FIRM DETERMINANTS OF RISK DISCLOSURE: EVIDENCE FROM ITALIAN LISTED COMPANIES

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Abstract

The purpose of the paper is to investigate the relationship between firm characteristics and risk disclosure in the Italian context. Analysing a sample of 183 non-financial Italian listed companies, a regression model was run to examine the influence of some firm determinants, such as size, industry, board of directors independence, ownership structure and leverage (independent variables), on the extent of risk disclosure measured through an index based on the information disclosed in annual report (dependent variable). In particular, from the methodology standpoint, both the bivariate (Pearson correlations) and the multivariate (OLS regression model) statistics have been used, while content analysis was carried out to find the useful information to build the risk index.

Findings show a positive relationship between firm size and the extent of risk disclosure. Contrarily, there is no statistically significant evidence between information provided by Italian companies regarding their risks and the other firm determinants. The results suggest that, in the Italian context, despite the recent interventions from the legislator to improve risk disclosure in corporate reporting, there is a remarkable difference between the disclosure provided by large and small sized companies. The findings could be conducive for regulators and policy-makers, in order to enhance risk disclosure practices and to enhance transparency in the annual report.

Keywords: Risk Disclosure, Board of Directors, Ownership Structure, Italy

1. INTRODUCTION

Over recent years, financial crisis and changes of the global economy increased the attention on risk disclosure. Corporate risk disclosure allows investors to meet their request for information, to assess the overall performance of the management, to understand the results of the financial statements and to formulate considerations regarding the prospective trend of the company, highlighting the variables that can influence future income and financial results. Furthermore, better disclosure allows to reduce information asymmetries and increase transparency of financial statements (Lajili & Zéghal, 2005; Marshall & Weetman, 2007; Dobler, 2008; Campbell et al., 2014; Elshandidy & Shrives, 2016), improving the functioning of markets, favoring a better allocation of resources and reducing the cost of capital (Akerlof, 1970; Botosan, 1997; Solomon et al., 2000; Healy & Palepu,

2001; Magnan & Markarlan, 2011). Some authors state that the demand for disclosure increases due to agency conflict and information asymmetry (Jensen & Meckling, 1976; Healy & Palepu, 2001). However, several studies state that many companies do not disclose information that could bring advantages to competitors or have potentially negative effects (Edwards & Smith, 1996; Linsley & Shrives, 2005).

Furthermore, when analysing the risk information, it is important to consider the company characteristics, country of origin, as the other factors can affect the demand for information from investors and the disclosure procedures set by the regulators (Rajab & Handley-Schachler, 2009).

Over recent years, the standard setters (e.g. ICAEW, 1997, 2011; SEC, 1997, 2010; IASB, 2014) have developed new rules for representing business risks with the aim to improve the level of disclosure and to allow investors a better knowledge of the company risk profile.

Even the world legislators have intervened on this issue through the introduction of new rules that require companies to provide in their annual report detailed information on the risks and uncertainties to which companies are exposed. In particular, the European Community has introduced strict rules (Dir. 2001/65/EU; 2003/51/EU; 2004/109/EU; 2014/95/EU) regarding the information that companies must provide in their annual reports. Italy has implemented the EU directives (Legislative Decree 394/2003, 32/2007, 195/2007, 254/2016) by introducing specific rules concerning the representation of risks and forcing some companies to improve the quality of disclosure in their reports. This paper seeks to examine the extent of risk disclosure in the annual report of the Italian listed companies.

The rest of the article is structured as follows: Section 2 describes the literature review on corporate risk disclosure and depicts the development of research hypotheses; Section 3 portrays the research design and the methodology adopted; Section 4 highlights the findings; Section 5 deals with the discussion of the main empirical evidence; lastly, Section 6 depicts the conclusion with a summary of implications, study limitations and suggestions for future research avenues.

