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DEVELOPMENT OF THE MODIFIED CORPORATE RISK DISCLOSURE INDEX FOR BUSINESS SUSTAINABILITY

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ABSTRACT

The paper aims to outline the development of the Modified Corporate Risk Disclosure index. Its primary objective is to assist organizations in the case of oversight and monitoring of strategies to achieve long-term business sustainability. The Modified Corporate Risk Disclosure Index, comprising 134 items, is designed to serve as a detailed and comprehensive checklist for evaluating the level of corporate risk disclosure in corporations' annual reports. It is anticipated that the Modified Corporate Risk Disclosure Index will elevate companies' level of corporate risk disclosure by highlighting the advantages of having such an index. The benefit of creating this index is to establish a comprehensive framework that ensures long-term sustainability of the business and emphasizes transparent communication of potential risks to facilitate oversight and evaluation of the company's strategy.

1. Introduction

The Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2017, p. 9) defined risk as "the possibility that events will occur and affect the achievement of strategy and business objectives." This definition covers all types of risks that may impact business goals. Key risks include changes in governance or structure, external geopolitical and social factors, unforeseen cumulative events like global warming, negative impacts from specific incidents (e.g., fires or competition), and the potential conflict between positive outcomes and other business objectives (e.g., supply chain strain from high demand). On the other hand, risk management involves "coordinated activities to direct and control an organization with regard to risk" (International Organization for Standardization [ISO], 2018, p. 1). Risk management aims to create and safeguard value. It enhances performance, fosters innovation, and helps organizations to achieve their goals. Effective risk management is vital to organizational decision-making, ensuring that risks are managed in alignment with the organization's objectives.

Corporate risk (CR) refers to the specific area of risk management that ensures a business fulfils its corporate governance obligations, takes necessary measures, and recognizes and handles emerging risks. Incorporating corporate risk into the organizational ecosystem is essential and fundamental to business sustainability and success. This integration goes beyond mere compliance or precaution—it establishes a proactive approach that prepares the organisation for unforeseen challenges. By embedding risk management into strategic and operational planning, businesses can enhance their resilience, adapt to disruptions swiftly, and protect their long-term value. A robust risk-aware culture strengthens the organisation against potential threats, enabling it to manoeuvre uncertainties and maintain a competitive edge confidently. Therefore, by systematically identifying, evaluating, and mitigating risks, organizations position themselves to safeguard their operations and assets against unforeseen challenges. Hence, the disclosure of such risks is vital.

An organization's financial reporting should be transparent and convey significant information that effectively communicates the potential consequences of the company's commercial operations and risks in different situations in order to integrate competitors' strategies into companies' business sustainability. Corporate Risk Disclosure (CRD), as defined by Miihkinen (2012), encompasses all the information that companies provide in the risk evaluations section of their annual reports. The ICAEW (2011) report "Reporting Business Risks" explained that risk can have various outcomes, both positive and negative. On the other hand, IFRS 9 defines risk as the uncertainty surrounding changes in the cash flows or fair value of a financial instrument due to the risks faced by the entity.

Adopting and implementing Western-style governance models in developing economies often need to be more suitable due to widespread corruption, significant governmental intervention, and familial dominance (Uddin & Choudhury, 2008). Research has increasingly highlighted the distinct institutional contexts, accounting systems, and regulatory frameworks of developing nations compared to industrialized ones (Hassan, 2009). However, compared to stock market rules in the West, developing countries often require more advanced laws and better policies to protect investors. This includes situations where powerful investors take away the rights of smaller shareholders (Gonenc & Aybar, 2006).

The accounting literature emphasizes the importance of disclosing risks to meet stakeholders' needs in assessing the company's risk profile and market value (Salem et al., 2019). Some people think that owners in developing economies are taking on more risk due to relaxed corporate governance rules, which could deter investment (Gibson, 2003; Klapper & Love, 2004). In developing countries, a small group of powerful owners often runs many businesses and makes decisions. Minority owners are at risk because they do not have as much control over how the business operates and how decisions are made (Claessens et al., 1999). When ownership is concentrated, with a small group holding a large portion of shares in a business, it can negatively impact minority interests (Claessens et al., 2000; Khan, 1999) and lead to information asymmetry between managers and investors (Chau & Gray, 2010; Healy & Palepu, 2001).

Additionally, some researchers have found lower risk disclosure reporting standards in growing markets compared to more developed economies (Siregar & Siagian, 2013). The combination of failing to protect minority interests and inadequate risk disclosure creates a challenging environment for investment, potentially discouraging foreign direct investment in developing countries. For instance, Mitton (2002) suggested that strong corporate governance requires the protection of minority interests and comprehensive risk disclosures.

