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Risk Disclosure and Firm Value: Evidence from the United Kingdom

Abstract

The International Accounting Standard Board (IASB) aimed to increase the decision usefulness of firms' risk disclosures with the 2007 introduction of the International Financial Reporting Standards (IFRS) 7. Specifically, listed firms were mandated to provide information to the market on both their (1) exposure and (2) risk management, which are associated with holding their financial instruments. This study investigates whether IFRS 7 financial instruments and their disclosures are associated with firm valuation. Using data on premium-listed United Kingdom (UK) companies, for the period 2007–2019, I find evidence that firm value (proxied by Tobin's Q) is negatively associated with the quantity of IFRS 7 interest and credit risk disclosures. I further find that the market value decreases with the presence of quantitative information tabulated in the disclosures. The findings of this study have important implications for the IASB's standard-setting process.

Keywords

market valuation | risk disclosures | IFRS 7 | downside risk

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1 Introduction

The financial information concerning risks are considered as a meaningful part of financial reporting. The content of risk disclosure was mandated by the International Financial Reporting Standards (IFRS) 7 Disclosures, issued by the International Accounting Standard Board (IASB), starting from January 2007. These standards increase the confidence of investors (Easley & O'Hara, 2004) concurrently, with a diminished bid–ask spread for them (LaFond & Watts, 2008), and to increase the stock appraisal (Bushee & Miller, 2007). The risk reporting decreases the information asymmetry because the management was warned about future risks. Moreover, by disclosing all types of risks, managers can prevent a financial crisis and reduce agency costs. In reality, only 49% of risk disclosures are published, while more than half of them remain unpublished (Hellman, 2018). Moreover, only 6% of disclosures have considerable significance in the decision usefulness concerning the quotation quantity over quality (Ojo, 2010). Himmelberg, Hubbard and

Palia (1999) argued that “when shareholders are too diffuse to monitor managers, corporate assets can be used for the benefit of managers rather than for maximizing shareholders wealth”.

I expect that risk disclosures are positively associated with the firm value. Most of the shareholders have partial access to the entire financial information, and therefore managers can use a big part of private information for their own purposes (LaPorta, Lopez-de-Silanes, Schleifer, & Vishny, 1998). Finally, the information asymmetry will falsely notify the shareholders about the potential risks.

Our research contributes to the specialized literature in several ways. First, many surveys are written about risk disclosure, but less is redacted about the firm value under risk disclosure. Mokhtar and Mellett (2013) argued that risk disclosures accomplish financial reporting as they are helpful for value computation. Nevertheless, there is some evidence (Accounting Standards Board, 2009; Linsley & Shrivess, 2006) which has argued for the insignificance of risk disclosures. This article also emphasizes the firm value

arising from the quality of risk disclosures under IFRS 7. Second, this article complements the survey of Mokhtar and Mellet (2013), questioning the tendencies of the firm value regarding risk disclosure. Third, no study has yet consigned to the relationship between firm value and risk disclosure, taking into account the direct impact of agency theory.

This article is subdivided into various sections, starting with a brief literature review. After this, it is followed by Section 3, which contains the research methods, and in Section 4 are specified the results. The final section, Section 5, presents our conclusions regarding firm value under risk disclosure.

2 Background and Hypotheses Development

Starting from 1 January 2007, IFRS 7 Disclosures became the most important change in financial reporting. This new standard ensures full financial reporting and makes the informational flow more comparable. The main purpose of the regulation is to increase the level of transparency of financial statements, especially for investors, and create a predictable future performance.

IFRS 7 comprises two parts (IFRS 7, 2005): the first part concerns the significance of financial instruments on the financial position and performance and the second part specifies the nature and extent of the risks arising from financial instruments, and how to manage them.

Another classification categorizes IFRS 7 between qualitative and quantitative risk disclosures (Elliot, 2013). The content of financial risk in a company refers to quantitative disclosures, while the qualitative part indicates the aims of the managers regarding the financial risk on processes. After 2010, IASB tried to implement several changes to correlate the qualitative and quantitative parts with regard to risk disclosures (Amendments of IFRS 7, 2010).

Financial risks are classified into market, liquidity and credit risks. Market risk includes all the market changes in interest risk, currency risk and all the other types of price risks. Liquidity risk is characterized by no longer payment obligations and credit risk occurs when debtors have no liquidity and they will not pay the obligations to the company. Regarding IFRS 7 (2005), the above risks are faced by entities exposed to financial

statements, without including operational risk. In this vein, investors perform an important role to have a definite frame about the nature and content of the risk.

| H1: Risk disclosure is associated with firm value.