2. LITERATURE REVIEW AND DEVELOPMENT OF HYPOTHESES

Over recent years, several studies examined the issue of risk disclosure, focusing in particular on the methods for representing information and on the relationships between the risks information disclosed and firm-specific characteristics (e.g. Marshall & Weetman, 2002; Beretta & Bozzolan, 2004; Lajili & Zéghal, 2005; Linsley & Shrives, 2006; Abraham & Cox, 2007; Hassan, 2009; Elshandidy et al., 2013). In particular, some authors focused on the advantage of risk disclosure for the stakeholders (Rajgopal, 1999; Linsley & Shrives, 2006), on the characteristics of risk disclosures (Linsley & Shrives, 2000; Linsley & Shrives, 2006) and on the relationship between the extent of risk disclosure and firm-specific characteristics, such as the industry type (Beretta & Bozzolan, 2004; Abraham & Cox, 2007), the risk level of the companies (Ahmed & Courtis, 1999; Linsley & Shrives, 2006), the board structure and the number of independent non-executive directors (Abraham & Cox, 2007; Ntim et al., 2013), the risks disclosed and the geographical contexts as well (Lajili & Zéghal, 2005; Dobler et al., 2011; Ali & Taylor, 2014; Elshandidy et al., 2015). In Italian context, several scholars looked into the risk disclosure issues focusing their attention on the determinants of disclosure and on the influence of firm characteristics over the quality and quantity of information disclosed in annual report (Beretta & Bozzolan, 2004; Allegrini & Greco, 2011; Allini et al., 2015; Malafronte et al., 2016), on the effects of regulatory upon disclosure (Greco, 2012), on the features of information provided by companies (Maffei et al., 2013), on the influence of corporate governance on risk disclosure practices (Elshandidy & Neri, 2014) and on the risk disclosure and integrated reporting (Manes Rossi et al., 2017). Drawing upon such prior studies, the main purpose of the paper is to investigate the relationship between some firm-specific characteristics and the "quantity" of risk disclosed by Italian companies,

from the entry into force of the current regulatory framework.

In particular, building on the previous studies, the following research hypotheses were set.

Size. Agency theory states that agency costs, in particular, monitoring costs, increase in relation to the number of shareholders (Jensen & Meckling, 1976). Therefore, in order to reduce information asymmetry and agent-principal conflict between managers and shareholders, companies disclose more information (Healy & Palepu, 1993, 1995, 2001). Large sized companies tend to provide better information on risks and uncertainties to satisfy the request for information from the shareholders. Several studies broke down such relationship emphasizing mixed results. In some cases, there is a positive relationship between firm size and the extent of risk disclosure (Linsley & Shrives, 2006; Dobler et al., 2011; Miihkinen, 2012; Elshandidy et al., 2013). Vice-versa, in other words, the absence of a negative association emerged (Lajili & Zéghal, 2005). Similarly, in the Italian context, findings were not univocal (Beretta & Bozzolan, 2004; Allegrini & Greco, 2011; Allini et al., 2015). Nonetheless, building on the most recent studies (Malafronte et al., 2016), a positive association between firm size and the extent of risk disclosure is expected. Therefore, the following hypothesis was posited.

H1: There is a positive relationship between firm size and the extent of risk disclosure.

Industry. Several studies analysed the relationship between industry and risk disclosure, with the aim to verify whether, in specific industries, companies disclosed more information than others. In particular, there may be companies exposed to greater risks or which receive greater attention by the stakeholders for their performance and therefore provide more information on the risks (Adams et al., 1998; Cooke, 1992). Several studies did not highlight univocal evidence, given that some scholars argued the absence of a relationship between industry and risk disclosure (Abraham & Cox, 2007). Likewise, in the Italian context, Beretta and Bozzolan (2004) did not prove any association. Conversely, other scholars showed a positive relationship between the foregoing variables. Indeed, firms belonging to the same industry disclosed similar information, as they must be compliant with the same regulatory requirements. Moreover, such firms work in similar economic context and have to manage comparable risk levels (Amran et al., 2009; Hassan, 2009). Thus, the following hypothesis was formulated.

