Management Characteristics, Risk Disclosure Quality and Liquidity: A Practical Evidence from the Egyptian Business Environment

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Abstract:

Purpose: To examine the relation between management characteristics and risk disclosure quality, and to further analyze its impact on liquidity in a sample of non-financial companies listed on the Egyptian Stock Exchange.

Design and methodology: The study used content analysis to examine the annual reports for a sample of Egyptian non-financial firms that are listed on the Egyptian Stock Exchange in the period from 2019 to 2021, with a total number of 345 observations. The study depended on this sample to test the hypotheses reflecting the relationship between management characteristics and risk disclosure quality, as well as the impact of risk disclosure quality on the decision to manage liquidity. Multiple regression was used to analyze the results of the study models.

Findings: The results showed a significant relation between the quality of risk disclosure and the percentage of non-executive board members, board size, the quality of the audit committees, the presence of a risk management committee while it was negatively related with the dual role of the CEO. Additionally, the results indicated that risk disclosure quality affects management decisions when determining the liquidity level. Accordingly, the study recommends that Egyptian companies should be motivated to disclose risk information whether financial or non-financial to the level that will not affect their competitive position, and that an accounting standard should be developed to regulate risk disclosure practices and their accounting treatments.

Study limitations: The study is limited to examining the relation between management characteristics and risk disclosure quality in a sample of listed non-financial Egyptian companies in the period from 2019 to 2021, as well as analyzing the impact of such disclosure on management's decision when setting the level of liquidity.

Practical implications: This study can benefit Egyptian regulatory and professional bodies in developing an accounting standard to regulate risk disclosure practices and their accounting treatments, it can also benefit companies in their efforts to enhance their financial flexibility and accessing external financing sources.

Originality: This study contributes to the accounting literature by investigating the relation between management characteristics and risk disclosure quality. Additionally, it analyzes the impact of risk disclosure quality on liquidity in an Egyptian context, as an example of emerging economies.

Keywords: Risk disclosure quality, management characteristics, liquidity, Egyptian business environment.

خصائص الإدارة، جودة الإفصاح عن المخاطر، السيولة:أدلة عملية من بيئة الأعمال المصرية

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ملخص البحث:

الهدف: استكشاف العلاقة بين خصائص الإدارة وجودة الإفصاح عن المخاطر، وتحليل أثرها على السيولة في الشركات غير المالية المقيدة بالبورصة المصرية.
التصميم والمنهجية: اعتمدت الدراسة على مدخل تحليل المحتوي في فحص التقارير السنوية للشركات غير المالية المقيدة بالبورصة المصرية خلال الفترة من (عام ٢٠١٩ حتى عام ٢٠٢١)، بإجمالي مشاهدات (٣٤٥) مشاهدة، لاختبار فروض البحث التي تعكس العلاقة بين خصائص الإدارة وجودة الإفصاح عن المخاطر، وكذلك أثر جودة هذا الإفصاح على قرار إدارة السيولة داخل الشركة، وتم استخدام أسلوب الانحدار المتعدد في تحليل النتائج.
النتائج والتوصيات: تشير نتائج هذا البحث إلى ارتباط جودة الإفصاح عن المخاطر بعلاقة موجبة وذات دلالة معنوية بكل من نسبة الأعضاء غير التنفيذيين بالمجلس، وحجم مجلس الإدارة، وجودة لجان المراجعة، ووجود لجنة لإدارة المخاطر في حين ترتبط بعلاقة سالبة وذات دلالة معنوية بكل من ازدواج دور المدير التنفيذي الأول،

كما أنَّ جودة الإفصاح عن المخاطر يؤثر على قرارات الإدارة في تحديد حجم السيولة. **واستنادًا إلى ذلك توصي الدراسة** بأهمية تحفيز الشركات المصرية للإفصاح عن المخاطر المالية وغير المالية بما لا يضر مركزها التنافسي، وإصدار معيار مستقل ينظم الجوانب المحاسبية لممارسات الإفصاح عن المخاطر.

حدود الدراسة: تقتصر الدراسة على استكشاف العلاقة بين خصائص الإدارة وجودة الإفصاح عن المخاطر في الشركات غير المالية المقيدة بالبورصة خلال الفترة من عام (٢٠١٩ حتى عام ٢٠٢١)، وكذلك تحليل أثر هذا الإفصاح على قرار الإدارة في تحديد حجم السيولة.

تطبيقات عملية: قد تكون هذه الدراسة محل اهتمام الهيئات الرقابية والمهنية المصرية لوضع معيار ينظم معالجتها محاسبيًا وكذلك محل اهتمام الشركات حيث تدعم المرونة المالية لها، وتعزز من وصولها لمصادر التمويل الخارجية.

الأصالة والإضافة: تُسهم هذه الدراسة في الأدب المحاسبي من خلال استكشافها للعلاقة بين خصائص الإدارة وجودة الإفصاح عن المخاطر، وتحليل أثر جودة هذا الإفصاح على السيولة في بيئة الأعمال المصرية، كمثال لاقتصاديات الدول الناشئة.

الكلمات المفتاحية:

جودة الإفصاح عن المخاطر، خصائص الإدارة، السيولة، بيئة الأعمال المصرية.

1.Introduction:

The importance of risk disclosure is highlighted by its role in enhancing the efficiency of financial market and helping investors in assessing the size and timing of company's future cash flows, its operations’ sustainability and forecasting of stock returns, which is reflected on investment decisions efficiency (Bischof et al., 2021; Al-Hadi et al., 2016). On the other hand, it can also help companies in improving financial flexibility by decreasing investors' demand for additional information and therefore reducing information asymmetry, agency costs and cash holdings (Nahar et al., 2016b,Serrasqueiro & Oliveira,2022). Risk disclosure can also help in improving risk management strategies practices and enhancing the effectiveness of managers when dealing with risks, and therefore companies' can have more access to various sources of funds and will be more able to restructure their financing at lower cost.

In the efforts of enhancing both the quality and transparency of risk information disclosure, risk disclosure practices became the target of many professional organizations and regulatory bodies. An example on this attention is the (ICAEW) study in 1997 which emphasized on the need of public companies to disclose various risks that they face. Additionally, The International Accounting Standard Board (IASB) published the Management Commentary guidelines in 2010, this guidelines have encouraged companies to disclose description of resources, risks and how they are managed in addition to information on key factors that may affect corporate value (IASB, 2010). IASB has also issued three standards on the presentation and measurement of financial instruments (IAS32, IAS39 and IFRS7). Moreover, The Canadian Institute of Chartered Accountants (CICA) has issued in 2009 an explanation for the management discussion and analysis (MD&A) for that have pointed to risk disclosures.

At the Egyptian context, there have been some attempts for enhancing risk disclosure, examples are some Egyptian Accounting Standards (EASs), such as (EASs 7, 13, 25 and 26). The Capital Market Act No. 95 of 1992 also noted in Article 6 that "companies must disclose risks in a timely manner for any material events that may affect their performance."