The information shared in financial statements based on accounting policies like impairment derivatives hedging, financial, political, economic risk management and control risk is defined as risk reporting. Explaining the risk information, the economic, social and political theories were developed in time. The first theory shows how to maximize the profit and self-interest of an entity using agent theory while the social and political theories are based on the relationship between the stakeholders and the entity concerning political approach and risk disclosure (Khelif & Hussainey, 2014). Furthermore, risk reporting promotes scrupulous risk management, to connect the process and enhance the control transfer to help managers with the considered information, which will increase the value of a company.

Additionally, stakeholders desire to receive risk information for good judgment about the trading size and time and it is claimed that transparent disclosures protect investors by increasing the accountability of the company (Liu, 2006).

Mihkinen (2013) shows that the level of quality of risk disclosures decreases information asymmetry and risk disclosures are more helpful for small firms. In the same area, Al-Shammari (2014) emphasized a positive association with firm characteristics like size, complexity, liquidity and auditor type and an insignificant association with other aspects like leverage, profitability and corporate risk disclosure.

Although the business risk is known to everyone, corporate scandals have increased in time the interest for risk management and risk reporting. Having a big impact, risk disclosures are the subject of many accounting regulators and accounting professional bodies, such as the American Accounting Association (AAA), Financial Accounting Standard Board (FASB), IFRS, the Institute of Chartered Accountants in England and Wales (ICAEW), Chamber of Financial Auditors of Romania (CAFR) and the Body of Licensed Accountants and Expert Accountants in Romania (CECCAR). These accounting regulators propose to fill the gap in risk information in annual reports (Schrand and Elliott, 1998). Linsley and Shrives (2000) motivated this disparity for companies to be exposed to uncertainties and more volatility.

To respond to the stock market requirements, companies need the freedom to report the risk information and disclosures of the entity, which becomes a very important tool to transmit the risk information to stakeholders (Elshandidy, Fraser, & Hussainey, 2013). Schrand and Elliott (1998) defined risk disclosures as all types of information that are shared in financial instruments dealing with affair uncertainties. The characteristics of large companies, being complex and having varied operations, increase the level of risk and degree of information asymmetry regarding the investors (Deumes & Knechel, 2008). In accordance with the agency theory, Watts and Zimmerman (1983), Watts and Zimmerman (1986) associated risk reporting with a lower level of information asymmetry between the management and shareholders. Elzahar and Hussainey (2012) argued that agency costs increase with a high leverage ratio.

H2: The association between risk disclosure and firm value is stronger for firms with higher levels of information asymmetry.

Information asymmetry is defined as a moral hazard, which leads to poor-quality service (Holmstrom, 1985), and can be diminished by specifying contingencies and liabilities in firms' contracts (Barzel, 1982). The impossibility to foresee all the contingencies and unfavourable standing of existing services determine the actual asymmetry. The degree of information asymmetry is positively associated with service characteristics (Zeithaml, 1981). The ratio of market to book (M/B) value, extended by Tobin's Q (Lindenberg & Ross, 1981), is used to measure the firm value. Even if we include a systematic risk adjustment (Wernerfelt & Montgomery, 1988), Tobin's Q aids to focus on the firm value. Panzar and Willig (1981) found that information asymmetry is better in performance than in economies of scope.

Agency theory has an important role in monitoring the information asymmetry and larger companies are motivated to disclose more information (Souissi & Khelif, 2012). In this vein, the degree of firm value will increase for listed and large companies because of direct access to financial information (Watson, Shrivess, & Marston, 2002). Aljifri (2008) also finds a negative relationship between a firm's size and firm value while studies by Oliveira et al. (2011) find no correlation.

Companies characterized by an increased level of leverage rate seem to be better than risky (Oliveira et al., 2011), which leads to high agency costs (Elzahar

& Hussainey, 2012). As for the association between leverage ratio and risk disclosure, a study by Abraham and Cox (2007) concludes a positive relationship, while the studies by Miihkinen (2012) and Ntim et al. (2013) find no evidence.