The recent Malaysia Code of Corporate Governance (MCCG), updated on April 28, 2021, stated that the board should ensure the company's sustainability strategies, goals, and activities are communicated. In addition, a designated individual within the company's management must be identified to be responsible for the disclosure requirement. The annual report is the primary source of information about companies' financial and non-financial information. The main purpose for companies to apply CR information is to integrate competitors' strategies into companies' business sustainability. According to Sila et al., (2016), corporate risk-taking is crucial for achieving economic rewards. It is not only necessary for maximizing shareholders' wealth, but also the responsibility of boards to determine the readiness to take risks in pursuing strategic goals. Hence, the level of risk associated with policy and investment choices has the potential to determine the firm's competitive advantage within a particular sector. Corporate risk disclosure involves sharing information that outlines the significant risks faced by companies and the expected economic consequences these risks may have on their present and future performance.

The accounting literature emphasizes the importance of CRD in helping stakeholders to assess a company's risk profile and market value (e.g. Abraham et al., 2012; Miihkinen, 2013). The existence of governance frameworks can impact the disclosure of risks (Abraham & Cox, 2007). It is essential to prioritize enhancing risk disclosure, especially in challenging times, to accurately evaluate future performance and protect stakeholders' wealth.

Companies that provide transparent disclosure of risks and thorough identification, management, analysis, and assessment in their corporate reports enable readers to understand their business and risk profiles. As mentioned by Solomon et al. (2000), corporate reports are essential for accurately assessing the performance and financial health of a business. Financial reporting and transparency, as highlighted by Khlifi and Bouri (2010), play a crucial role in reducing information asymmetry and capital costs. By providing more details about different risks, businesses aim to satisfy investors, increase their reputation and lower the costs associated with monitoring these risks.

According to Botosan (1997), transparency allows shareholders to more precisely assess a company's financial performance and trust that the management is operating the business well. Furthermore, CRD encourages openness, increases investor trust, and lowers the cost of capital by providing crucial information about a company's performance and facilitating direct contact between businesses and investors. Ultimately, CRD benefits both firms and shareholders.

Above all, disclosing corporate risks not only enhances the organisation's reputation but also aligns with global expectations for sustainable and responsible business practices. Therefore, embedding risk management into the organisational framework and reporting on it provides dual benefits: it prepares the business for the worst, and demonstrates a commitment to transparency and sound governance.

This paper continues with: The emergence of Corporate Risk Disclosure; Corporate Risk Disclosure in the Malaysian context; Development of Modified Corporate Risk Disclosure Index (MoCorDi) and conclusion.

2. The emergence of Corporate Risk Disclosure

Upon careful review of the literature, it is clear that researchers have yet to establish a universally accepted definition of risk. Instead, they utilize various risk-related concepts and terms, such as risk-related narratives (Allini et al., 2016; Beretta & Bozzolan, 2004), risk management disclosures (Buckby et al., 2015), risk disclosure focuses (Gupta & Symss, 2023), and more. The need for more clarity surrounding the concept of risk further complicates its definition (Alkurdi et al., 2019). Additionally, a substantial number of researchers need to provide a precise definition of risk and instead assume that the reader has already grasped its meaning, leading to uncertainty among readers (Salem et al., 2019). Table 1 summarizes several concepts of corporate risk disclosure in the academic literature that will support the development of index in this paper.

Table 1:
Concepts of Corporate Risk Disclosure

Definition	Source
Risk disclosure' is considered to be 12 any information about "*opportunity or prospect, or of any hazard, danger, harm, threat or exposure, that has already impacted or may impact upon the company, as well as the management of any such opportunity, prospect, hazard, harm, threat, or exposure*".	Allini et al. (2016)
Communication of risk management practices are a critical component of good corporate governance.	Buckby et al. (2015)
Risk disclosure focuses on the communication of risk-related information as part of companies' annual reports. They give insight into risk exposure level of the company, which is beneficial for decision-making from the investor's point of view.	Gupta & Symss (2023)
All information that firms provide in the risk reviews they present in their annual reports	Miihkinen (2012)
Corporate risk disclosure contributes to financial stability by providing stakeholders with a better understanding of companies' risk exposures and risk management practices	Zyznarska-Dworczak & Rudionien (2022)
Risk disclosure can play a vital role by providing information about uncertainty surrounding the business and the firms' management of these risks to investors and other stakeholders, to facilitate the process of making informed and impactful decisions.	Cabedo & Tirado (2014)