The Egyptian Guide to Corporate Governance (Issue III, 2016) in section (2.3.4) has also referred to the formation of a risk management committee of non-executive and independent board members, among the committee roles is developing procedures to deal with all types of risks that can face the company, identifying and evaluating the level of risks that the company can accept, and supervise and verify the effectiveness of the company's risk management.

In the same context Neifar and Jarboui (2017) and Al-Maghzom et al., (2016) have provided empirical evidence on the significance of risk disclosure (from the agency's theory perspective) by contributing to solving both the adverse selection and moral hazard problems that may appear between managers and stakeholders by reducing conflicts of interest (Nahar et al., 2016a), risk disclosure can also serves as a signal to funds providers for the management's ability on dealing with any risks, and in assessing the effectiveness of risk management systems, and can therefore contributing decrease costs of capital and better financial flexibility (Hussein, 2021). Furthermore, risk disclosure quality can lead to better risk management ability, improved accountability, financial reporting quality, , investor protection and stability (Zou, 2022; Elzahar and Hussainey, 2012).

Based on the previous discussion there are several motives for this study, among them is the variation in the prior research findings related to the relation between management characteristics and risk disclosure quality, so more research in this area is required. Consequently, further analysis of this relationship especially in the Egyptian context can help in improving the transparency of disclosure, which can also be reflected on decisions related to manage liquidity. Moreover, providing clearer image on the overall strategy of risk disclosure is necessary for the development of financial reports. The absence of an Egyptian accounting standard regulating risk disclosure also presents another motive for this study, and therefore the research gap can be highlighted by the scarcity of accounting literature on the relation between management characteristics and risk disclosure quality from one side and liquidity from the other side especially within the Egyptian business environment, as an example of emerging economies.

The rest of the study will be structured as follows: section 2 represents a discussion on the relation between management characteristics and risk disclosure quality. Section 3 discusses the impact of risk disclosure quality on liquidity, while section 4 highlights prior research around the study topic and the development of the study. Section 5 introduces the research methodology, and section 6 the findings of the empirical study and testing the study hypothesis. Finally, section 7 which represents a summary for the study results.

2.The Relation between Management Characteristics and Risk Disclosure Quality

Risk disclosure quality refers to the information provided by a company in its annual report and describes major risks to which the company is exposed, the ways it manages its risks, and these risks expected economic impacts on the company’s current and future performance. This information should be characterized by the primary qualitative characteristics and the secondary qualitative characteristics, which contributes to reducing the level of uncertainty around the company's activities (Marzouk, 2016; Mokhtar and Mellett, 2013),

Prior accounting research has introduced many theories that explain companies' motivations for improving the quality of risk disclosure. For example, Taylor et al., (2010) suggested that according to Agency Theory companies disclose information related to its activities in order to reduce agency costs and therefore reduce conflicts between management and shareholders. As managers needs to convince shareholders how they that they seek to achieve their interests and this disclosure can contribute to reducing the level of uncertainty associated with the companies' future performance (Buckby et al., 2015). Signaling Theory on the other hand suggests that management usually tends to disclose information on risks to send signals to the market on the company's ability to deal with these risks and it will be able to protect and create value for investors when compared to other companies (Abdullah and Shukor, 2015). Legitimacy Theory also proposes that a company tends to disclose information related to potential risks and threats to gain solid shareholder support, and to legalize many of its actions and to avoid litigation and reputational costs. Further, Stakeholder Theory argues that management has ethical obligations to stakeholders, accordingly it must disclose risk information to stakeholders in order to help them make decisions and to preserve their wealth, which is reflected in an increased trust between the company and stakeholders and an improved reputation (Habbash et al., 2016). Finally, Political and Positive Theories suggest that companies are politically sensitive , which may result in wealth transfers, so they may be inclined to disclose information risks in order to avoid further political considerations and reduce monitoring costs, as well as to avoid damaging its reputation (Nahar et al., 2020).

Accounting literature has been concerned with analyzing the relationship between management characteristics and risk disclosure quality. For example when considering board size, companies with higher number of board members, will be characterized by a variety of experiences and among their board members. This will most probably enhance monitoring activities efficiency and the company's disclosure policy, which can positively affect risk disclosure quality, however, this contradicts agency's theory which claims that boards with high number of members may be ineffective compared to those with smaller size (Saggar and Singh, 2017; Elshandidy et al., 2013). Moreover both agency and stakeholder theories suggests that increasing the number of independent and non-executive directors contributes to reducing agency costs, provides an incentive for senior management to improve transparency of risk disclosure, to avoid the risk of damaging their personal reputation (Oliveira et al., 2011). Additionally, signaling theory argues is that diversification among board members in terms of gender, age, professional experience, and education may constitute an incentive for more risk disclosure to build good company image and enhance its performance. Finally, the separation of Chairman and CEO positions can contribute to reducing management's opportunistic practices and supports transparency of risk disclosure (Guthrie et al., 2020; Moumen et al., 2016).

3.Risk Disclosure Quality and Liquidity

Liquidity points to the ability of companies to convert their assets into cash with only the loss of minimum value (Mousa and Elamir, 2013), the assessment of liquidity performance therefore represents a superior importance to many regulators and stakeholders when assessing the solvency of a company, as low liquidity means that the company shall be unable to meet its obligations when becoming due, which can results to the loss of lenders' confidence leading to higher exposure to bankruptcy (Mokhtar and Mellett, 2013;Azevedo et al.,2022). In line with signaling theory, companies may be reluctant to disclose more information on their good performance, the strength of their liquidity positions and their ability to manage risks (Kamel and Awadallah, 2017), and in this context, it is clear that risk disclosure main aim is reducing the expectation gap between management and investors, this increases the transparency of information, reduces stakeholder concerns and makes companies more able to rely on external sources of financing, and therefore companies can hold minimal amounts of cash and only for protection purposes.

Despite of having studies on the relation between risk disclosure and the decisions related to liquidity, results are inconsistent. For example, while Elshandidy and Neri (2015) and Elshandidy et al. (2011) found evidence on a relation between them, Elzahar and Hussainey (2012) found no evidence on such relation.

4.Literature Review and Developing the Study Hypothesis

The main objective for the study conducted by Elshandidy and Neri (2015) was to analyze the effect of corporate governance mechanisms on risk disclosure practices and how this would affect market liquidity in non-financial companies within the UK and Italy with a total observations of (1,890) companies-year from (2005 to 2010). While Tauringana and Chithambo (2016) aimed to investigate the compliance of Malawi Stock Exchange-listed companies with IFRS 7 requirements of risk disclosure. The study also addressed the impact of some of the company's characteristics on risk disclosure by analyzing 39 observations (companies -year) during the period from 2007 to 2009. The study found that risk disclosure is positively and significantly related with both the percentage of non-executive directors, the company size, and debit amount, while it has a non-significant relation with the company's profitability. Furthermore, Nahar et al., (2016a) study aimed to investigate the disclosure of risk investigate and the factors affecting this disclosure for a sample of banks working in Bangladesh from 2007 to 2012. The study found evidence that risk disclosure is significantly related with the number of risk committees' members, the size of the company, board size, and the audit firm size.

