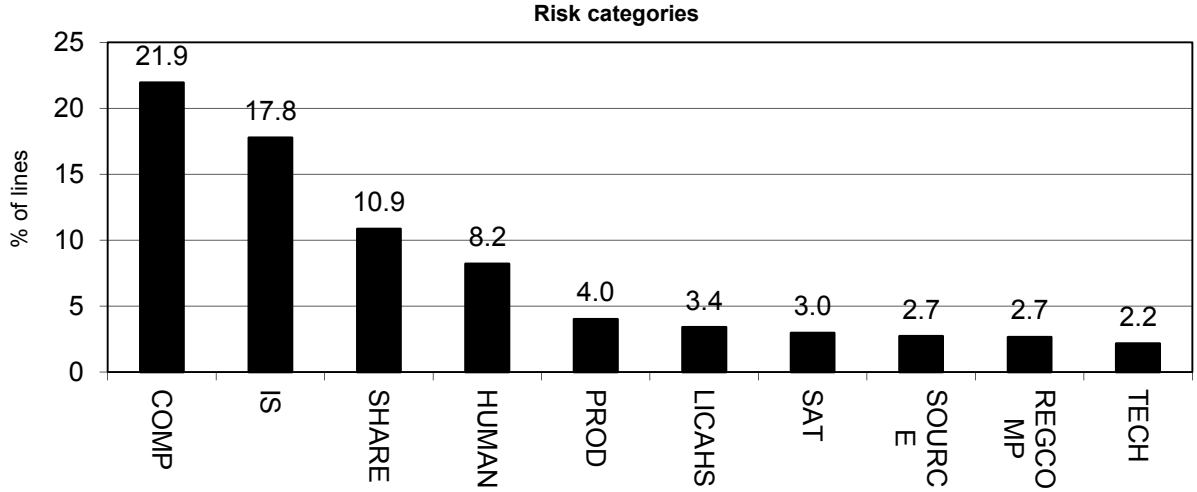
Code[1]	Sector	Median	Median[2] difference (Manuf.*vs* IT)	Mann- Whitney U0statistic	Significance test
TOT	Manufacturing	33.80	-3.45	1.281	0.240
	IT	37.25			
ENV	Manufacturing	42.70	-11.50	2.242	0.026
	IT	54.20			
OP	Manufacturing	39.00	3.00	-1.121	0.310
	IT	36.00			
FIN	Manufacturing	6.60	2.60	-1.764	0.093
	IT	4.00			
EP	Manufacturing	1.00	0.80	-1.164	0.310
	IT	0.20			
INPRO	Manufacturing	0.00	-0.65	0.893	0.485
	IT	0.65			
INTEG	Manufacturing	0.00	-0.35	1.897	0.180
	IT	0.35			
DM	Manufacturing	9.45	4.95	- 1.922	0.065
	IT	4.50			
FL	Manufacturing	24.45	-21.35	2.242	0.026
	IT	45.80			
QN	Manufacturing	40.35	6.70	- 0.961	0.393
	IT	33.65			

*Notes: 1. ENV, OP, FIN, EP, INPRO, INTEG, and DM are the codes used for the main risk categories. Respectively, they represent the environmental, operational, financial, empowerment, integrity, and decision making risk components. FL and QN refer to the coded type dimension (forward-looking and quantitative types). 2. The differences between sectors have been investigated using the company-based mean. Un-tabulated summary statistics show that this does not differ remarkably from the text-based mean used in the main body of the study. *** denotes 0.01 statistical significance, ** denotes 0.05 statistical significance, *denotes 0.1 statistical significance.*

So far, it appears that both types of companies are keen on providing a broad volume of information concerning i) risks arising from the external environment (ENV); ii) internal risks related to companies' processes (OP); and iii) risks associated with the relevance and reliability of information provided by companies (DM). By contrast, traditional financial risks are uncommon, and other sources of uncertainties are almost absent. Moreover, IT companies say relatively more than manufacturers about environmental risks and provide more FL information. To further investigate these reporting pattern, the volume of risk information has been examined, considering risk sub-category, to assess whether specific types of risks could be identified in the two samples. Figure 3 provides the distribution and the ranking of the top 10 risk categories across sectors, while Table 4 introduces the cumulative percentages for the top 20 risk categories. The former figure suggests that both types of companies share a similar pattern regarding the top five risk categories: competitor (COMP), industry (IS), shareholder (SHARE), human resource (HUMAN), and product development risk (PROD). It is only in relation to industry risk (IS) that IT companies appear to provide a higher proportion of risk information.