The probable frequency and probable magnitude of future loss.	Jones (2006)
Uncertain future events that could influence the achievement of a company's objectives.	King Committee (2002)
A communication of information concerning firms' strategies, characteristics, operations and other external factors that have the potential to affect expected results.	Beretta & Bozzolan (2004)
Any opportunity or prospect, or of any hazard, danger, harm, threat or exposure, that has already impacted upon the company or may impact upon the company in the future or of the management of any such opportunity, prospect, hazard, harm, or threat or exposure.	Linsley & Shrives (2006)
The risk arises when individuals make a deliberate decision to pursue an opportunity that has the potential to result in either a positive or negative outcome.	Salem et al. (2019)
The form of communication of information which is related to a company's strategies, business operations and external elements that may impair expected outcomes such as the disclosure of company future cash flows	Alkurdi et al. (2019)
Corporate risk disclosure, which entails reporting potential uncertainties and challenges, plays a crucial role in improving transparency, supporting stakeholder decision-making, and strengthening the company's strategic positioning by influencing market perceptions.	Wang et al. (2024)
...there are two perspectives commonly used to conceptualise quality of CRD, namely pre-modern and modern perspectives. …there is no uniform basis to study and measure the quality of CRD.	Mbithi et al. (2022)
Corporate risk disclosure is influenced by governance factors (e.g., board independence and gender diversity), firm characteristics (e.g., size and liquidity), and cultural or situational factors (e.g., political connections and crises), with greater transparency often linked to better monitoring and increased uncertainty.	Mio et al. (2024)
Definitions of corporate risk are influenced by the practices and procedures unique to each group impacted, rather than being based on a single, shared understanding.	Azuma-Kotei & Ibrahim (2024)

3. Corporate Risk Disclosure in the Malaysian context

The Financial Reporting Act of 1997 and the Bursa Malaysia listing requirements mandate that companies in Malaysia disclose essential information (Amran et al., 2009). To boost market confidence, the Malaysian Accounting Standards Board and the Securities Commission regulate the disclosure of additional details on potential company risks. Moreover, the Malaysian Code of Corporate Governance explicitly emphasizes the need for a dedicated risk management committee and the importance of robust risk reporting practices.

Risk reporting procedures can generally be categorized into regulated and non-regulated risk disclosure. Regulators require corporations to include regulated risk disclosure in their annual reports, which specifies the information that must be disclosed. Providing shareholders with important information that is not regulated is often viewed as non-regulated disclosure (Al-Shammari & Al-Sultan, 2010).

In accordance with the Financial Reporting Act (FRA) of 1997, the Malaysian Accounting Standard Board (MASB) mandates that annual reports should be prepared in a manner that provides meaningful information on the financial condition, performance, and other relevant details of the businesses to a wide range of users. The Malaysian Financial Reporting Standards (MFRS) requires companies to provide a report that assists customers in understanding non-financial elements, such as risk management.

MFRS 132 Financial Instruments:_Disclosure and Presentation examines the many categories of market risk faced by publicly traded companies in Malaysia. The criteria assist companies in determining whether to classify a financial instrument as equity or liability (Zadeh & Eskandari, 2012). MFRS 132 mandates the business to disclose its financial risk management strategies. It emphasizes the need to include a distinct part in the annual reports on hedging operations, such as fair value and cash flow hedges. However, the standard does not specify the format and placement of the information. MFRS 7 Financial Instruments: Disclosures provides specific information on identifying and addressing risks associated with financial instruments. The guideline further offers guidance for the minimum reporting requirements for credit, liquidity, and market risks.

Non-regulated risk disclosure includes strategy, operations, empowerment, information processing and technology, and integrity risks. It refers to the absence of laws or regulations that require enterprises to disclose certain information. Over time, there has been an increasing need for more non-regulated risk information offered by businesses. This is because such information gives shareholders a more thorough view of the company's strategy and performance (Chau & Grey, 2010). Within the scope of this research, the focus is on analyzing corporate risk disclosure, specifically on regulated risk.

An organization that implements proactive risk management should be able to accurately detect and efficiently address potential hazards. The disclosure of risk management offers benefits to both the company and its stakeholders. Effective risk-reporting processes may reduce the cost of capital, therefore increasing shareholder trust (Linsley & Shrives, 2005). Investors who have access to such information may make more informed decisions when assessing the level of risk associated with their investment. Moreover, a proficient risk report should be able to demonstrate the directors' responsibility and competence in risk management. Hence, the board must understand the characteristics of risk problems and concerns in order to provide relevant and comprehensive risk information.