Moreover, Al-Hadi et al., (2016) explored the effects of having a separate and independent risk committee and its characteristics on the disclosure of market risks during the various stages of the company's life cycle with the use of (677) observations (company – year) for a sample of financial institutions in the GCC from 2007 to 2011). The study found that having a separate and independent risk committee was positively related with the level of market risk disclosure and more clearly at the maturity stage of the company life cycle. While Moumen et al., (2016) investigated the impact of board characteristics on companies' decision to disclose information about the risks they are exposed to by analyzing 789 observations (company – year) for listed companies in various developing countries markets in the MENA region from 2007 to 2009. The study found that the quality of the board structure (board size, high non-executive board members proportion) enhances the quantity and quality of risk disclosure which can help investors in forecasting future profit growth, the study also found that the dual role of the CEO does not affect investors' confidence in disclosed risks.

On the other hand, Saggar, and Singh (2017) examined the relation between the quality of the company's governance mechanisms and risk disclosure level within non-financial companies listed on the Indian Stock Exchange. The study found that risk disclosure is significantly related to board size and gender diversity, while it is negatively related with ownership concentration. While Gulko et al., (2017) study aimed to analyze the relation between risk disclosure and corporate governance mechanisms during, pre, and post-financial crisis through analyzing the financial reports of three companies listed in the London Stock Exchange in the period from 2006 to 2009. The study found that although the level of risk disclosure increased during the financial crisis period, it declined after this crisis, and it found also that the quantity and quality of risk disclosure are positively affected by both the company size, board size and the independence of board members. Finally, Neifar and Jarboui (2017) attempted in their study to explore the effect of corporate governance mechanisms on voluntary operational risk disclosure through an empirical study on a sample of 34 Islamic banks from 2008 to 2014. The study found that there is a significant effect for both the independence of board members, the existence of a sharia monitoring system, and the size of the audit office on the disclosure of operational risks, while there was a negative effect for the dual role of CEO on this disclosure.

Based on the above, it is clear that however prior research have attempted to analyze the relationship between management characteristics, quality of risk disclosure, and liquidity, results were inconsistent, and were mainly targeting developing markets that have solid regulations and with many solid parties that have big influences on companies disclosure practices. Accordingly, there is a strong need for more research and investigation on this relation in the Egyptian business environment as one of the emerging markets that are facing liquidity problems. Additionally, this study provides a practical evidence from the Egyptian business environment on the most influential management characteristics on risk disclosure with a focus on the underlying theories that are used to explain these relationships in order to settle the continuous debate on the key determinants of risk disclosure.

4.1 Board Composition:

Following agency theory, non-executive managers have sufficient incentives to increase and improve the quality of risk disclosure, reduce the opportunistic behaviors of management, and mitigate agency conflicts, which can affect the quality of financial reports and improves the company’s market value (Moumen et al., 2016; Michelon et al., 2015). Empirically, the findings of research on the relation between board structure and risk disclosure were mixed and inconsistent. For example, the study of Abraham and Cox (2007) found that despite of the benefits (knowledge, experience, and neutrality) of the independence of directors, such benefits do not promote risk disclosure. Moreover, the studies of Allini et al., (2016) and Elzahar and Hussainey (2012) found no evidence on a relation between the percentage of independent members and risk disclosure, while the findings of Elshandidy and Neri (2015) and Moumen et al. (2016) have confirmed that board of directors structure can enhance risk disclosure so that investors can better forecast future performance. Based on the findings of these studies and following agency theory explanation the first hypothesis can be developed as follows:

There is a significant relation between the percentage of non-executive Board members and the quality of risk disclosure.

4.2 Board Size:

Both Stakeholder and Resource Dependence Theories claim that large boards have more experience and more diverse knowledge, leading to a more effective monitoring role, and higher risk disclosure levels (Moumen et al., 2016,Raimo et al.,2022). Agency theory also argues that boards with more members are less likely to be controlled or dominated by management, It will have more knowledge base that enables the board to better perform its advisory role, better distribute the workload and functions of committees, which has a positive impact on corporate disclosure practices including risk disclosure (Hussainey and Al-Najjar, 2012). In the same context many studies such as (Saggar and Singh, 2017; Ntim et al., 2013) found that board size has positive impact on the company's disclosure of risks information. On the other hand studies like that of Abou-El-Sood (2018) have criticized boards having large numbers of directors for having less cooperation between their members, the difficulty of reaching agreed on decisions, having less board cohesiveness and for the latency of actions. Finally, Elzahar and Hussainey (2012) found no relation between board size and risk disclosure level. Accordingly the second hypothesis can be structured as follows:

There is a significant relation between Board size and the quality of risk disclosure.

4.3 Risk Management Committee

Al-Hadi et al., (2016) argue that the role of Risk Management Committee in improving the quality of risk disclosure depends on the availability of some characteristics, including: independence of the committee members, qualifications and experience of members, the size of the committee, and the frequency of its meetings. In general prior research have not reached definite conclusions on the impact of having a risk management committee on risk disclosure quality. Some studies such as that of Ntim et al., (2013), Hutchinson and Ngoc(2013) and Al-Hadi et al., (2016) found that risk disclosure is positively related with the existence of a risk management committee, while other studies such as that conducted by Nahar et al., (2016b) have found no evidence that the presence of a risk management committee has any effect on the disclosure of liquidity and operational risks. Accordingly, the third hypothesis can be developed as follows:

There is a significant relation between the presence of a risk management committee and the quality of risk disclosure.

4.4 Audit Committee:

Audit committee represents an important monitoring mechanism that helps the board of directors in its responsibilities and enhances its effectiveness (Alfraih and Almutawa, 2017,Makhlouf,2022), therefore the quality of the audit committee performance can help in improving the quality of disclosure and the useability of annual reports. While Elzahar and Hussainey (2012) found that having an audit committee can enhance risk disclosure level, Mangena and Pike (2005) found that the relationship between these two variables is not significant, and Alfraih and Almutawa (2017) found that there is a little impact for having an audit committee on voluntary disclosure practices. Therefore, the fourth hypothesis can be developed as follows:

There is a positive and significant relation between audit committee quality and risk disclosure quality.