H2: There is a positive relationship between the industry and the extent of risk disclosure.

Independent directors. Some authors focused their attention on the independent directors and their role in reducing the agency conflict between management and shareholders, through a reduction in information asymmetries and an improvement in financial reporting (Jensen & Meckling, 1976; Fama, 1980). In particular, they investigated whether the presence of independent directors influences disclosure practices and whether their presence on the board encourages a better corporate financial disclosure. The current empirical studies showed mixed results. In more detail, some scholars pointed out the presence of a relationship (Eng & Mak, 2003;

Barako et al., 2006; Cheng & Courtenay, 2006; Lim et al., 2007; Donnelly & Mulcahy, 2008; Oliveira et al., 2011), while others found no significant associations (Ho & Wong, 2001).

With reference to the information provided on the corporate risks, some scholars underscored a positive relationship between the number of independent non-executive directors and the extent of risk disclosure (Abraham & Cox, 2007; Baek et al., 2009; Greek, 2010; Ntim et al., 2013). In the Italian context, Allini et al. (2015) broke down to what extent board composition might condition risk disclosure levels, focusing their attention on board size, meetings, independence, multiple directorships, the presence of a woman, education and age. In particular, they found that gender, education, and age positively affect risk disclosure. Vice versa, other studies proved that board size, board meetings, board independence, and multiple directorships did not exert any influence on risk disclosure (Ntim et al., 2013; Elshandidy & Neri, 2015). Building on the former works, the following hypothesis was set.

H3: There is a positive relationship between independent directors and the extent of risk disclosure.

Ownership concentration. Some studies examined in depth the relationship between the ownership structure and the corporate level of disclosure (Tagesson et al., 2009; Reverte, 2009; Allegrini & Greco, 2013). In some cases, the results show that companies with a dispersed ownership structure provide more information than those with a concentrated one (Chau & Gray, 2002; Huafang & Jianguo, 2007). Other scholars pointed out a negative relationship between blockholder ownership and risk disclosure, given that in a circumstance of concentrated ownership structure, companies tend to disclose less risk information (Eng & Mak, 2003; Abraham & Cox, 2007; Deumes & Knechel, 2008; Donnelly & Mulcahy, 2008; Hill & Short, 2009; Elshandidy et al., 2013; Ntim et al., 2013). According to the studies above mentioned, the following research hypothesis was set.

H4: There is a negative relationship between ownership concentration and the extent of risk disclosure.

Leverage. Higher levels of debt might cause greater risks for the company and they consequently imply a growing increase of information from investors (Ahn & Lee, 2004). Current empirical evidence led to different results, highlighting the positive and negative relationships between firm debt exposure and the extent of risk disclosure (Meek, 1995; Deumes & Knechel, 2008; Hassan, 2009; Taylor et al., 2010; Oliveira et al., 2011, Dobler et al., 2011). In the Italian context, Allini et al. did not find any association. According to the prevailing literature, a positive relationship between the two foregoing variables is expected. Hence, the following research hypothesis was posited.

H5: There is a positive relationship between company leverage and the extent of risk disclosure.

3. RESEARCH DESIGN AND METHODOLOGY

The sample consists of 183 Italian non-financial firms listed on FTSE Italia All-Share Index of Borsa

Italiana S.p.A.[1] Taking into account the total amount of companies included in the foregoing index, financial (i.e. investment and holding companies, asset management companies and banks)[2] as well as other five companies were excluded, as a consequence of the unavailability of the annual report or the bias information[3]. The data refers to the annual report related to the fiscal year 2016 (namely the last available report at the time of analysis). The main data sources were both the Borsa Italiana and the corporate websites. In particular, the Borsa Italiana's website was used for picking out the sample of Italian non-financial firms and the related industries into which they work. Still, from each corporate website, the annual reports were downloaded, in order to collect the data pertinent to debt, total assets, number of shares, net asset and value, turnover and board composition. Table 1 gives an overview of the sample.