With respect to agency theory, managers should issue risk information to diminish information asymmetry (Elshandidy et al., 2013) and reduce uncertainties (Hassan, 2009), which lead to a better assessment of the company. Reporting risk information implies more perspectives for investors (Iatridis, 2008) and a lower degree of information asymmetry.

The association between firm value and risk disclosure remains significant, taking into consideration three industry types as follows: financial companies, non-financial companies and a combination of them. We compute the size of an entity as market capitalization, which is linked to investors' responses concerning risk disclosure correlated with aggregated assets. Furthermore, the total assets extend the endurance of a firm's position (Mokhtar & Mellett, 2013) and so the firm value.

3 Data, Descriptive Statistics and Research Design

3.1 Sample selection

To test the firm value under risk disclosures and firm characteristics and to observe the direct consequences of the adoption of IFRS 7 Financial Instruments: Disclosures, we use a sample of UK entities in the period 2007–2019. We draw the sample testing the firm value with available database from DataStream and Thomson Reuters for the selected years using the companies' ISIN as external key.

For each company, we gathered financial disclosures mandated by IFRS 7, computing Tobin's test to observe the dynamics of firm value based on other independent variables such as *Currency_risk*, *Credit_risk*, *Hardscore* and *Total_numbers_of_words* and firm characteristics such as *Vol* (Volatility), *Size* (Size), *Leverage* (the effect of leverage), *Age* (Firm's registration) and *Sales_growth* (Sales).

After removing the missing financial data, we obtained a total sample of 5,040 observations. Totally, our sample is limited by the disposability of the spread of the DataStream database.

3.2 Specification of the empirical model

The relationship between firm value and IFRS 7 Financial Instruments: Disclosures can be understood by the following equation:

$$Tobin's\ Q_{i,t} = \alpha + \beta_1 IFRS\ Risk_{i,t} + \beta_2 Firm\ controls_{i,t} + \beta_3 Industry\ fixed\ effects_{i,t} \quad (1)$$

where the dependent variable *Tobin's Q* designates the *MTB_Market To Book Value* computed as the sum of *MVC_Market Capitalization* and *TL_Total Liabilities* lagged by *TA_Total Assets* of a company (*Tobin's Q* (MVC_{TL}/TA)). The independent variables are *Size* or *TA_Total Assets*, *Age* or *Date* (Years), *Vol_Volatility* and the *NL_Growth of Sales* as the annual growth rate of the company's total sales (%), winsorized at 1% at each end of the total distribution. At the same time, the firm value can be affected by firm characteristics such as size, leverage, sales growth, age and volatility.

To measure the entity's performance, we computed Tobin's Q, which is also used by researchers as the dependent variable. The Tobin's Q ratio was popularized by James Tobin, Nobel laureate in Economics, from Yale University. In 1966, Nicholas Kaldor published it in an academic announcement, although this ratio is attributed to Tobin. The same ratio is known as "Kaldor's v", from his first creator. The Tobin's quotient is equal to the market value of a firm divided by the costs of asset replacement.

Tobin's Q quantifies the performance of companies by market-based measures. This quotient is used as a proxy to evaluate the firm's assets and it can be computed in various ways. In the same vein, we can compute the return on investment (ROI) or return on equity (ROE). For example, the amortization in the formula ROI is used like a non-operating element.

The independent variables are *Volatility*, *Sales Growth*, *Size*, *Leverage* and *Age* of the entity. The literature defines control variables as those that can influence our dependent variable even if the control variables remain constant. The apportionment of shares between the shareholder and the company remains an unsolved problem, which can negatively influence the firm value (Berle & Means, 1932; Jensen & Meckling, 1976). In this equation, the shareholders choose to maximize their part and the managers trace self-interest. An ethical problem can arise when they cannot manage inside the company. In 1988, Mork, Shleifer, and Vishny argued about a positive relationship between firm value and risk disclosure.

4 Results

The first hypothesis argues that risk disclosure is associated with firm value for the analyzed period, 2007–2019, for all listed UK companies, which trade Premium Shares. Taking into consideration the result of Tobin's Q, we can explain the significant positive association with the firm characteristic of risk disclosure as *Leverage* and *Age*, where the *p*-value is <0.001. I find evidence that firm value is negatively associated with the quantity of IFRS 7 interest and credit risk disclosures. Instead of negative augmentation of the *Volatility*, we can observe an appropriate negative ratio for *Size* and *Sales growth* as we expect towards the literature terms. We conclude that the market value decreases with the presence of quantitative information tabulated in the disclosures.