Panel (a): Manufacturing companies





Panel (b): IT companies

Figure 3: Distribution and ranking of top 10 risk categories by sector

Table 4: Ranking of Top 20 Risk Categories

Code	Manufacturing (n=6.635)			IT (n=5.039)		
	Rank	%	Cum. %	Rank	%	Cum. %
COMP	1	18.3	18.3	1	21.9	21.9
IS	2	12.3	30.5	2	17.8	39.7
SHARE	3	9.6	40.1	3	10.9	50.5
HUMAN	4	5.8	45.9	4	8.2	58.8
PROD	5	5.4	51.3	5	4.0	62.8
SAT	10	3.4	54.7	7	3.0	65.7
SOURCE	9	3.6	58.3	8	2.7	68.5
TAX	6	4.4	62.7	21	1.1	69.6
REGCOMP	12	2.9	65.7	9	2.7	72.2
BERO	8	3.9	69.6	17	1.4	73.6
LICASH	14	2.3	71.9	6	3.4	77.0
EFFI	7	4.1	75.9	22	1.1	78.1
PRODFAIL	11	3.1	79.1	16	1.4	79.5
AINFO	13	2.8	81.9	14	1.7	81.3
CAPY	15	2.2	84.1	15	1.7	83.0
BUSINTER	16	1.8	85.9	12	2.0	84.9
CHAN	17	1.6	87.5	11	2.0	87.0
REG	21	0.9	88.5	13	1.9	88.8
VALUSTRA	19	1.4	89.9	19	1.2	90.1
TECH	28	0.4	90.3	10	2.2	92.2

Notes: n represents the total number of risk lines coded within the company's IPO prospectus; % shows the proportion of the total number of risk lines, n; and cum. % denotes the cumulative percentage across rankings. The shaded risk categories are those that fall outside the overall top 20.

A heavy concentration of disclosures within the same risk categories across the two sectors is evident. Table 4 shows that the top five risk categories account together for nearly 62.8% (51.3%) of the total IT (manufacturing) IPO risk disclosures. For the next 15 categories, we observe that the level of information drops to an average of nearly 2% (3%) for the IT (manufacturing) sector, suggesting that the information is equally spread across these categories. The remaining 55 risk categories account for less than 10%, cumulatively.

However, a closer inspection of Table 4 reveals some differences, which are marked by the shading of those risk categories that fall outside the overall top 20. In particular, manufacturers make relatively more disclosures related to taxation (TAX) and efficiency risk (EFFI), whereas IT companies seem to have relatively higher disclosures related to technological risk (TECH) and regulatory risk (REG). Such differences may be justified as follows: Given the articulated group structure of the manufacturing companies, emphases on taxation and on organization efficiency, such as plans concerning restructures, are plausible. Moreover, given the uncertain regulation and the technological drifts typical of the IT sector, these companies can be expected to emphasize regulation and technological risks.

Combining the two analyses undertaken at the risk categories and sub-risk categories levels, it can be seen that the disclosure patterns for both sectors are similar, focusing mainly on three specific external risk categories that are considered to have particular value to users (Beattie, 1999). This finding is consistent with the patterns observed by Beretta and Bozzolan (2004), Kajüter (2006), Linsley and Shrives (2006, 2005), within the Italian, German, and UK annual reports, respectively. This confirms the view that directors are more open to disclosing external risks that are faced by every company in their sector than they are to disclosing internal risks. However, the Italian prospectuses do not emphasize financial risks to the same extent found in the annual reports (e.g., Lajili & Zéghal 2005). A potential explanation for this difference may involve the specific material examined: Given the initial investment decision context of prospectuses, directors may be more willing to discuss strategic and operational risks than to comment on financial uncertainties.

With regard to the other examined dimensions—that is, quantitative/qualitative and forward-looking orientations—it was confirmed that companies are reluctant to report quantitative and forward-looking risk information (Beretta & Bozzolan, 2004; Kajüter, 2006; Lajili & Zéghal 2005). This supports the view that risk reporting still needs to be improved (ASB, 2007) and suggests that the lack of guidance on the preferred dimensions of risk disclosures may be of little help to readers who wish to know the size of future principal risks and how these are managed (CICA, 2006). Inevitably, differences in units of measurement, as well as in the extent of the narrative material examined, lead to higher absolute volumes of risk information than those identified in the annual reports.