Table 1. Sample selection

Italian listed companies in FTSE MIB Index – Borsa Italiana SpA	227
- financial companies (investment and holding companies, asset management companies and banks)	(39)
- companies whose annual reports were not available or had incomplete information	(5)
Total	183

The sample is made up of 16 industry sectors, according to the classification adopted by Borsa Italiana. Table 2, on the basis of the industry, shows the sample structure.

Table 2. Categorisation of the sample, on the basis of the industry

No.	Industry	Tot.	%
1.	Utilities	16	9
2.	Telecommunications	4	2
3.	Real Estate	8	4
4.	Personal and Household Goods	25	14
5.	Industrial Goods and Services	42	23
6.	Health Care	6	3
7.	Chemicals	3	2
8.	Construction and Materials	10	5
9.	Travel and Leisure	7	4
10.	Technology	16	9
11.	Food and Beverage	8	4
12.	Automobiles and Parts	9	5
13.	Media	14	8
14.	Retail	8	4
15.	Oil and Gas	5	3
16.	Basic Resources	2	1
	Total	183	100

A risk disclosure framework was used, in order to include both mandatory and voluntary risk information (Beretta & Bozzolan, 2004; Cabedo & Tirado, 2004; Lajili & Zèghal, 2005; Linsley & Shrives, 2006; Abraham & Cox, 2007; Deumes, 2008)[4].

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[1] FTSE Italia All-Share Index of Borsa Italiana S.p.A. includes FTSE MIB, FTSE Italia Mid Cap and FTSE.

[2] Financial companies was excluded, because of different operational characteristics and types of risks.

[3] See Appendix.

[4] In particular, own elaboration drew upon the following works: Beretta and Bozzolan (2004), Lajili and Zèghal (2005), Linsley and Shrives (2006).

Table 3. Risk categories

1.	Financial
2.	Operational
3.	Macroeconomic scenario
4.	Customers and suppliers
5.	Human resources and job security
6.	Illegal acts and frauds
7.	Reputational
8.	Information processing and technology
9.	Compliance
10.	Environmental
11.	Industry
12.	Strategic

A content analysis was carried out to verify the presence or not of each risk category in the firm annual report. This method was adopted to analyse the risk disclosure narrative (Linsley & Shrives, 2006; Abraham & Cox, 2007; Ntim et al., 2013; Elshandidy et al. 2013) and allowed to examine and categorise into a specific cluster the sentences relating to risk disclosure. In particular, a dichotomous approach was used, namely: 1, if a risk category is disclosed in the annual report and 0 – otherwise. The risk disclosure was identified according to 12 risk categories (see Table 3), with the aim to build a handmade risk disclosure score, given that the information was manually analysed and gathered. In more detail, such an index was used to measure the extent of risk disclosure. In this regard, it should be noted that some prior manuscripts adopted a disclosure index as a proxy to measure the quality and quantity of risk disclosure (Botosan, 1997; Beattie et al., 2004). In this empirical study, the index derives from the following formula:

$$I_K = \frac{S}{M} \qquad (1)$$

in particular:

I_K = risk disclosure index referring to individual company K $0 \leq I_k \leq 1$

$S = \sum_{i=1}^{n}(r_i)$ = points scored by the company K

$M = \sum_{i=1}^{m}(r_i)$ = total of all risks categories (for further details, see Table 3).

"S" stems from the number of points scored by each company. The maximum score is 12, namely 1 point for each risk category identified ($0 \leq S \leq 12$). "M" represents the total of all risk categories and it was computed by assigning 1 point for each kind of risk disclosed. Therefore, the maximum score is equal to 12, namely to the sum of all risk categories (M = 12).

The size was measured by the natural logarithm of turnover (Linsley & Shrives, 2006; Beretta & Bozzolan, 2004). Instead, industry stems from the Borsa Italiana categorisation. Each industry was classified by way of a progressive number. Overall, there are 16 categories (Table 2).

The presence of independent directors derives from the ratio between the number of independents and the board size. Blockholder ensues from the ratio between the share of capital held by the first shareholder and the company's equity. Finally, leverage is equal to the ratio between the value of the liabilities and the total assets.