4.5 Dual role of Chief Executive Officer:

Prior accounting research have reached mixed and inconsistent findings on the relation between risk disclosure quality and the dual role of CEO (Gull et al.,2022). For example, Saggar and Singh (2017) found that companies with a separation in the roles of CEO are having higher quality in their risk disclosure compared to companies with dual roles. In the same context, Alfraih and Almutawa (2017) and that of IIhan Nas and Kalaycioglu, (2016) have found a negative relation between the duality of CEO role and both the level of risk disclosure and the company's performance. Contradictory, Vandemele et al., (2009) found a non-significant relation between the duality of CEO role and risk disclosure. Accordingly, the fifth hypothesis can be developed as follows:

There is a significant relation between the dual role of the CEO and the quality of risk disclosure.

4.6 Quality of Risk Disclosure and Liquidity:

Mainly, there are two main perspective when considering the effect of risk disclosure on liquidity. The first perspective can be explained by signaling theory, which considers any disclosure by the company in its financial reports as a signal to stakeholders. This is extended to cover the risk disclosure which can be regarded as how the company will be able to manage and address risks, and therefore this can help in better accessing to sources of fund which is reflected on less need to keep big amounts of cash holdings (Elshandidy et al., 2013, Elshandidy and Neri, 2015).

The second perspective regards, risk disclosure as something that will reduce financial flexibility and leads to harmful consequences on the company’s profits (Chakraborty et al., 2017). Lee (2012) claims that during the 2008 financial crisis, listed companies tended to hold cash to protect themselves against potential credit risks. On the other hand, (Elzahar and Hussainey, 2012; Mangena and Pike, 2005) found that there is no significant relation between risk disclosure and liquidity. Consequently, the sixth hypothesis can be developed as follows:

There is a negative and significant relation between the quality of risk disclosure and the amount of cash holdings.

5.Methodology

5.1 Measuring Risk Disclosure Quality:

Risk disclosure quality is measured using an index consisting of (50) items that have an equal importance, this index was prepared based on the accounting standards and prior relevant studies (Mokhtar and Mellett, 2013; Martikainen et al., 2015; Kassamany et al.,2022).

$$\boxed{QRD_{ij} = \frac{\sum_{i=1}^{n} D_{ij}}{\sum_{i=1}^{m} D_{ij}}}$$

Where:

- QRD_{ij} Quality of risk disclosure for the company (j).
- D Take (1) if the risks are disclosed, and (zero) otherwise.
- N The number of risk items that have been disclosed in each company.
- M The total number of risk items in the proposed index.

5.2 Measuring Management Characteristics:

The measurement of management characteristics is shown through the following table:

Table (1): Model (1) variables and their measurement methods

Variables	Icon	Measurement method
Board composition	NEXC	Non-executive directors to total board members.
Board size	BS	The number of board members.
Risk management committee	RC	A dummy variable that takes (1) in the case of the company have risk management committee or (zero) in the absence of this committee.
Quality of audit committees	AUDT Q	Measured as an aggregate variable with value ranges from (1 to 4) depending on the availability of certain audit committee's characteristics (member independence, financial and accounting expertise, frequency of meetings, matching the size of the Committee to corporate governance rules) or otherwise zero.
CEO Role Duality	RD	A dummy variable that takes (1) if the CEO is the chairman or (zero) if the two positions are separated.

5.3 Measuring liquidity:

Liquidity is measured by total cash and cash equivalents divided by total assets (Cho and Kim, 2021).measuring control variables is shown through the following table:

Table (2): Model (2) variables and their measurement methods

Variables	Icon	Measurement method
The company size	FSIZ	The Natural logarithms of total Assets on the year end.
Profitability	PROF	Net profit before taxes for the year divided by total assets at the end of the year.
Leverage.	LEV	Total short- and long-term liabilities divided by total assets.
Cash dividends.	DIV	A dummy variable that takes (1) if the company makes cash dividends or (zero) otherwise.

5.4 The model for measuring the impact of management characteristics on risk disclosure quality:

$$\mathbf{QRD_{it}= \beta0+ \beta1(NEXC_{it}) + \beta2(BS_{it})+\beta3(RC_{it}) +\beta4(AUDTQ_{it}) +\beta5(RD_{it}) + \varepsilon_{it}}$$

Where:

(QRD_{it}): Risk disclosure Quality for the company (i) per year (t), (β0): the constant value in regression equation, (NEXC): The percentage of non-executive directors, (BS): Board size, (RC):

Risk Management Committee, (AUDTQ): Quality of audit committee, (RD): CEO role duality role, (ε_{it}): the random error value.

5.5 The model for measuring the impact of risk disclosure quality on liquidity:

$$\mathbf{CASH_{it} = \beta 0 + \beta 1(QRD_{it}) + \beta 2(FSIZ_{it}) + \beta 3\,(PROF_{it}) + \beta 4\,(LEV_{it}) + \beta 5(DIV_{it}) + \varepsilon_{it}}$$

Where:

(Cash): The dependent variable reflecting total cash and cash equivalents, (LEV): The degree of financial leverage, (Div): Cash dividends**.**

5.6 The Study Population and Sample:

The study population consists of all listed Egyptian companies in the Egyptian Stock Exchange in the period from 2019 to 2021, and the study sample was selected based on the following criteria: the availability of the company’s financial reports in a regular base, the availability of sufficient data to measure the study variables, the company has not been written off from the stock market, merged or discontinued during the study period, and has not been sustaining regular losses for more than a year.. The application of these selection criteria has resulted in the selection of 115 joint stock companies and a total of 345 observations (company/year).

The study depended on content analysis of the financial reports of the companies within the sample for the period from 2019 to 2021, reports were retrieved from the companies' websites, argamm.com, mubasher.info, Egypt Information Dissemination website. (www.egidegypt.com), and the Egyptian Stock Exchange website (www.egx.com.eg).

6.The Analysis of the Empirical Study Data and Testing the Hypotheses:

6.1 Data Validity Test for Statistical Analysis:

To test how close continuous Variables are following their natural distribution, Kolmogorov-Smirnov and Shapiro-Wilk tests were used, and the results show that the data were not following natural distribution as the significance value (Sig.) is less than 0.05. To address this problem, the Natural Algorithm function has been used for these variables to approach normal distribution. Moreover, according to Central limit theorem, since the sample size is larger than (50) individual, the problem of non-natural distribution will not have an impact on the validity of the study models.

Linear Multicollinearity was also measured by calculating the variance Inflation Factor (VIF) for each variable was found to have VIF values for all independent variables. The VIF value for all study variables did not exceed (10) so the study model does not have Multicollinearity problems between independent variables.

Durbin-Watson test was also performed to verify that there is no autocorrelation problem between the study variables. The Durbin-Watson values lies between the top tabular values and four minus the top tabular values, indicating that the study models are not having autocorrelation issues.

6.2 Descriptive Analysis of Study Variables:

Table 3 shows a description for the study continous variables.