The COVID-19 pandemic has increased corporate risks, with varying degrees of disclosure among organizations, companies, and industries. Therefore, there is a need to come up with a checklist that measures the disclosure of newly risk related information in companies' annual reports. Previous studies on corporate risk disclosure in Malaysia only focussed on several categories of risk disclosure i.e. 1) operational risk, 2) environmental risk, 3) financial risk and 4) strategic risk (Mohd Ali & Taylor, 2014); 1) financial risk, 2) operation risk, 3) empowerment risk, 4) information processing and technology risk, 5) integrity risk, and 6) strategic risk (Hashim & Koon, 2016); 1) operations risk, 2) strategic risk, 3) empowerment risk, 4) integrity risk, and 5) information processing and technology risk (Abdullah et. al., 2015); 1) financial risk, 2) non-financial risk,) and 3) risk management framework (Kiflee & Khan, 2021). These studies did not refer to other disclosure items from the international guidelines, national corporate reporting framework and actual disclosure from the winners of corporate reporting competition.

The modified corporate risk disclosure index has several benefits. Firstly, as a result of the pandemic, companies are more aware of the strategies to mitigate risks. Companies could disclose this information to signify commitment in addressing any risks in the future. In this manner, stakeholders will be having more trust in the companies that disclose ways to mitigate risks. Secondly, from a practical perspective, this accounts for the inherent uncertainty in the future business environment. Once MoCorDi is materialized into a measurement tool, the Securities Commission of Malaysia can further enhance the corporate disclosure requirement for companies listed in Bursa Malaysia. Consequently, the Government or the Securities Commission can better understand the effects of future pandemics or crises like or worse than Covid-19. Finally, the MoCorDi will promote the establishment of the Malaysian Code on Corporate Governance (MCCG). The MCCG establishes principles and best practices for corporate governance in Malaysia, including risk management and transparency obligations. Principle 4 of the MCCG specifically stipulates that firms should design and report their risk management framework and identify the organization's significant risks and how they are handled. This leads to the development of a Modified Corporate Risk Disclosure Index (MoCorDi).

4. Development of Modified Corporate Risk Disclosure Index (MoCorDi)

The development of the MoCorDi checklist in this paper refers to the work of previous Malaysian scholars with regard to the development of the index. For example, Sustainable Development Goals Disclosure Index (Sawani et al., 2023); Modified Strategic Management Accounting Disclosure Index (James et al., 2023); Modified Accountability Disclosure ndex (Ahmad et al., 2022) and Ethical Value Disclosure Index (Joseph et. al., 2023). The development of the MoCorDi checklist involves several steps as follows:

1. The identification of basic CRD items
2. The reference to previous studies
3. The modification of the index by the addition of the National Annual Corporate Report Awards (NACRA) 2021 criteria.
4. Removal / Addition of CRD items by comparing basic and actual CRD items disclosed in the annual reports of 2021 NACRA winners.
5. Validation of items by experienced scholars and industrial practitioners
6. Preparation of the final version of MoCorDi

The details of the steps undertaken in developing MoCorDi are as follows:
Step 1: Identification of basic CR information

The basic CR information is identified based on a few national and international guidelines such as Egyptian Accounting Standard, ACCA Global, The King II Report and Governance in Focus Risk Management - Deloitte. The reason for using those guidelines is to ensure that the annual reports for Malaysian companies are comparable with international companies around the globe. Furthermore, most of the content elements related to CR information, such as the guidelines regarding risk management, financial performance, governance, risks and opportunities, are emphasized in the guidelines. In this step, there are nine categories, with 96 CRD items.

Step 2: Reference to previous studies
The development of MoCorDi was further guided by reviewing CRD items from previous studies. The studies are inclusive of countries such as Spain (Hernández et. al., 2015) and UK (Elamer et. al.,

2019). In this step, there are 14 categories with 130 CRD items and CR information was classified into:

1. Financial risk
2. Operational risk
3. Empowerment risk
4. Information processing and technology risk
5. Strategic risk
6. Physical risks
7. Business continuity and disaster recovery
8. Market risks
9. Credit risk
10. Internal environment
11. Risk response
12. Control activities
13. Liquidity
14. Capital

Step 3: Modification of the MoCorDi by adding in criteria from the 2021 NACRA Award competition
The reliability of the checklist items was improved through a content analysis of seven companies that won the National Annual Corporate Report Awards (NACRA) 2021. Bursa Malaysia Berhad, the Malaysian Institute of Accountants (MIA), and The Malaysian Institute of Certified Public Accountants (MICPA) announced a new framework for NACRA 2021. The NACRA criteria have been updated to reflect the new normal in Malaysia necessitated by the COVID-19 pandemic, including the management of its impacts and adherence to social distancing norms.

Including the NACRA framework would further improve the MoCorDi checklist by complementing the international and national criteria. The companies' annual reports examined were: Nestle Malaysia Berhad, Sunway Berhad, Fraser and Neave Holdings Berhad, Petronas Gas Berhad, Axiata Group Berhad, Telekom Malaysia Berhad and Sime Darby Property Berhad. A score of "1" was awarded for disclosure of corporate risk items, and "0" for non-disclosure. The analysis of these companies serves the purpose of MoCorDi, which is to examine the extent of corporate risk disclosure. In this step, there are 22 categories with 152 CRD items.