Table 4 sets out the dependent and independent variables included in the empirical analysis.

Table 4. Description of the variables

Variable	Measurement	Code
Dependent variable		
Risk disclosure index	Risks disclosed/total risks	RD_INDEX
Independent variables		
Size	Natural logarithm of turnover	LN_REV
Industry	Industry	IND
Independent directors	Independent directors/tot. members of board directors	NED_OVER_BOARD
Blockholder	Percentage of shares held by majority shareholder/total shares	BL_HOLD
Leverage	Debt/total assets	LEV

To verify the relationship between risk disclosure and the foregoing specific firm characteristics, a multivariate analysis was run into which the dependent variable is categorical while the five independent variables are numerical. As said earlier, the dependent variable consists of an index based on 12 risk categories (Table 3). Moreover, the independent variables are the following: size, industry, board composition, ownership structure and leverage (Table 4).

From the methodological standpoint, a cross-sectional analysis was carried out, given that the data are focused on just the fiscal year 2016. In more detail, an ordinary least squares (OLS) regression model was run, in order to explore the influence of each independent variable (i.e. size, industry, board composition, block ownership, and leverage) over company risk disclosure.

4. RESULTS

Table 5 highlights the descriptive statistics. The variable named RD_INDEX ranges from 0.08 to 1.00. In 16 cases, the index covers all the risk categories considered in the empirical research (i.e. 12 divided by 12). The mean is equal to 0.4894 namely almost half of the total number of risks considered in the empirical study. LN_REV ranges from 12.54 to 28.94 while the mean is equal to 19.4540. Still, NED_OVER_BOARD varies from 0.00% to 90.00%. The average amounts to 44.04% and shows that independent directors are below 50% of the board size. With reference to the BL_HOLD, the average (47.87%) points out a high level of concentration in the ownership structure of the companies included in the sample. At last, Leverage ranges from 0.03 to 1.56. The average (0.62) puts in evidence a high level of debt on total assets.

Table 5. Descriptive statistics

	Obs	*Min*	*Max*	*Mean*	*Std. Dev*
RD_INDEX	183	0.08	1.00	0.4894	0.2668
LN_REV	183	12.54	28.94	19.4540	2.1826
IND	183	1	17	7.63	4.5800
NED_OVER_BOARD (%)	183	0.00	0.90	0.4404	0.1785
BL_HOLD (%)	183	0.05	1.00	0.4787	0.1846
LEV	183	0.03	1.56	0.6219	0.2325

Pearson's correlations were computed among independent variables, with the aim to handle possible multicollinearity problems. Table 6 sets out the presence of a significant association between the following independent variables: LN_REV and NED_OVER_BOARD (correlation coefficient: 0.2534; p-value <0.001). Nevertheless, it is worthwhile mentioning that the foregoing Pearson's correlation coefficient is far beneath the critical threshold of |0.80| (Jing et al., 2008). Furthermore, in the following multivariate analysis, variance inflation factors tests (VIFs) were applied to further detect the reliability of findings.

Table 6. Pearson's correlation matrix

	LN_REV	IND	NED_OVER_BOARD	BL_HOLD	LEV
Correlation coefficient	1				
Sig. (2- tails)	.				
N	183				
Correlation coefficient	0.0731	1			
Sig. (2- tails)	0.3254	.			
N	183	183			
Correlation coefficient	0.2535***	-0.0851	1		
Sig. (2- tails)	0.0005	0.2521	.		
N	183	183	183		
Correlation coefficient	0.0591	0.0678	-0.0237	1	
Sig. (2- tails)	0.4269	0.3617	0.7501	.	
N	183	183	183	183	
Correlation coefficient	0.0331	-0.0053	0.0007	0.0132	1
Sig. (2- tails)	0.6561	0.9436	0.9930	0.8597	.
N	183	183	183	183	183

*Note: Significance level: *p<0.10; **p<0.05; ***p<0.001; ****p<0.0001.*

The OLS regression model is statistically significant. Indeed, F-statistics is below 0.001. In addition, R^2 is 0.1906 while R^2 *adjusted* amounts to 0.1678 (Table 7). The multivariate analysis displays that RD_INDEX positively affects LN_REV (Size). Thus, H1 is confirmed the (Beta coefficient: 0.0894; p-value 0.000). Contrarily, other empirical evidence is not statistically significant. Therefore, *H2, H3, H4* and *H5* are rejected (Table 10).