Table (3) Descriptive statistics for the study variables

Variables	Symbol	Mean	Standard deviation	Maximum	Minimum	Range
Risk disclosure quality	QRD	.4215	.12563	. 64	. 19	. 37
Liquidity	CASH	. 3324	.07231	. 43	. 23	. 35
Company size	FSIZ	9. 6921	1.82413	12. 15	7. 23	6. 23
Profitability	PROF	.24	.08427	. 48	.00	. 48
Percentage of non-executive directors	NEXC	. 4851	.07234	. 662	. 31	. 23
Board size	BS	10.00	1.53007	13.00	7.00	5.00
Audit committee quality	AUDTQ	3.2254	.74008	4.00	2.00	2.00
Leverage	LEV	7. 01	.9321	9.83	4.31	5.82

From table (3), it is noted that the mean for risk disclosure quality is (42.15%), with the maximum disclosure quality being (64%), while the minimum value is at (19%), The mean for liquidity is (33.24%), with a standard deviation of (.07231) and an increase in the mean size of the company's assets at (9.6921). The mean value for profitability is (24%), the results also showed that the mean for non-executive directors percentage is (48.51%), the maximum non-executive directors percentage was (66.2%) while the lowest percentage was (31%). These figures indicate a good level of independence for the Board of Directors in Egyptian companies during the study period. As for the board of directors size, the maximum number of board members during the study period was (13) members, while the lowest nember of members was (7) members. Finally, the analysis shows that the quality of the audit committees is quite good with a mean of (3,254), which approaches the highest value of this variable (4).

Following is Table 4 which shows a description for the study dummy variables.

Table (4) Descriptive statistics for the study dummy variables

Binomial Test						
Variables	**Symbol**	**Verified observations (1)**		**Unverified observations (0)**		**Sig.**
		Number	**Ratio**	**Number**	**Ratio**	
Risk Management Committee	RC	165	48%	180	52%	.000
Role duality of Ceo	RD	160	46%	185	54%	.000
Cash distributions	DIV	175	51%	170	49%	.539

It is clear from table (1) that the number of observations for the Egyptian companies with risk management committees is (165) observations and a percentage amounted to (48%), while the number of observations for companies with dual role of CEO is (160) companies and a percentage of (46%). The results also showed an increase in the number of observations for Egyptian companies that made cash dividends distributions is (175) companies and a percentage of (51%).

6.3 Testing the Effect of Management Characteristics on Risk Disclosure Quality:

First: Correlation Analysis:

Pearson Correlation coefficient measured the strength and direction of the relation between both management characteristics and risk disclosure quality. Table 5 shows the correlation matrix for the study variables.

Table (5) Pearson Correlation matrix for study variables

Variable		QRD	NEXC	BS	RC	AUDTQ	RD
QRD	Corr	1.000					
	Sig						
NEXC	Corr	. 691**	1.000				
	Sig	.000					
BS	Corr	. 682**	. 675**	1.000			
	Sig	.000	.000				
RC	Corr	. 617**	. 428**	. 532**	1.000		
	Sig	.000	.000	.000			
AUDTQ	Corr	. 685**	. 531**	. 678**	.717**	1.000	
	Sig	.000	.000	.000	.000		
RD	Corr	-. 625**	-. 517**	-. 527**	-. 638**	-. 513**	1.000
	Sig	.000	.000	.000	.000		

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Results of Pearson Correlation in table 5 show that there is a positive correlation between the BOD composition from a majority of non-executive members, board size, the presence of a risk management committee and risk disclosure quality, as the correlation factor sign was positive, and the level significance (sig.) is less than (0.05). While the role duality of CEO has a negative correlation with risk disclosure quality as the correlation coefficient sign was negative (-.625) and its and the level significance (sig.) is less than (0.05).

Second: Multiple Regression Results:

The Ordinary Least Squares (OLS) was adopted for developing the regression models that are used to measure the impact of management characteristics as an independent variable on risk disclosure quality as a dependent variable. Table 6 shows regression analysis.

Table (6) Results of Multiple Regression analysis of the first model

QRDit=β0+β1 NEXC+β2 BS+ β3 RC+ β4 AUDTQ+β5 RD +ε0					
Dependent variables	**QRD_{it}**				
	Unstandardized Coefficients		**Standard regression transactions**		
Independent variables	**B**	**Std. Error**	**Beta**	**T**	**Sig.**
(Constant)	.017	.016		1.400	.121
NEXC	. 123	.035	.074	2.123*	.024
BS	.004	.002	.076	2.121*	.032
RC	.015	.004	.042	2.321**	.004
AUDTQ	.003	.002	.026	2.000*	.031
RD	-.016	.006	-.051	-2. 513**	.004
	Multiple link coefficient R.= 546				
	Coefficient of determination R^2 = . 512				
	Adjusted coefficient of determination $Adj\ R^2$=. 442				
	F-value extracted from the (ANOVA) table = 16. 15				
	Probability value (Sig) = .000				

Table (6) shows that Adjusted coefficient of determination R^2 is equal to (.442) which reflects that the aggregate independent variables determine (44.2%) of the disclosure quality, while the remaining is due to random error in the model or the failure to include other independent variables. The analysis of variance (ANOVA) results shows the high significance of the used model and its validity for achieving the study objectives as the F-value for the disclosure quality is equal to (16.15) at a significance level of (.000).

The regression results showed that some of the management characteristics, such as board of directors composition from non-executive members, board size, the presence of a risk management committee and the quality of audit committees, have a positive and significant effect on risk disclosure quality as the regression coefficient (β) sign was positive and the probability value is less than (0.05). These results confirm the validity of the first, second, third, and fourth hypotheses, and this is supported by both agency and stakeholder theories as well as the findings of many previous studies (Mokhtar and Mellett, 2013; Elshandidy et al., 2013; Saggar and Singh, 2017). Accordingly, board of directors with large number of independent members, good risk management and audit committees, has the advantages of diverse experience and knowledge, and high managerial monitoring ability which will be reflected positively on the company's disclosure of risks and therefore tend to better reduce the opportunities of corruption and fraud.

On the other hand, the dual role of the CEO has a negative and significant impact on risk disclosure, as the regression coefficient (β) sign was negative and the probability value is equal to (0.020) which is less than the significance level of (0.05). This result confirms the validity of the fifth hypothesis, which is consitent with the results of Elshandidy and Neri (2015) study and is supported by the Agency's theory which suggest that the separation of the role of the CEO and Chairman improves management monitoring ability, transparency and the quality of risk disclosures in the financial reports (Mokhtar and Mellett, 2012).

QRD model (quality of risk disclosure):

$$\widehat{\mathbf{QRD}}\mathbf{\imath t} = \mathbf{.017 + .123(NEXC) + .004(BS) + .015\ (RC) + .003\ (AUDTQ) - .016\ (RD)}$$

6.4 Testing the Risk Disclosure Quality Impact on Liquidity:

The relation between risk disclosure quality and liquidity can be examined as follows:

First: Correlation Analysis:

Pear1son Correlation coefficient measured the strength and direction of the relation between both risk disclosure quality and liquidity. Table 7 shows the correlation matrix for the study variables.

