THE CORONAVIRUS (COVID-19) RELATED INFORMATION ON FIRM PERFORMANCE DISCLOSURE: THE MODERATING EFFECT OF CORPORATE GOVERNANCE MECHANISMS

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2024

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DISSERTATION SUBMITTED IN PARTIAL FULFILMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ACCOUNTING
(REPORTING AND MANAGEMENT ACCOUNTABILITY)

FACULTY OF BUSINESS AND ECONOMICS
UNIVERSITI MALAYA
KUALA LUMPUR

2024

UNIVERSITI MALAYA

ORIGINAL LITERARY WORK DECLARATION

Name of Candidate: Vivian Khor

Registration/ Matric No: S2111086/1

Name of Degree: Master of Accounting (Reporting and Management Accountability)

Title of Dissertation: The Coronavirus (COVID-19) Related Information on Firm Performance Disclosure: The Moderating Effect of Corporate Governance Mechanisms

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THE CORONAVIRUS (COVID-19) RELATED INFORMATION ON FIRM PERFORMANCE DISCLOSURE: THE MODERATING EFFECT OF CORPORATE GOVERNANCE MECHANISMS

ABSTRACT

The world is heavily affected by the impact of coronavirus (COVID-19) ever since the first reported in Wuhan City, China at the year-end of 2019. As the first case of coronavirus (COVID-19) was detected in Malaysia, the government of Malaysia has no alternative but to promulgate and extend the Movement Control Order (MCO) until the number of coronavirus (COVID-19) decreased in Malaysia. This first research objective is to examine the association between coronavirus (COVID- 19) related information and firm performance disclosure among Malaysian public listed companies. The moderating effects of corporate governance mechanisms: board size, board independence, board gender diversity and audit committees, in enhancing the relationship between (COVID-19) related information and firm performance disclosure are also examined as second research objective in the study. Prior literatures found that a better corporate governance will result in a higher level of firm performance disclosure, which the moderating effects of corporate governance mechanism are investigated on the Malaysian public listed companies. This study makes several significant contributions as it theoretically extends the application of Agency theory by examining its relevance in the context of the coronavirus (COVID-19) pandemic, providing new insights into how corporate governance mechanisms influence firm performance disclosure during crises. Practically, the study offers valuable implications for corporate policymakers, regulators, and practitioners in enhancing firm transparency and communication strategies, particularly in turbulent times. Methodologically, the use of computerized textual analysis offers a robust and replicable approach to content analysis, enriching the process of evaluating corporate disclosures. Additionally, this research aims to fill a gap in the literature by being one of the early studies to analyze coronavirus (COVID-19) related information and firm performance disclosure in Malaysia, contributing to a better understanding of disclosure practices in emerging markets during unprecedented times. From here, this study finds the number of total 137 public listed companies from five (5) selected sectors to represent Malaysian public listed companies as a whole. Also, this study conducted quantitative research which focuses on content analysis that related to computerized textual analysis to score the coronavirus (COVID-19) related information and firm performance disclosure in the annual reports. SPSS Statistic version 26 was used in this study to conduct descriptive statistic, correlation analysis, multicollinearity test, regression analysis, and moderating analysis on the variables. Finally, the findings found significantly positive relationship between coronavirus (COVID-19) related information and performance disclosure, which indicates that coronavirus (COVID-19) related information is associated with the level of firm performance disclosure. However, other than board gender diversity, the other corporate governance mechanisms: board size, board independence and audit committee showed insignificant negative relationship in moderating the association of coronavirus (COVID-19) related information and performance disclosure. The inclusion of women on boards brings diverse perspectives, leading to more comprehensive discussions and decision-making. That is, the female board members must have influential roles while translating gender diversity into better governance and disclosure practices.

Keywords: Pandemic; Coronavirus (COVID-19) Related Information; Firm Performance Disclosure; Corporate Governance Mechanisms; Agency Theory

MAKLUMAT BERKAITAN CORONAVIRUS (COVID-19)

MENGENAI PENDEDAHAN PRESTASI FIRMA:

KESAN MODERASI DARI

MEKANISME TADBIR URUS KORPORAT

ABSTRAK

Sejak pertama kali koronavirus (COVID-19) kes dilaporkan di Bandar Wuhan, China pada akhir tahun 2019, dunia telah terjejas oleh kesan coronavirus (COVID-19). Dengan kes pertama koronavirus (COVID-19) dikesan di Malaysia, kerajaan Malaysia tidak mempunyai alternatif selain mengisytiharkan dan melanjutkan Perintah Kawalan Pergerakan (PKP) sehingga bilangan koronavirus (COVID-19) berkurangan di Malaysia. Objektif penyelidikan pertama ini adalah untuk mengkaji perkaitan antara maklumat berkaitan coronavirus (COVID-19) dan pendedahan prestasi firma dalam kalangan syarikat senaraian awam Malaysia. Kesan penyederhanaan mekanisme tadbir urus korporat: saiz lembaga, kebebasan lembaga pengarah, kepelbagaian jantina lembaga dan jawatankuasa audit, dalam meningkatkan hubungan antara maklumat berkaitan (COVID-19) dan pendedahan prestasi firma juga diteliti sebagai objektif penyelidikan kedua dalam kajian. Literatur terdahulu mendapati bahawa tadbir urus korporat yang lebih baik akan menghasilkan tahap pendedahan prestasi firma yang lebih tinggi, yang mana kesan penyederhanaan mekanisme tadbir urus korporat disiasat ke atas syarikat senaraian awam Malaysia. Kajian ini memberikan beberapa sumbangan penting kerana secara teorinya meluaskan aplikasi teori Agensi dengan mengkaji kaitannya dalam konteks pandemik coronavirus (COVID-19), memberikan pandangan baharu tentang cara mekanisme tadbir urus korporat mempengaruhi pendedahan prestasi firma semasa krisis. Secara praktikalnya, kajian ini menawarkan implikasi yang berharga untuk penggubal dasar korporat, pengawal selia dan pengamal dalam meningkatkan ketelusan firma dan strategi