Table 7. OLS regression analysis results

Dependent variable: RD_Index	*Coefficient*	*Std. Err.*	*t*	*Prob.*
LN_REV	0.0894****	0.0161	5.55	0.000
IND	0.0880	0.0075	1.18	0.241
NED_OVER_BOARD	0.0921	0.0717	1.29	0.200
BL_HOLD	0.0015	0.0686	0.02	0.982
LEV	0.0337	0.0731	0.46	0.645
R-squared	0.1906			
R-squared adjusted	0.1678			
F-statistic	8.34****			
Prob. (*F*-statistic)	0.0000			

*Note: Significance level: *p<0.10; **p<0.05; ***p<0.001; ****p<0.0001.*

Referring to the possible presence of multicollinearity problems, the VIFs are always below 1.0 (Table 8) and resultantly far beneath the critical threshold of 10 (Hair et al., 2010). Test for heteroscedasticity shows a chi-squared of 1.65 and given that the Prob. chi-squared is greater than 0.05, the OLS regression model's assumptions are not violated (Table 9).

Table 8. Robustness tests: multicollinearity

Variable	*VIF*
LN_REV	1.08
IND	1.02
NED_OVER_BOARD	1.08
BL_HOLD	1.01
LEV	1.00

Table 9. Robustness tests: heteroscedasticity

	chi-squared	*prob. chi-squared*
Breusch-Pagan/Cook Weisberg test for heteroscedasticity	1.65	0.1991

*Note: Significance level: *p<0.10; **p<0.05; ***p<0.001; ****p<0.0001.*

Table 10. Summary of hypotheses

Hypotheses	Result
H1 - There is a positive relationship between firm size and the extent of risk disclosure.	Confirmed
H2 - There is a positive relationship between industry and the extent of risk disclosure.	Rejected
H3 - There is a positive relationship between independent directors and the extent of risk disclosure.	Rejected
H4 - There is a negative relationship between ownership concentration and the extent of risk disclosure.	Rejected
H5 - There is a positive relationship between company leverage and the extent of risk disclosure.	Rejected

5. DISCUSSION

The empirical evidence supports the hypothesis related to the presence of a positive relationship between firm size and the extent of risks disclosed, consistently with prior studies (Hossain et al., 1994; Meek, 1995; Linsley & Shrives, 2006; Elshandidy et al., 2013; Miihkinen, 2012; Al-Hadi et al., 2016). By contrast, the other determinants, such as industry, board composition, ownership structure, and leverage are not statistically significant in explaining the extent of the risk disclosure in the annual reports of Italian listed companies.

The findings suggest that in large-sized companies, due probably to the pressure of investors, directors are obliged to provide more complete disclosure in their annual reports, to more completely depict their risk profile, to reduce information asymmetries and to raise funds in international capital market (Akerlof, 1970). In line with the agency theory, to ease a good relationship with shareholders and to mitigate the principal-agent problem, large sized companies disclose more information about the situations involving exposure to risk (Jensen & Meckling, 1976). Furthermore, the demand for information from analysts and market operators and other stakeholders could be greater for large-sized companies (Houssain et al., 1994).

Findings also show that there is not an industry where firms disclosed more risk information than others (*H2*). Although the sample does not include financial companies, this could suggest that investors require the same risk information and there are no significant differences in risk disclosure provided by companies. The results pertinent to *H4* and *H5* highlight that there is no relationship with disclosure. In this regard, it is possible to hypothesize that, in the existing regulatory framework and in the current economic context, companies are obliged to provide the same risk information independently from ownership structure and financial situation.