Table (7) Pearson Correlation matrix for study variables

Variable		CASH	QRD	FSIZE	PROF	LEV	DIV
CASH	Corr	1.000					
	Sig						
QRD	Corr	. 720**	1.000				
	Sig	.000					
FIZE	Corr	. 713**	. 812**	1.000			
	Sig	.000	.000				
PROF	Corr	. 634**	. 863**	. 714**	1.000		
	Sig	.000	.000	.000			
LEV	Corr	-. 815**	-. 678**	. 694**	-.581**	1.000	
	Sig	.000	.000	.000	.000		
DIV	Corr	. 752**	. 649**	. 625**	. 547**	. 653**	1.000
	Sig	.000	.000	.000	.000		

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Table 7 shows that liquidity is positively related with both the quality of risk disclosure, company size and cash dividends as the correlation coefficient sign was positive, while it is negatively related leverage as the correlation coefficient sign was negative.

Second: Multiple Regression Results:

Ordinary Least Squares was used to measure risk disclosure quality effect on liquidity. Table 8 shows the results of the regression analysis.

Table (8) Results of Multiple Regression analysis of the second model

CASHit= β0+ β1(QRDit) + β2(FSIZit) + β3 (PROFit)+ β4 (LEVit)+ β5(DIVit) + εit					
Dependent variables	**CASHit**				
	Unstandardized Coefficients		**Standard regression transactions**		
Independent variables	**B**	**Std. Error**	**Beta**	**T**	**Sig.**
(Constant)	.005	.007		. 613	. 365
QRD	-.023	.014	-.076	-**2. 542	.004
FSIZ	.002	.003	.031	*2.000	.012
PROF	.042	.025	.063	*2. 174	.012
LEV	-.026	.002	-. 362	-**16. 412	.000
DIV	.004	.002	.062	**2. 4500	.001
	Multiple link coefficient R= 562				
	Coefficient of determination R^2 = 521				
	Adjusted coefficient of determination $Adj\ R^2$=. 426				
	F-value extracted from the (ANOVA) table = 12. 14				
	Probability value (Sig) = .000				

It is noted from table (8) that the Adjusted coefficient of determination R^2 is equal to (.426) which reflects that risk disclosure quality determines (42.6%) of the liquidity management decisions, while the remaining (57.33%) is due to random error in the model or the failure to include other independent variables. It is also noted that the analysis of variance (ANOVA) results shows the high significance of the used model and its validity for achieving the study objectives as the F-value for the disclosure quality is equal to (12.14) at a significance level of (.000). Further, risk disclosure is negativly and suignificantly associated with liquidity, as the regression coefficient (β) sign is negative and the probability value is less than (0.05). This result confirm the validity of the sixt hypothesis and agrees with the findings of some past studies *(*Dayanandan et al., 2017; Elshandidy and Neri, 2015; Lee, 2012), this agree with the claim that risk disclosure reduces the degree of uncertainty facing companies and make it easier for companies to access sources of funds needed to finance their operations, this can lower motivations hold cash other than cash held for preventive purposes.

On the other hand when considering control variables, table 8 shows that the amount of cash holdings is positively and significantly related with the company size, its profitability and cash dividends, this is because the regression coefficient (β) sign is positive and the probability value is less than (0.05). While it has a negative and significant relationship with leverage, as the regression coefficient (β) sign is negative and the probability value is (.000) which is less than the significance level of (0.05).

The regression model for risk disclosure effect on liquidity is as follows:

$$\widehat{\mathbf{CASH}}\mathbf{ıt} = \mathbf{.005 - .023\ (QRD) + .002\ (FSIZ) + .042(PROF) - .026(LEV) + .004(DIV)}$$

7. Summary:

This study aimed to investigate the relation between management characteristics and risk disclosure quality, and to analyze its impact on liquidity within non-financial in the Egyptian capital market. The study results showed a positive and significant relation between risk disclosure quality and some management characteristics such as the of the board of directors composition of a majority of non-executive members, board size, and the presence of risk management committee, and the quality of audit committee, these findings confirms the validity of the first, second, third, and fourth hypotheses. These findings also supports the claim that board of directors of bigger size is characterized by having a variety in experiences and knowledge, which enhances risk disclosure policies.

Moreover, the presence of independent and non-executive members provides an incentive to improve the transparency of risk disclosure information to maintain the reputation of these board members. Further, the quality of audit committee can enhance the board's monitoring effectiveness, which is reflected on risk disclosure quality. The study also found a negative and significant relation between risk disclosure and the dual role of CEO, which confirms the validity of the fifth hypothesis, this can be due to the fact that the dual role of the CEO may present a motive for him to hide some information and to perform some opportunistic practices, which will be reflected on less risk

information to be disclosed. This is supported by Agency theory which suggests that the duality of roles for the CEO may weaken the board's monitoring role, and therefore affecting risk disclosure quality.

Additionally, the study found evidence on the presence of a negative and significant relationship between risk disclosure of risks and cash holdings, this confirms the validity of the sixth hypothesis. A suggested explanation is that risk disclosure can help in reducing the uncertainty and lessens the agency problems between managers and stakeholders and thus enhances the financial flexibility of the company and enables it to access the required sources of funding. This will help in reducing the need to hold cash other than that held for prevention purposes.

Based on the above discussion, the study recommends that companies should be encouraged to increase their voluntary disclosure of financial and non-financial risks to the degree that would not harm their competitive position. The study also help in drawing the attention of the bodies responsible for regulating the accounting and auditing profession in Egypt to develop a new and independent standard to regulate the accounting aspects of all types of financial and non-financial risks to improve the quality of these disclosures, and to develop a relevant audit standard to assign the auditor responsibilities towards the disclosure of these types of risks.

Finally, this study raises some issues that need more attention from researchers in the field of accounting, such as investigating other factors affecting the quality of risk disclosure, such as senior management incentives, company age, audit office size, ownership structure (ownership concentration, institutional ownership). Other variables that can impact the quality of risk disclosure and that need more investigation are the environmental, legal, legislative, political, and economic factors surrounding the company. Moreover, other interesting future research direction can involve the effect of risk disclosure on earnings management, and the economic value added.