4.1 Descriptive statistics

We begin by estimating some regressions of the firm value measured by Tobin Q. Table 1 presents a summary of statistics for all the independent variables and the computed dependent variable, for the period 2007–2019. We control for risk disclosure, the following variables: *Currency_risk*, *Credit_Risk*, *Liquidity_risk*, *Hardscore* and *Total_numbers_of_words*. Regarding firms characteristics, we control for firm *Size*, *Sales_growth*, *Age*, *Leverage* and *Volatility* for using to test the firm value (e.g., Adams & Ferreira, 2009). Ultimately, we comprise industry and fixed effects, computing robust standard errors for every firm (Petersen, 2009).

4.1.1 Main findings

Table 2 describes the results of our computation of Equation (1) – the direct impact of IFRS 7 Financial Instruments: Disclosures in firm value. The coefficient of M/B value remains positive and significant. The present result emphasizes the correlation between the dependent variable – Tobin's Q, independent variables – *Leverage*, *Age*, *Sales_growth*, *Total_numbers_of_words* related by risk disclosure and control variables – *Volatility*, *Hardscore* and *Currency_risk* related by risk disclosure.

In Table 2, we can observe the outcome for the dependent variable (Tobin's Q) and independent variables for firm characteristics and risk disclosure.

Tab. 1. Summary statistics: Firm value

Variable	Mean	Var	SD	Min	Max	Sum
TobinQ	0.599027	0.060885	0.24675	0.0904696	1.498183	1737.179
<i>Currency_risk</i>	337.9087	65,588.8	256.1031	0	1,211	909,988
<i>Credit_risk</i>	254.4588	33,803.9	183.8584	0	890	685,003
<i>Liquidity_risk</i>	289.2518	46,472.65	215.5752	1	732	778,955
<i>Hardscore</i>	2.463424	2.518443	1.58696	0	6	6,634
<i>Total_numbers_of_words</i>	1,664.364	826,869	909.3234	248	4,553	4,482,133
<i>Size</i>	14.02631	2.972186	1.724003	9.904737	18.39878	46,960.07
<i>Sales_growth</i>	9,982.709	1.95E12	1,395,131	-1.35E07	5429232	3.21E07
<i>Age</i>	47.10369	1,253.893	35.41035	4	136	154,453
<i>Leverage</i>	0.576811	0.055007	0.234535	0.0821182	1.354258	1,931.164
<i>Volatility</i>	24.09152	188.683	13.73619	0	54.08	83,308.48

The table shows the summary statistics for firm value concerning risk disclosures and firm characteristics.

***, ** and * specify the significance at 1%, 5% and 10% level, respectively.

We note that the coefficient for *Currency_risk* is negative and significant at the 1% level. The positive impact from *Hardscore* and *Total_numbers_of_words* for firm value is economically significant at 0.0189 and 0.0259, respectively, in Tobin's Q equation.

The age and the leverage firm is significant and positive, prescribing that older firms with an increased effect of leverage attain a higher degree of valuation as other empirical studies find the same evidence (Abraham & Cox, 2007). Regarding the firm size and sales growth, the results suggest a negative association, which achieve lower valuations. Moreover, some findings show the same association as those of Lajili and Zeghal (2005), Skinner (1994) or Hill and Short (2009).

Table 3 presents the firm fixed effects. To include the firm fixed effects would bring additional variables of around 400. Considering that the sample size is 1685 and 1977, respectively, we decide not to include them.

The results from Table 4 show that there is a positive and significant association between *Total_numbers_of_words*, *Age* and firm value. Entities with a high degree of risk will try to raise the risk disclosures that the uncertainties will be reduced among investors, taking into consideration a better assessment of risk by the market (Hassan, 2009).

Hypotheses 1 is validated in Table 2, where the coefficient for *Currency_risk* is negative and significant at the 1% level. The positive impact from *Hardscore* and *Total_numbers_of_words*, for firm value is economically significant with 0.0189 and 0.0259, respectively, in Tobin's Q equation. Table 4 shows the results for the testing of Hypothesis 2; the association between risk disclosure and firm value is stronger for firms with higher levels of information asymmetry, measured by the positive and significant association between *Total_numbers_of_words*, *Age* and firm value.