5. Discussion

This study contributes to the extant literature on risk reporting in two principal ways. In terms of the first research objective, concerning the amount and content of risk information disclosed within IPO prospectuses, the results show that the relative amounts of risk information disclosed represent 32% and 37% of the overall IPO narratives examined. This figure reveals that, during the phase of their initial public offerings, Italian companies are aware of the importance of risk information. Further, extensive disclosures of risk information within three external risk categories (competitor, industry, and shareholder risk) were found, whereas financial risk represented only a small percentage of the total disclosures. This suggests that companies are eager to provide detailed information on external risks, which may be of particular interest to investors during initial placements and which may be less sensitive to proprietary costs. Financial risks, by contrast, are more appreciated in the annual report context (Linsley & Shrives, 2006). Moreover, in terms of risk dimensions, both industries exhibited a high proportion of qualitative and historical information. This finding is consistent with previous empirical studies on Italian (Bozzolan & Beretta, 2004), German (Kajüter, 2006) and Canadian annual reports (Lajili & Zéghal, 2005), indicating that further guidance for the dimensions of risk disclosures may be helpful to readers who wish to know the size and management of future risks.

With regard to the second research objective, we did not find considerable differences between the manufacturers and the IT companies in the amount or content of risk information in their IPO prospectuses. The latter were more keen to disclose relatively more forward-looking information and external risk categories. Overall, the analysis revealed a disclosure pattern characterized by space-filling statements in both industries, with the danger that insightful disclosures may be obscured within the high volume of narratives. This finding confirms the concerns raised in the literature that the information contained in the IPO prospectuses can be shaped by the behavior of a dominant advisor (Hribar, 2004), by the proprietary costs associated with the release of sensitive information to competitors (Verrechia, 2001), and by the litigation costs determined by inadequate or misleading information disclosures in the IPO. Consequently, although the sector effect may be relevant, and though Italian regulation allows a considerable level of subjectivity in the disclosure of risk information, the studied IPO prospectuses showed similar disclosure patterns across industries.

It is worth pointing out that this study has some shortcomings. The methodology used neither allowed the investigation of a large number of companies nor any further analysis of the potential causes of disclosure levels across companies. Nevertheless, it did allow us to conduct a first assessment of risk disclosure practices in Italian prospectuses, which may be used as a basis for the development of further empirical analysis. First, a comparison between IPO and annual report risk disclosures (i.e., for the year after the IPO) may contribute to analyzing the extent to which the identified reporting pattern has been influenced by external advisors and listing regulations. Secondly, it is also relevant to investigate other factors that could drive companies' risk disclosure practices. For instance, the analysis undertaken suggests that the release of commercially sensitive risk information may play a significant role in IPO disclosure strategies. Similarly, the exposure to litigation costs may be a further significant concern for providing forward-looking information. Thirdly, a demand-side study may be useful for appreciating whether the disclosures revealed in prospectuses are considered useful by different users. Such insights could be achieved by using a survey to gather new information on institutional investors' views on IPO risk reporting. Finally, to know whether risk warnings are beneficial to companies, association tests could be performed to examine whether the quality of risk disclosures is related to the performance of IPO stocks. By reducing the information asymmetry surrounding new listed companies, it could be expected that transparent risk disclosures should limit the underpricing of Initial public offerings.

Appendix A: Extract from the coding instrument

Main risk categories	Risk sub-categories	Code	Risk definition Based on AA Model	Disclosure risk items
ENVIRONMENT RISK	Country political risk	COUN	The risk that adverse political actions of a country in which the company has invested significantly, can affect the company's resources and future performances.	Identity and effects of key political trends, e.g., government instability, adverse relations with other countries etc.
	Legal risk	LEGAL	The risk that a company's transactions, contractual agreements and specific strategies are not enforceable under the applicable law.	Identity and effects of existing and proposed laws that could impact business significantly, e.g. complex procurements practices.
	Regulatory risk	REG	The risk that changes of regulations can affect the company's capability to carry out business transactions, or implement specific strategies and activities.	Identity and effects of existing and proposed regulations that could impact business significantly, e.g., new business licences/authorizations; environmental regulations.
	Social and demographic risk	SOC	The risk that changes in demographic/cultural and social variables can impact the customer base and work force.	Identity and effects of key social/cultural and demographic trends that could alter demand for products/services or change buying venues, e.g. family structures, social mobility, lifestyle changes, level of education, population demographics, etc.
	Climatic and catastrophic risk	CATA	The risk that major disasters and adverse climatic conditions threaten the firm's ability to sustain operations and provide products and services.	Identity and effects of severe climatic conditions, and natural disasters, e.g. unusual and/or unfavourable weather conditions, storms, natural seasonal patterns, etc.
	Industry structure risk	IS	The risk that changes in industry underlying factors could affect corporate performance.	Description and effects of changes in supply and demand (e.g. market growth demand below expectations, cyclical trends etc.); prevailing conditions and trends in the macro-economic environment (e.g., level of unemployment, GPD trends, rates).