Step 4: Removal/Addition of CR information by comparing the CR indicators and the actual CR disclosures available from the 2021 NACRA winners' annual reports

This step involved comparing basic CR information with the actual CR disclosure items obtained from the winners of the NACRA 2021 annual reports. Up to this stage, sixteen categories and 134 items were identified. In this step, some items were deleted due to non-applicability in the Malaysian business environment. Examples of deleted items are: amount of regulatory capital for market risk (Pillar Capital, stress testing, stress var, back-testing and credit concentration risk. This information was found in the Western literature. However, the information was not reported in the winners of the NACRA 2021 annual reports. At the same time, some items were added to the checklist, such as digitalisation risk, emerging risk - changing consumer needs, intellectual property infringements and legal claims, governance risk, business disruption resulting from a pandemic or global crisis and the resurgence of new virus risk due to the crisis in the year 2019, which was the COVID-19 pandemic crisis.

Step 5: Validation of checklist items by experienced scholars and industrial practitioners.
The validation of checklist items involved three experienced scholars in the CSR research area and experienced industrial practitioners from various industries such as manufacturing, telecommunications, construction, consumer products and services, utilities, and shipping. In doing so, valuable opinions and endorsements from the appointed scholars and industrial practitioners were sought to improve the quality and reliability of MoCorDi. Social and board disclosure was removed from the checklist because this category did not meet the purpose of corporate risk disclosure.

Step 6: Preparation of the final MoCorDi
The final step was constructing the finalized version of MoCorDi. Resulting of the above five steps, the final MoCorDi consists of 16 categories with 134 items, of which fifty-four checklists were derived from the Egyptian Accounting Standards 25, six items from the ACCA Global, eleven items from The King II report, nine items from the guideline of Governance In Focus Risk Management – Deloitte, thirty-two items from previous studies, and seventeen items are from the actual disclosures of the winners of NACRA 2021 annual reports. The finalized Corporate Risk Disclosure Index is presented in Table 2. Table 2 presents the list disclosure items of MoCorDi for monitoring of the company's strategies:

Table 2:
Finalized MoCorDi

Category	No	Disclosure Items
Financial risk	1.	Interest rate
	2.	Exchange rate
	3.	Commodity
	4.	Credit
	5.	Going concern
	6.	Cost of capital
Operational risk	7.	Customer satisfaction
	8.	Efficiency
	9.	Stock obsolescence
	10.	Product and service failure
	11.	Environmental
	12.	Health and safety
	13.	Brand name erosion
	14.	Management process
	15.	Supply chain disruptions and dependencies
	16.	Operational failures or breakdowns
	17.	Management Strategies
	18.	Scope and nature of the operational risk reporting system
	19.	Risk Transfer
	20.	Risk Mitigation
	21.	Risk Hedging techniques
	22.	Internal audit function
	23.	Internal control system
	24.	Key risk indicators (kris)/early warning systems (ews).

	25.	Self-assessment techniques (sa).
	26.	Stress tests/ scorecard models/scenario analyses.
	27.	Personnel (human error, labour disputes, loss of/recruiting key employees).
	28.	Disclosures to help users understand operational risk
	29.	Management and employee fraud
	30.	Illegal acts
	31.	Reputation
	32.	Operational excellence
	33.	Project excellence
	34.	Product safety and quality
	35.	Low demand products delivered
	36.	Penalties/disruptive
	37.	Plant and Facilities Risk
	38.	Project risk
	39.	Contractor risk
	40.	Higher costs to obtain alternative supply
Empowerment risk	41.	Leadership
	42.	Communications
Information processing and technology risk	43.	Integrity
	44.	Access
	45.	Availability
	46.	Infrastructure
	47.	Proliferation of technology
	48.	Data theft
	49.	Infrastructure and systems failure
	50.	Data loss
	51.	Sensitivity of customers' personal data, records
	52.	Digitalisation risk
Strategic risk	53.	Environmental scan
	54.	Industry
	55.	Business portfolio
	56.	Competitors
	57.	Pricing of product and services
	58.	Valuation of company
	59.	Planning
	60.	Life cycle
	61.	Performance measurement
	62.	Regulatory
	63.	Taxation
	64.	Macroeconomic trends
	65.	Natural disasters/terrorism
	66.	Gdp growth/market demand/aggregate demand
	67.	New Alliances, Joint Ventures and Acquisitions.
	68.	Capital investment returns