References:

- Abdullah, M., Shukor, Z. A., Mohamed, Z. M., & Ahmad, A. (2015). Risk management disclosure: A study on the effect of voluntary risk management disclosure toward firm value. ***Journal of Applied Accounting Research***, 16(3), 400–432. https://doi.org/10.1108/JAAR-10-2014-0106
- Abou-El-Sood, H. (2019). Corporate governance and risk taking: the role of board gender diversity. ***Pacific Accounting Review***, 31(1), 19–42. https://doi.org/10.1108/PAR-03-2017-0021
- Abraham, S., & Cox, P. (2007). Analyzing the determinants of narrative risk information in UK FTSE 100 annual reports. ***British Accounting Review***, 39(3), 227–248. https://doi.org/10.1016/j.bar.2007.06.002
- Alfraih, M. M., & Almutawa, A. M. (2017). Voluntary disclosure and corporate governance: empirical evidence from Kuwait. ***International Journal of Law and Management***, 59(2), 217–236. https://doi.org/10.1108/IJLMA-10-2015-0052

- Al-Hadi, A., Hasan, M. M., & Habib, A. (2016). Risk Committee, Firm Life Cycle, and Market Risk Disclosures. ***Corporate Governance: An International Review***, 24(2), 145–170. https://doi.org/10.1111/corg.12115
- Allini, A., Manes Rossi, F., & Hussainey, K. (2016). The board's role in risk disclosure: an exploratory study of Italian listed state-owned enterprises. Public Money and Management, 36(2), 113–120. https://doi.org/10.1080/09540962.2016.1118935
- Al-Maghzom, A., Hussainey, K., & Aly, D. (2016). Corporate governance and risk disclosure: Evidence from Saudi Arabia. ***Corporate Ownership and Control***, 13(2), 145–166. https://doi.org/10.22495/cocv13i2p14
- Azevedo,G.,Oliveira,J.,Sousa, L.(2022)." The determinants of risk reporting during the period of Basel II Accord: evidence from the Portuguese commercial banks".A***sian Review of Accounting***. 30(2):177-206. https://doi-org.sdl.idm.oclc.org/10.1108/ARA-03-2021-0051
- Bischof, J., Daske, H., Elfers, F., & Hail, L. (2022). "A Tale of Two Supervisors: Compliance with Risk Disclosure Regulation in the Banking Sector". ***Contemporary Accounting Research,*** 39(1), 498–536. https://doi.org/10.1111/1911-3846.12715
- Buckby, S., Gallery, G., & Ma, J. (2015). An analysis of risk management disclosures: Australian evidence. ***Managerial Auditing Journal***, 30(8–9), 812–869. https://doi.org/10.1108/MAJ-09-2013-0934
- Chakraborty, A., Baum, C. F., & Liu, B. (2017). Corporate financial policy and the value of cash under uncertainty. ***International Journal of Managerial Finance***, 13(2), 149–164. https://doi.org/10.1108/IJMF-12-2015-0210
- Cho, H., & Kim, R. (2021). Asymmetric effects of voluntary disclosure on stock liquidity: evidence from 8-K filings. ***Accounting and Finance***, 61(1), 803–846. https://doi.org/10.1111/acfi.12594

- Dayanandan, A., Donker, H., & Karahan, G. (2017). Do voluntary disclosures of bad news improve liquidity? .***North American Journal of Economics and Finance***, 40, 16–29. https://doi.org/10.1016/j.najef.2017.01.002
- Elshandidy, T., & Neri, L. (2015). Corporate Governance, Risk Disclosure Practices, and Market Liquidity: Comparative Evidence from the UK and Italy. ***Corporate Governance: An International Review***, 23(4), 331–356. https://doi.org/10.1111/corg.12095
- Elshandidy, T., Fraser, I., & Hussainey, K. (2013). Aggregated, voluntary, and mandatory risk disclosure incentives: Evidence from UK FTSE all-share companies. ***International Review of Financial Analysis***, 30, 320–333. https://doi.org/10.1016/j.irfa.2013.07.010
- Elzahar, H., & Hussainey, K. (2012). Determinants of narrative risk disclosures in UK interim ***reports. Journal of Risk Finance***, 13(2), 133–147. https://doi.org/10.1108/15265941211203189
- Gulko, N., Hyde, C., & Seppala, N. (2017). Disclosure of corporate risks and governance before, during and after the global financial crisis: Case study in the UK construction industry in 2006-2009. ***International Journal of Disclosure and Governance***, 14(3), 207–223. https://doi.org/10.1057/s41310-017-0021-z
- Gull,A.,Abid.,A., Hussainey,A.,Ahsan,T., and Haque,A.(2022)." Corporate governance reforms risk disclosure quality: evidence from an emerging economy". Journal of Accounting in Emerging Economies".1-24. https://doi-org.sdl.idm.oclc.org/10.1108/JAEE-11-2021-0378.
- Guthrie, J., Manes Rossi, F., Orelli, R. L., & Nicolò, G. (2020). Investigating risk disclosures in Italian integrated reports. ***Meditari Accountancy Research***, 28(6), 1149–1178. https://doi.org/10.1108/MEDAR-10-2019-0596

- Habbash, M., Hussainey, K., & Awad, A. E. (2016). The determinants of voluntary disclosure in Saudi Arabia: An empirical study. ***International Journal of Accounting, Auditing and Performance Evaluation***, 12(3), 213–236. https://doi.org/10.1504/IJAAPE.2016.077890
- Hussainey, K., & Al-Najjar, B. (2012). Understanding the determinants of Risk Metrics/ISS ratings of the quality of UK companies’ corporate governance practice. ***Canadian Journal of Administrative Sciences***, 29(4), 366–377. https://doi.org/10.1002/CJAS.1227
- Hussein R., (2021), “Determinants of Risk Disclosure and its Impact on the Cost of Equity Capital - An Empirical Study on Firms Listed in the Egyptian Stock Exchange Market”, Doctoral dissertation in accounting and Auditing, ***Benha University***, Egypt.
- Hutchison, M. R., & Ngoc, T. B. (2012). Corporate Governance and Risk Management: The Role of Risk Management and Compensation Committees. ***SSRN Electronic Journal***, 1–39. https://doi.org/10.2139/ssrn.1979895
- IASB. (2010). "IFRS *Practice Statement: Management Commentary*". International Accounting Standards Board. London.
- ICAEW (1997), *Financial Reporting of Risk: Proposals for a Statement of Business Risk*, ICAEW, London.
- Ilhan Nas, T., & Kalaycioglu, O. (2016). The effects of the board composition, board size and CEO duality on export performance: Evidence from Turkey. ***Management Research Review***, 39(11), 1374–1409. https://doi.org/10.1108/MRR-01-2015-0014
- Kamel, H., & Awadallah, E. (2017). The extent of voluntary corporate disclosure in the Egyptian Stock Exchange. ***Journal of Accounting in Emerging Economies***, 7(2), 266–291. https://doi.org/10.1108/jaee-05-2015-0037
- Kassamany,T.,Harb, E.,and Louhichi,W.(2022)."Impact of risk disclosure on the volatility, liquidity and performance of the UK

and canadian insurance companies". ***Competitiveness Review: An International Business Journal***.1-32. https://doi-org.sdl.idm.oclc.org/10.1108/CR-10-2021