References

Abid, A. & Shaiq, M. (2015). A Study of Risk Disclosures in the Annual Reports of Pakistani Companies: A Content Analysis. *Research Journal of Finance and Accounting,* 6 (11), 14-24.

Abraham, S. & Cox, P. (2007). Analysing the determinants of narrative risk information in UK FTSE 100 annual reports. *British Accounting Review*, 39, 227-248.

Abraham, S. & Shrives, P. (2014). Improving the relevance of risk factor disclosure in corporate annual reports. *The British Accounting Review*, 46 (1), 91-107.

ACCA. (2014). *Reporting risk*. The Association of Chartered Certified Accountants, London, UK.

Ahmed, K. & Courtis, J. K. (1999). Association between corporate characteristics and disclosure levels in annual reports: a meta-analysis. *British Accounting Review,* 31 (1), 35-61.

Arthur Andersen (1998), *Operational risk and financial institutions*, Arthur Andersen.

ASB (2005). *Reporting Statement: Operating and Financial Review*, Accounting Standards Board.

ASB (2007). *A review of narrative reporting by UK listed companies in 2006*. The Accounting Standard Board, London, UK.

Beattie, V. (1999). *Business reporting: The inevitable change*. The Institute of Chartered Accountants of Scotland, Edinburgh, UK.

Beattie, V., McInnes, B. & Fearnley, S. (2004a). *Through the eyes of management: A study of narrative disclosure. Final report. Centre for Business Performance*. The Institute of Chartered Accountants in England and Wales, London, UK.

Beattie, V., McInnes, B. & Fearnley, S. (2004b), A methodology for analysing and evaluating narratives in annual reports: a comprehensive descriptive profile and metrics for disclosure quality attributes. *Accounting Forum*, 28 (3), 205-236.

Beattie, V. & Thomson, S. (2007). Lifting the lid on the use of content analysis to investigate intellectual capital disclosures. *Accounting Forum*, 31 (2), 113-216.

Beretta, S. & Bozzolan, S. (2004). A framework for the analysis of firm risk communication. *The International Journal of Accounting*, 39 (3), 265-288.

Botosan, C. A. (1997). Disclosure level and cost of equity capital. *The Accounting Review*, 72 (3), 323-349.

Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Thousand Oaks: Sage Publication.

Bukh, P.N., Nielsen C., Gormsen, P. & Mouritsen J. (2005). Disclosure of information on intellectual capital in Danish IPO prospectuses. *Accounting, Auditing & Accountability Journal*, 18 (6), 713-732.

Cabedo, J. D. & Tirado, J. M. (2004). The disclosure of risk in financial statements. *Accounting Forum*, 28 (2), 181-200.

Campbell, J. L., Chen, H., Dhaliwal, D. S., Lu, H. & Steele, L. B. (2014). The information content of mandatory risk factor disclosures in corporate filings. *Review of Accounting Studies*, 19 (1), 396-455.

CICA. (2002, revised 2004), *Management's discussion and analysis: Guidance on preparation and disclosure*. Canadian Institute of Chartered Accountants, Toronto, Ontario.

CICA. (2006). *Building a better MD&A risk disclosure*. Canadian Institute of Chartered Accountants, Toronto, Ontario.

CONSOB. (1999). *Regolamento di attuazione del Decreto Legislativo 24 febbraio 1998, n. 58, concernente la disciplina degli emittenti, Delibera n. 11971/1999*, Commissione Nazionale per le Società e la Borsa, Milano.

Cordazzo, M. (2007). Intangible and Italian IPO prospectuses: A disclosure analysis. *Journal of Intellectual Capital*, 8 (2), 288-305.

Courtis, J. K. (1999). Expanding the future financial corporate reporting package. *Accounting Forum*, 24 (3), 248-263.

Deumes, R. (2008). Corporate risk reporting. A content analysis of narrative risk disclosures in prospectuses. *Journal of Business Communication,* 45 (2), 120-157.

Elliott, R. K. & Jacbson, P. D. (1994). Costs and benefits of business information disclosure. *Accounting Horizons*, 8 (4), 80-96.

GASB. (2001). *GAS No. 5: Risk reporting*. German Accounting Standard Board. Berlin.

Guo, R., Lev, B. and Zhou N. (2004). Competitive costs of disclosure by biotech IPOs. *Journal of Accounting Research*, 43 (2), 319-355.