5 Conclusions

The achieved result emphasizes the correlation between the dependent variable – Tobin's Q, independent variables – *Leverage*, *Age*, *Sales_growth* and *Total_numbers_of_words* related by risk disclosure and control variables – *Volatility*, *HardScore* and *Currency_risk* related by risk disclosure. I find evidence that firm value (proxied by Tobin's Q) is negatively associated with the number of risk disclosures. We examine the impact of risk disclosure and firm characteristics on firm value. We find that the coefficient for *Currency_risk* is negative and significant at the 1% level. The positive impact from *Hardscore* and *Total_numbers_of_*

Tab. 2. Firm characteristics measured by risk disclosure and firm characteristics

	Tobin's Q	
	(1)	(2)
<i>Currency_risk</i>	-0.0675*	-0.0310**
	(0.0271)	(0.0115)
<i>Credit_risk</i>	0.0569*	-0.0318**
	(0.0253)	(0.0106)
<i>Liquidity_risk</i>	-0.0227	0.00715
	(0.0208)	(0.00892)
<i>Hardscore</i>	0.0189	-0.0273***
	(0.0155)	(0.00688)
<i>Total_numbers_of_words</i>	0.0259	0.0730***
	(0.0356)	(0.0150)
<i>Size</i>		-0.0109
		(0.00894)
<i>Sales_growth</i>		-0.00197
		(0.0110)
<i>Age</i>		0.0833***
		(0.0101)
<i>Leverage</i>		0.880***
		(0.00963)
<i>Volatility</i>		0.0176
		(0.0111)
Constant	0.594***	0.0850
	(0.158)	(0.0741)
Industry fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
<i>N</i>	1977	1685
Adj. <i>R</i> ²	0.119	0.862

This table emphasizes the OLS regression estimation outcomes of firm value. Standard errors are grouped for every firm and *t*-statistics are in brackets.

***, ** and * specify the significance at 1%, 5% and 10% level, respectively.

Tab. 3. Tobin's Q: firm fixed effects

	Tobin's Q	
	(1)	(2)
<i>Currency_risk</i>	-0.0339	-0.0282*
	(0.0263)	(0.0137)
<i>Credit_risk</i>	0.0114	-0.00587
	(0.0251)	(0.0127)
<i>Liquidity_risk</i>	-0.00418	0.00620
	(0.0155)	(0.00779)
<i>Hardscore</i>	-0.0178	-0.0103
	(0.0168)	(0.00887)
<i>Total_numbers_of_words</i>	0.0474	0.00114
	(0.0324)	(0.0162)
<i>Size</i>		0.118***
		(0.0344)
<i>Sales_growth</i>		0.00901
		(0.00646)
<i>Age</i>		-0.0282
		(0.471)
<i>Leverage</i>		0.845***
		(0.0124)
<i>Volatility</i>		0.0290**
		(0.0110)
Constant	0.566	-0.0154
	(0.426)	(0.792)
Industry fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
<i>N</i>	1,977	1,685
Adj. <i>R</i> ²	0.800	0.960

The table shows firm fixed effects regression estimation outcomes of firm value scales on risk disclosures and firm characteristics.

***, ** and * specify the significance at 1%, 5% and 10% level, respectively.

Tab. 4. Alternatives measures of firm value

	Tobin's Q
	(1)
<i>Hardscore</i>	-0.0294*** (0.00658)
<i>Total_numbers_of_words</i>	0.0409*** (0.0105)
<i>Size</i>	-0.0158 (0.00847)
<i>Age</i>	0.0870*** (0.00936)
<i>Leverage</i>	0.869*** (0.00917)
Constant	0.109* (0.0508)
Industry fixed effects	Yes
Year fixed effects	Yes
<i>N</i>	1,828
Adj. <i>R</i> ²	0.859

The table shows OLS regression estimation outcomes of firm value measures on *Hardscore*, *Total_numbers_of_words*, respectively, *Age*, *Leverage* and *Size*.

***, ** and * specify the significance at 1%, 5% and 10% level, respectively.

words, for firm value, is economically significant at 0.0189 and 0.0259, respectively, in Tobin's Q equation. The age and the leverage firm are significant and positive, prescribing that older firms with an increased effect of leverage attain a higher degree of valuation. I further find that the market value decreases with the presence of quantitative information tabulated in the disclosures. We can conclude that the firm value is increased by risk disclosure and firm characteristics as *Age* and *Leverage* firm.

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