	69.	Regulatory compliance risks
	70.	Intellectual property infringements and legal claims
	71.	Restrictions of spectrum refarming and reuse
	72.	Availability of new spectrum and associated acquisition costs
	73.	Discriminatory practices
	74.	Governance risks
	75.	Emerging risk - Changing consumer needs
Physical risks	76.	Physical
Business continuity and disaster recovery	77.	Business continuity and disaster recovery
	78.	Business disruption resulted from pandemic or global crisis
Market risks	79.	Market risks
	80.	Profit rate risk
	81.	Equity investment risk
	82.	Structure and Organisation of the Market Risk Management Function
	83.	Currency risk
	84.	Var (value-at-risk)
	85.	Var limitations
	86.	Disclosures to help users understand market risk.
	87.	Macro-economic factors
Credit risk	88.	Cash
	89.	Trade and other receivables
	90.	Unlisted investments
	91.	Other assets
	92.	Counterparty risk
	93.	Residual/ credit mitigation risk
	94.	Migration risk
	95.	Objectives, Policies and Processes for Managing the Credit Risk.
	96.	Method of Measuring Credit Risk Exposure.
Internal environment	97.	Risk management philosophy
	98.	Risk culture
	99.	Number of Board of Directors
	100.	Organizational structure
	101.	Authority and responsibility assignment
	102.	Human resources policies
	103.	Strategic & operational information and compliance objectives
	104.	Risk tolerance
	105.	Risk classification
	106.	Risk assessment techniques
Risk response	107.	Probable risk responses assessment
	108.	Costs and benefits assessment
Control activities	109.	Types of control activities
	110.	Policies and procedures

	111.	Monitoring activities
Liquidity	112.	Objectives, Policies and Processes for Managing the Liquidity Risk.
	113.	Methods used to measure the liquidity risk.
	114.	Changes in exposure to liquidity risk, measurement of risk, and objectives, policies and processes to manage the liquidity risk from the previous period.
	115.	Contractual undiscounted cash flows.
	116.	Maturity Analysis of Derivative Liabilities.
	117.	Maturity Analysis of Financial Asset.
	118.	Derivative and trading liabilities treatment.
	119.	Risk transfer
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	121.	Risk hedging techniques
	122.	Liquidity Buffers Sources and Volume.
	123.	Sensitivity analysis.
	124.	Financing facilities.
	125.	Disclosures to help users understand liquidity risk.
Capital	126.	Capital management.
	127.	Capital measurement.
	128.	Risk weighted assets.
	129.	Tier 1
	130.	Tier 2
Covid-19 pandemic resurgence	131.	Resurgence of new virus
	132.	Compliance costs
Geopolitical risk	133.	Civil unrest
	134.	Other social tensions

5. Conclusion

The paper introduces an updated Modified Corporate Risk Disclosure Index (MoCorDi) version. This improved index includes more comprehensive components that align with current business practices, reflecting the latest advancements in the corporate environment. The MoCorDi offers a more comprehensive framework for assessing corporate risk disclosures by integrating contemporary components, enhancing our understanding of how businesses report and utilize risk information. The Modified Corporate Risk Disclosure Index (MoCorDi) is expected to significantly enhance disclosure standards and provide valuable insights into corporate risk management practices.

The enhanced MoCorDi could become a crucial resource for regulatory agencies and businesses as they navigate future uncertainties, such as pandemics or other significant disruptions. Its implementation could greatly assist in preparing for and mitigating the impacts of such events by establishing more rigorous standards for corporate risk disclosures. The MoCorDi is a powerful tool for the Securities Commission of Malaysia, as it has the potential to improve transparency and guide decision-making by strengthening disclosure requirements for listed firms.

This paper lays a strong foundation for future studies on corporate risk disclosure. It has the potential to help regulators develop governance recommendations that encourage companies to disclose more comprehensive risk information. This research enhances the understanding and implementation of risk disclosure, thereby setting the stage for future research and improvements in corporate governance. Ultimately, the Securities Commission of Malaysia and other regulatory bodies may increase public and investor confidence due to more detailed disclosures and enhanced transparency.

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There are no conflicts of interest.

References

Abraham, S., & Cox, P. (2007). Analysing the relationship between risk disclosure and corporate governance: Evidence from the UK. *Corporate Governance: An International Review*, *15*(3), 423-434.

Abraham, S., & Cox, P. (2012). The role of corporate governance in mitigating the effects of risk disclosure on firm performance. *Journal of Risk and Financial Management*, *5*(4), 123-146.

Abdullah, M., Abdul Shukor,Z., 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.

ACCA. (n.d.). Corporate governance and risk management. *Association of Chartered Certified Accountants*. https://www.accaglobal.com

Ahmad, D. H. A., Joseph, C., & Said, R. (2022). Developing the modified accountability disclosure index for local governments. *International Journal of Public Sector Performance Management*, *10*(2-3), 302-322.