Guthrie, J. & Mathews, M. R. (1985), Corporate social accounting in Australia. In L. E. Preston (Ed.), *Research in corporate social performance and policy*, Vol. 7, pp. 251-277.

Haniffa, R. M. & Cooke, T. E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *Abacus*, 38 (3), 317-349.

Healy, P. M. & 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 (3), 405-440.

Hill, P. & Short, H. (2009). Risk disclosures on the second tier markets of the London Stock Exchange. *Accounting & Finance*, 49, 753-780.

Hussainey, K. & Walker, M. (2006). *The use of forward looking Key Performance Indicators by financial analysts: Evidence from high versus low growth industries*. Paper presented at the 10th Financial Reporting & Business Communication Conference, Cardiff Business School, 6-7 July 2006.

Hribar, P. (2004). Discussion of competitive costs of disclosure by biotech IPOs. *Journal of Accounting Research*, (42) 2, 357-364.

ICAEW. (1997). *Financial reporting of risks—Proposals for a statement of business risk*. Institute of Chartered Accountants in England and Wales, London, UK.

ICAEW. (1999). *No surprises: The case for better risk reporting.* Institute of Chartered Accountants in England and Wales, London, UK.

ICAEW. (2002). *No surprises: Working for better risk reporting*. Institute of Chartered Accountants in England and Wales, London, UK.

ICAEW. (2011). *Reporting business risks. Meeting the expectations*. Institute of Chartered Accountants in England and Wales, London, UK.

IASB. (2007). *IFRS 7: Financial instruments: Disclosures.* International Accounting Standards Board. London.

Kajüter, P. (2006). *Risk disclosures of listed firms in Germany: A longitudinal study*. Paper presented at the 10th Financial Reporting & Business Communication Conference, Cardiff Business School, 6-7 July 2006.

Krippendorff, K. (2004). *Content analysis: An introduction to its methodology,* 2nd Ed. Sage Publications, Beverly Hills, CA.

Lajili, K., & Zéghal, D. (2005). A content analysis of risk management disclosures in Canadian annual reports. *Canadian Journal of Administrative Sciences*, 22 (2), 125-142.

Linsley, P. M. & Shrives, P. J. (2005). Examining risk reporting in UK public companies. *The Journal of Risk Finance*, 6 (4), 292-305.

Linsley, P. M. & Shrives, P. J. (2006). Risk reporting: A study of risk disclosures in the annual reports of UK companies. *British Accounting Review*, 38 (4), 387-404.

Linsmeier, T. J., Thornton, D. B., Venkatachalam, M. & Welker, M. (2002). The effect of mandated market risk disclosures on trading volume sensitivity to interest rate, exchange rate, and commodity price movements. *The Accounting Review*, 77, 343-77.

Markus, J. M. & Adler, R. W. (1998). Exploring the reliability of social and environmental disclosures content analysis. *Accounting, Auditing & Accountability Journal*, 12 (2), 237-256.

Rajgopal, S. (1999). Early evidence on the informativeness of the SEC's market risk disclosures: the case of commodity price risk exposure of oil and gas producers. *The Accounting Review*, 74, 251-80.

Richardson, S. (2001). Discretionary disclosure: A note. *Abacus*, 37 (2), 261-280.

Schrand, C. M. (1997). The association between stock-price interest rate sensitivity and disclosures about derivative instruments. *The Accounting Review*, 72, 87-109.

Schrand, C. M. & Elliott, J. A. (1998). Risk and financial reporting: A summary of the discussion at the 1997 AAA/FASB conference. *Accounting Horizons*, 12 (3), 271-282.

Scott, W. A. (1995). Reliability of content analysis: The case of nominal scale coding. *Public Opinion Quarterly*,

19, 321-325.

SEC (1997). *FRR 48: Disclosure of accounting policies for derivative financial instruments and derivative commodity instruments and disclosure of quantitative and qualitative information about market risk inherent in derivative financial instruments, other financial instruments, and derivative commodity instruments*. Securities and Exchange Commission.

Solomon, J. F., Solomon, A., & Norton, S. D. (2000). A conceptual framework for corporate risk disclosure emerging from the agenda for corporate governance. *British Accounting Review*, 32, 447-478.

Verrechia, R. E. (2001). Essays on disclosure. *Journal of Accounting and Economics,* 32, 97-180.

Wallman, S. M. (1996). The future of accounting and financial reporting Part II: The colorized approach. *Accounting Horizons*, 10 (2), 138-148.

Weber, R. P. (1985). *Basic content analysis, quantitative applications in the social sciences*. Sage Publications, Beverly Hills, CA.