- Lee, J.,(2012). "The Role Conservatism Firms' Financial Decisions". Working Paper, College of Business Administration University of Illinois Chicago. Available at: *http://ssrn.com/abstract=1718494. 1-53*.
- Makhlouf,M.(2022)." Audit committee and impression management in financial annual reports: evidence from Jordan". Euromed Journal of Business.1-24. https://doi-org.sdl.idm.oclc.org/10.1108/EMJB-01-2022-0009
- Mangena, M., & Pike, R. (2005). The effect of audit committee shareholding, financial expertise, and size on interim financial disclosures. ***Accounting and Business Research***, 35(4), 327–349. https://doi.org/10.1080/00014788.2005.9729998
- Martikainen, M., Kinnunen, J., Miihkinen, A., & Troberg, P. (2015). Board’s financial incentives, competence, and firm risk disclosure: Evidence from Finnish index listed companies. ***Journal of Applied Accounting Research***, 16(3), 333–358. https://doi.org/10.1108/JAAR-10-2014-0117
- Marzouk, M. (2016). Risk reporting during a crisis: Evidence from the Egyptian capital market. ***Journal of Applied Accounting Research***, 17(4), 378–396. https://doi.org/10.1108/JAAR-02-2015-0012
- Michelon, G., Bozzolan, S., & Beretta, S. (2015). Board monitoring and internal control system disclosure in different regulatory environments. Journal of Applied Accounting Research, 16(1), 138–164. https://doi.org/10.1108/JAAR-03-2012-0018
- Mokhtar, E. S., & Mellett, H. (2013). Competition, corporate governance, ownership structure and risk reporting. ***Managerial Auditing Journal***, 28(9), 838–865. https://doi.org/10.1108/MAJ-11-2012-0776

- Moumen, N., H. Ben Othman, and K. Hussainey. (2016)." Board structure and the informativeness of risk disclosure: Evidence from Mena emerging Markets". ***Advances in Accounting Incorporating Advances in International Accounting***. 1-15.
- Mousa, G., Elamir, E., Mousa, G. A., & Elamir, E. A. H. (2013). Content Analysis of Corporate Risk Disclosures: The Case of Bahraini Capital Market. ***Global Review of Accounting and Finance***, 4(1), 27–54. https://www.researchgate.net/publication/292379243
- Nahar, S., Azim, M. I., & Hossain, M. M. (2020). Risk disclosure and risk governance characteristics: evidence from a developing economy. ***International Journal of Accounting and Information Management,*** 28(4), 577–605. https://doi.org/10.1108/IJAIM-07-2019-0083
- Nahar, S., Azim, M., & Jubb, C. (2016a). The determinants of risk disclosure by banking institutions Evidence from Bangladesh. ***Asian Review of Accounting***, 24(4), 426–444. https://doi.org/10.1108/ARA-07-2014-0075
- Nahar, S., Azim, M., & Jubb, C. A. (2016b). Risk disclosure, cost of capital and bank performance. ***International Journal of Accounting and Information Management***, 24(4), 476–494. https://doi.org/10.1108/IJAIM-02-2016-0016
- Neifar, S., & Jarboui, A. (2018). Corporate governance and operational risk voluntary disclosure: Evidence from Islamic banks. Research in International Business and Finance, 46, 43–54. https://doi.org/10.1016/j.ribaf.2017.09.006
- Ntim, C.G., Lindop, S., and Thomas, D. A. (2013). "Corporate governance and risk reporting in South Africa: A study of corporate risk disclosures in the pre- and post-2007/2008 global financial crisis periods". ***International Review of Financial Analysis***. 30: 363–383.

- Oliveira, J., Rodrigues, L. L., & Craig, R. (2011). Risk-related disclosures by non-finance companies: Portuguese practices and disclosure characteristics. ***Managerial Auditing Journal,*** 26(9), 817–839. https://doi.org/10.1108/02686901111171466
- Raimo,N.,Nicolo,G.,Polcini,T., and Violla,F.(2022)."Corporate governance and risk disclosure: evidence from integrated reporting adopters". ***Corporate Governance***.1-29. https://doi-org.sdl.idm.oclc.org/10.1108/CG-07-2021-0260
- Saggar, R., & Singh, B. (2017). Corporate governance and risk reporting: Indian evidence. Managerial Auditing Journal, 32(4–5), 378–405. https://doi.org/10.1108/MAJ-03-2016-1341
- Serrasqueiro,R., and Oliveira,J.(2022)." Risk reporting: do country-level institutional forces really matter?. Asian Review of Accounting. 30(2). https://doi-org.sdl.idm.oclc.org/10.1108/ARA-10-2021-0193
- Tauringana, V., & Chithambo, L. (2016). Determinants of risk disclosure compliance in Malawi: a mixed-method approach. ***Journal of Accounting in Emerging Economies***, 6(2), 111–137. https://doi.org/10.1108/jaee-03-2014-0015
- Taylor, G., Tower, G., & Neilson, J. (2010). Corporate communication of financial risk. ***Accounting and Finance***, 50(2), 417–446. https://doi.org/10.1111/j.1467-629X.2009.00326.x
- Vandemele, S., Vergauwen, P. and Michiels, A. (2009). "Management risk reporting practices and their determinants: a study of Belgian listed firms". Available at: https://uhdspace.uhasselt.be/dspace/bitstream/1942/9392/2/CorporateriskB.pdf.
- Zou, Y. (2022). Strategic Entry Decisions, Accounting Signals, and Risk Management Disclosure†. ***Contemporary Accounting Research***. https://doi.org/10.1111/1911-3846.12803

Appendix:

Risk Disclosure Quality Index

Index Elements
First: Financial Risks
Interest rate
Exchange price
Liquidity
Pricing
Commodity
Capital adequacy
Derivatives
Credit
Second: Non-financial risks
Strategic Risks
Market competition risk
The firm's strategy, future trading, and marketing activities risk
Production chain risk
Clients dependency risks
Suppliers dependency risks
Changes in customer preferences
Technological development risks
Organizational changes
Political changes
Economic changes
Merger and acquisition
Pricing risks
New products risk
Business portfolio risks
Life cycle risks
Management risks

Research and developments risks
Performance measurement risks
Operations Risks
Relying on employee knowledge risks
delivery chain problems
Price fluctuations in production factors
Intellectual capital rights risks
Customers satisfaction risk
Information technology risks
Brand name erosion
Stock obsolescence and shrinkage
Failure of products and services
Health and safety risks
Quality controls risks
Product development risks
Sourcing risks
Compliance with Regulations Risks
Compliance with financial regulations risks
Compliance with corporate business requirements and regulations risks
Compliance with listing rules risks
Litigation risks
Empowerment Risks
Leadership and management risks
Outsourcing risks
Performance incentives risks
Willingness to change risks
Integrity Risks
Management and employee fraud risks
Illegal business risks
Reputation risks