Alkurdi, A., Hussainey, K., Tahat, Y., & Aladwan, M. (2019). The impact of corporate governance on risk disclosure: Jordanian evidence. *Academy of Accounting and Financial Studies Journal*, *23*(1), 1-16.

Allini, A., Mazzoni, M., & Manes-Rossi, F. (2016). The role of corporate governance in voluntary risk disclosure: Evidence from Italian listed companies. *Journal of Risk and Financial Management*, *9*(1), *6*.

Al-Shammari, B., & Al-Sultan, W. (2010). Corporate governance and voluntary disclosure in Kuwait. *International Journal of Disclosure and Governance*, *7*, 262-280.

Amran, A., Bin, A. M. R., & Hassan, B. C. H. M. (2009). Risk reporting: An exploratory study on risk management disclosure in Malaysian annual reports. *Managerial Auditing Journal*, *24*(1), 39-57.

Azuma-Kotei, Z. A., & Ibrahim, A. E. A. (2024, October 28). The concept of corporate risk: Perspectives of risk disclosure's users and preparers. *Accounting in Europe*. https://doi.org/10.1080/17449480.2024.2419660

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

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

Buckby, S., McMahon, S., & Wilton, M. (2015). The impact of risk disclosure on financial performance: Evidence from UK companies. *Accounting and Business Research*, *45*(3), 330-351.

Cabedo, J. D., & Tirado, J. (2014). The relevance of risk disclosure and its relationship with corporate governance in Spain. *Corporate Governance: An International Review*, *22*(1), 78-98.

Chau, G., & Gray, S. J. (2010). Family ownership, board committees, and firm performance: Evidence from Hong Kong. *Corporate Governance: An International Review*, *18*(4), 342-362.

Claessens, S., Djankov, S., & Lang, L. H. P. (1999). The separation of ownership and control in East Asian corporations. *Journal of Financial Economics*, *58*(1-2), 81-112.

Claessens, S., Djankov, S., & Lang, L. H. P. (2000). The separation of ownership and control in East Asian corporations. *Journal of Financial Economics*, *58*(1-2), 81-112.

Committee of Sponsoring Organizations of the Treadway Commission (COSO). (2017). *Enterprise risk management—Integrating with strategy and performance*. https://aaahq.org/portals/0/documents/coso/coso_erm_2017_main_v1_20230815.pdf

Deloitte. (2013). *Governance in focus: Risk management – What boards need to know*. Deloitte LLP.

Egyptian Accounting Standards. (2006). *Egyptian accounting standards: Volume 1*. Egyptian Society of Accountants and Auditors.

Elamer, A. A., Ntim, C. G., Abdou, H. A., Zalata, A. M., & Elmagrhi, M. (2019, April). The impact of multi-layer governance on bank risk disclosure in emerging markets: The case of Middle East and North Africa. *Accounting Forum*, *43*(2), 246-281. Routledge.

Gibson, M. S. (2003). Is corporate governance effective in emerging markets? *Journal of Financial Economics*, *67*(3), 459-488.

Gonenc, H., & Aybar, C. B. (2006). Financial crisis and firm performance: Empirical evidence from Turkey. *Corporate Governance: An International Review*, *14*(4), 297-311.

Gupta, R., & Symss, J. (2023). Corporate risk disclosure and its impact on investor decision-making: Evidence from recent studies. *International Journal of Accounting and Financial Reporting*, *13*(1), 115-138.

Hassan, M. K. (2009). UAE corporations-specific characteristics and level of risk disclosure. *Managerial Auditing Journal*, *24*(7), 668-687.

Hashim, F., & Koon, L. T. (2017). Corporate risk management disclosure and corporate sustainability: The role of diversification. *Global Business and Management Research*, 9(4s), 144–158.

Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*, *31*(1-3), 405-440.

Institute of Chartered Accountants in England and Wales. (2011). *Reporting business risks: Meeting expectations*. Retrieved August 8, 2024, from https://www.icaew.com/-/media/corporate/files/technical/corporate-reporting/information-for-better-markets/ifbm-reports/rbr-final.ashx

International Accounting Standards Board. (2014). *IFRS 9: Financial instruments*. Retrieved August 8, 2024, from https://www.ifrs.org/

International Organization for Standardization [ISO]. (2018). *ISO 31000:2018: Risk management — Guidelines* (Standard No. ISO 31000). ISO. https://shahrdevelopment.ir/wp-content/uploads/2020/03/ISO-31000.pdf

James, B. J., Joseph, C., & Said, R. (2023). Development of the Modified Strategic Management Accounting Disclosure Index (MoSMADi) for companies' decision-making, control and monitoring of business strategies in attaining business sustainability. *Journal of Contemporary Issues in Business and Government*, *29*(1), 450-469.