Moreover, no statistical evidence emerged regarding board composition (*H3*). The results suggest that the number of independent directors is not able to influence the extent of risk disclosure. Additionally, further issues could arise with respect to their role in monitoring financial information process and in improving governance standards in Italian listed companies.

Based on empirical evidence, many companies do not provide enough information to allow investors to define their risk profile. The information disclosed in the annual reports is on average less than 50% (around 6 out of 12 kinds of risk categorized in the empirical analysis); the bulk of risk disclosure pertains the general risks to which Italian listed companies are exposed, such as financial, operational and market risks, while other relevant typologies are not disclosed, such as human resources and job security risks, illegal acts and fraud risks, reputational risks, information processing, technology risks, and so on (Lajili & Zèghal, 2005; Linsley & Shrives, 2006).

6. CONCLUSION

This study sought to investigate whether some firm characteristics are able to condition the extent of risk disclosure. In particular, the empirical analysis is focused on the relationship between the amount of risk disclosed in the annual report and the following firm-specific characteristics: size, industry, board composition, blockholder, and leverage. The dataset consists of Italian non-financial companies listed in FTSE Italia All-Share of Borsa Italiana S.p.A., during the fiscal year 2016. The total amount of observations is equal to 183. An OLS regression model was run to explore the foregoing relationship and a content analysis was carried out to measure the extent of risk disclosure.

The findings suggest that risk disclosure is conditioned by firm size. In particular, large sized companies disclosed more risks than the small sized. Moreover, other firm characteristics are not statically significant.

Despite the improvement of the rules regarding risk disclosure, the implications for theory and practice take root in a clear difference between large and small-sized companies with a potential and negative influence over annual report transparency, information asymmetries, reputation, cost of capital, resource allocation and well-functioning of the organizations (Botosan, 1997; Botosan 2006; Healy & Palepu, 2001; Deumes, 2008). Moreover, a poor risk disclosure does not allow both the investors and the other stakeholders to assess corporate risk profile and the key drivers that might negatively condition the future cash flow, the economic performance and value creation, especially in market uncertainty situations (Shrand & Elliot 1998; Linsley & Shrives, 2006). Drawing upon the assessment of company risk profile and the long-term financial and economic performance, investors might make their investment decisions (Cabedo & Tirado, 2004).

The main limitations regard the sample size, given that the focus is on just the FTSE Italia All-Share Index. Therefore, it is not possible to generalize the empirical evidence to the whole Italian context. Moreover, the risk disclosure framework based on Beretta and Bozzolan (2004), Lajili and Zèghal (2005), Linsley and Shrives (2006) works and used for the operationalization of the dependent variable might not reflect the effective demand for risk information deriving from investors and other stakeholders. In addition, it is worthwhile pointing out that content analysis is considered a subjective coding method to identify risk disclosed by companies (Linsley & Shrives, 2006).

Future research could look into other firm-specific characteristics of Italian listed companies or adopt qualitative research approaches with the aim

to examine in depth not only the "quantity" but also the "quality" of risk information disclosed by companies. Future studies avenues might also investigate risk disclosure behaviour of Italian companies delving, for example, into the disclosure of corporate social responsibility (CSR) risks and the information disclosed in the annual reports.