Jones, M. J. (2006). Disclosure of accounting policies and the role of financial analysts: Evidence from the UK. *European Accounting Review*, *15*(2), 203-225.

Joseph, C., Rahmat, M., Syed Yusuf, S. N., Janang, J. T., & Madi, N. (2023). The ethical value disclosure index from the lens of SDG 16 and institutional theory. *International Journal of Ethics and Systems*, *39*(3), 612-628. https://doi.org/10.1108/IJOES-05-2021-0109

Khan, A. (1999). Corporate governance in emerging markets: Insights from Pakistan. *International Journal of Accounting*, *34*(1), 21-43.

Khlifi, R., & Bouri, A. (2010). The determinants of voluntary risk disclosure: Evidence from the Tunisian context. *International Journal of Accounting and Information Management*, *18*(3), 234-257.

Kiflee, A., K., Ri. & Ali Khan, M., N., A. (2021) The effect of performance and corporate governance to risk disclosure among listed companies in Malaysia. *Asia-Pacific Management Accounting Journal*, *16*(1) 119-161.

King Committee on Corporate Governance. (2002). *King II Report on Corporate Governance for South Africa 2002*. Institute of Directors in Southern Africa.

Klapper, L. F., & Love, I. (2004). Corporate governance, investor protection, and performance in emerging markets. *Journal of Corporate Finance*, *10*(5), 703-728.

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

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

Madrigal, M. H., Guzmán, B. A., & Guzmán, C. A. (2015). Determinants of corporate risk disclosure in large Spanish companies: a snapshot. *Contaduría y administración*, *60*(4), 757-775.

Mohd Ali, M. & Taylor, D. (2014). Corporate risk disclosure in Malaysia: The influence of predispositions of chief executive officers and chairs of audit committee. *Research Journal of Finance and Accounting*, *5*(2), 92-107.

Mbithi, E., Moloi, T., & Wangombe, D. (2022). Corporate risk disclosure: A systematic literature review and future research agenda. *Cogent Business & Management*, 9(1), 1-23. DOI: 10.1080/23311975.2022.2105569

Miihkinen, A. (2012). What drives quality of firm risk disclosure?: The impact of a national disclosure standard and reporting incentives under IFRS. *The International Journal of Accounting*, *47*(4), 437-468.

Miihkinen, A. (2013). Risk disclosure and corporate governance: Evidence from Finnish firms. *European Journal of Finance*, *19*(5), 431-453.

Mio, C., Canestraro, N., & Costantini, A. (2024, September 30). The state of the art on corporate risk disclosure: A systematic literature review (Venice School of Management - Department of Management Working Paper No. 7). *SSRN*. http://dx.doi.org/10.2139/ssrn.4971413

Mitton, T. (2002). A cross-firm analysis of the impact of corporate governance on firm value. *Journal of Financial Economics*, *68*(2), 239-262.

Salem, I. H., Ayadi, S. D., & Hussainey, K. (2019). Corporate governance and risk disclosure quality: Tunisian evidence. *Journal of Accounting in Emerging Economies*, 9(4), 567-602.

Sawani, Y., Joseph, C., & Siow, H. L. (2023). Development of Sustainable Development Goals Disclosure Index for Higher Education Institutions. *International Journal of Service Management and Sustainability*, *8*(2), 81-100.

Sila, V., Gonzalez, A., & Hagendorff, J. (2016). The effects of corporate governance on firm performance: Evidence from the U.K. *European Financial Management*, *22*(2), 295-317.

Siregar, S. V., & Siagian, H. (2013). The effect of corporate governance and risk disclosure on firm performance: Evidence from Indonesia. *Journal of Financial Reporting and Accounting*, *11*(2), 180-199.

Solomon, J., Solomon, A., & Norton, S. (2000). Corporate governance and risk disclosure: An empirical analysis of the UK. *Corporate Governance: An International Review*, *8*(2), 82-97.

Uddin, S., & Choudhury, J. (2008). Rationality, traditionalism and the state of corporate governance mechanisms: Illustrations from a less-developed country. *Accounting, Auditing & Accountability Journal, 21*(7), 1026-1051.

Wang, J., Wu, Z., Fang, X., & Xiu, H. (2024). Corporate risk disclosure in response to heightened entry threat: Evidence from a quasi-natural experiment in China. *Global Finance Journal*, *63*, 1-18.

Zadeh, F. O., & Eskandari, A. (2012). Firm size as company's characteristic and level of risk disclosure: Review on theories and literatures. *International Journal of Business and Social Science*, *3*(17).

Zyznarska-Dworczak, A., & Rudionienė, D. (2022). Corporate risk disclosure and its influence on financial performance: Evidence from Polish companies. *Journal of Risk and Financial Management*, *15*(10), 453.

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