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Appendix

Companies selected

No.	Company	No.	Company
1.	A2a	44.	Centrale del Latte D'Italia
2.	Acea	45.	Cerved Information Solutions
3.	Acotel_Group	46.	Chl
4.	Acsm_Agam	47.	Cir
5.	Aedes	48.	Class Editori
6.	Aeffe	49.	Cnh Industrial
7.	Aeroporto_Guglielmo_Marconi_di_Bologna	50.	Coima Res
8.	Alerion_Cleanpower	51.	Compagnia Immobiliare Azionaria
9.	Ambienthesis	52.	D'Amico
10.	Amplifon	53.	Damiani
11.	Ansaldo Sts	54.	Danieli & C
12.	Aquafil	55.	Datalogic
13.	Ascopiave	56.	De' Longhi
14.	Astaldi	57.	Diasorin
15.	Astm	58.	Digital Bros
16.	Atlantia	59.	Edison Rsp
17.	Autogrill	60.	Eems
18.	Autostrade Meridionali	61.	Ei Towers
19.	Avio	62.	EI.En
20.	B&C Speakers	63.	Elica
21.	Basicnet	64.	Emak
22.	Bastogi	65.	Enav
23.	Be	66.	Enel
24.	Beghelli	67.	Enervit
25.	Beni Stabili	68.	Eni
26.	Best Union Company	69.	Eprice
27.	Bialetti Industrie	70.	Erg
28.	Biancamano	71.	Esprinet
29.	Biesse	72.	Eukedos
30.	Bioera	73.	Eurotech
31.	Brembo	74.	Exprivia
32.	Brioschi	75.	Falck Renewables
33.	Brunello Cucinelli	76.	Ferrari
34.	Buzzi Unicem	77.	Fiat Chrysler Automobiles
35.	Cad It	78.	Fidia
36.	Cairo Communication	79.	Fiera Milano
37.	Caleffi	80.	Fila
38.	Caltagirone	81.	Fincantieri
39.	Caltagirone Editore	82.	Fnm
40.	Campari	83.	Fullsix
41.	Carraro	84.	Gabetti
42.	Cembre	85.	Gas Plus
43.	Cementir Holding	86.	Gedi Gruppo Editoriale

No.	Company	No.	Company
87.	Gefran	136.	Pirelli & C
88.	Geox	137.	Poligrafica S Faustino
89.	Gruppo Ceramiche Ricchetti	138.	Poligrafici Editoriale
90.	Hera	139.	Prima industrie
91.	I Grandi Viaggi	140.	Prysmian
92.	Igd_Siiq	141.	Rai Way
93.	IlSole24Ore	142.	Ratti
94.	Ima	143.	Rcs Mediagroup
95.	Immsi	144.	Recordati
96.	Indel B	145.	Reno De Medici
97.	Intek Group	146.	Reply
98.	Interpump Group	147.	Retelit
99.	Inwit	148.	Risanamento
100.	Irce	149.	Roma
101.	Iren	150.	Rosss
102.	Isagro	151.	Sabaf
103.	It Way	152.	Saes Getters
104.	Italgas	153.	Safilo Group
105.	Italiaonline	154.	Saipem
106.	Italmobiliare	155.	Salini Impregilo
107.	Ivs Group	156.	Salvatore Ferragamo
108.	Juventus Football Club	157.	Saras
109.	K.R.Energy	158.	Servizi Italia
110.	La Doria	159.	Sesa
111.	Landi Renzi	160.	Sias
112.	Lazio	161.	Snaitech
113.	Leonardo	162.	Snam
114.	Luve	163.	Sogefi
115.	Luxottica	164.	Sol
116.	Maire Tecnimont	165.	Stefanel
117.	Marr	166.	Stmicroelectronics
118.	Massimo Zanetti Beverage	167.	Tas
119.	Mediacontech	168.	Technogym
120.	Mediaset	169.	Telecom Italia
121.	Molmed	170.	Tenaris
122.	Moncler	171.	Terna
123.	Mondadori Editore	172.	Ternienergia
124.	Mondo Tv	173.	Tesmec
125.	Monrif	174.	Tiscali
126.	Netweek	175.	Tod'S
127.	Nice	176.	Trevi Fin Industriale
128.	Openjobmetis	177.	Txt
129.	Ovs	178.	Unieruro
130.	Panariagroup Industrie Ceramiche	179.	Valsoia
131.	Parmalat	180.	Vianini
132.	Piaggio & C	181.	Yoox Net A Porter Group
133.	Pierrel	182.	Zignago Vetro
134.	Pininfarina	183.	Zucchi
135.	Piquadro		