komunikasi, terutamanya dalam masa yang bergelora. Dari segi metodologi, penggunaan analisis teks berkomputer menawarkan pendekatan yang mantap dan boleh ditiru kepada analisis kandungan, memperkayakan proses menilai pendedahan korporat. Selain itu, penyelidikan ini bertujuan untuk mengisi jurang dalam literatur dengan menjadi salah satu kajian awal untuk menganalisis maklumat berkaitan coronavirus (COVID-19) dan pendedahan prestasi firma di Malaysia, menyumbang kepada pemahaman yang lebih baik tentang amalan pendedahan dalam pasaran baru muncul pada masa yang belum pernah berlaku sebelum ini. Dari sini, kajian ini mendapati jumlah 137 syarikat senaraian awam daripada lima (5) sektor terpilih untuk mewakili syarikat senaraian awam Malaysia secara keseluruhan. Selain itu, kajian ini menjalankan penyelidikan kuantitatif yang memfokuskan pada analisis kandungan yang berkaitan dengan analisis teks berkomputer untuk menjaringkan maklumat berkaitan coronavirus (COVID-19) dan pendedahan prestasi firma dalam laporan tahunan. Statistik SPSS versi 26 digunakan dalam kajian ini untuk menjalankan statistik deskriptif, analisis korelasi, ujian multikolineariti, analisis regresi, dan analisis penyederhanaan ke atas pembolehubah. Akhir sekali, penemuan mendapati hubungan positif yang ketara antara maklumat berkaitan coronavirus (COVID-19) dan pendedahan prestasi, yang menunjukkan bahawa maklumat berkaitan coronavirus (COVID-19) dikaitkan dengan tahap pendedahan prestasi firma. Walau bagaimanapun, selain daripada kepelbagaian jantina lembaga, mekanisme tadbir urus korporat yang lain: saiz lembaga pengarah, kebebasan lembaga pengarah dan jawatankuasa audit menunjukkan hubungan negatif yang tidak ketara dalam menyederhanakan persatuan maklumat berkaitan coronavirus (COVID-19) dan pendedahan prestasi. Kemasukan wanita dalam lembaga membawa perspektif yang pelbagai, yang membawa kepada perbincangan yang lebih komprehensif dan membuat keputusan. Maksudnya, ahli lembaga wanita mesti mempunyai peranan yang

berpengaruh sambil menterjemahkan kepelbagaian jantina kepada amalan tadbir urus dan pendedahan yang lebih baik.

Kata kunci: Pandemik; Pendedahan Coronavirus (COVID-19); Pendedahan Prestasi Firma; Mekanisme Tadbir Urus Korporat; Teori Agensi

AKNOWLEDGEMENT

First and foremost, I am grateful to University of Malaya for giving me the opportunity to offer me the admission to the Master of Accounting programme and creating such a wonderful learning environment.

Next, I would like to express my sincere gratitude to my supervisor Dr. Yazkhiruni Binti Yahya whose continuous guidance, support and encouragement ensured that I am always on the right track in the journey of completing this dissertation. Her careful supervision and valuable feedback enabled me to perform to the best of my ability which I will be forever grateful.

Also, I humbly dedicate this dissertation to my supportive family members. I would have not been able to complete this dissertation if there was none of their continuous moral, emotional, and financial support. I am forever indebted to them for all they have done for me and continue to do so.

Last but not least, I would like to thank all the amazing lecturers and lovely course mates from MAcc for a wonderful learning experience.

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LIST OF SYMBOLS AND ABBREVIATIONS

The abbreviations used in this study:

COVID-19	Coronavirus Year 2019
MCO	Movement Control Order
BS	Board Size
BI	Board Independence
GD	Board Gender Diversity
AC	Audit Committee
CR	Current Ratio
ROA	Return on Asset

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CHAPTER 1: INTRODUCTION

1.1 Introduction

The world is heavily affected by the impact of coronavirus (COVID-19) ever since the first reported in Wuhan City, China at the year-end of 2019. This outbreak has expanded speedily in 2020 to more than 200 nations, including Malaysia, causing a serious and fast deterioration in the world's economy. As the first case of coronavirus (COVID-19) was detected in Malaysia, the number of coronavirus (COVID-19) case kept increasing and eventually an official speech and officially promulgated the Movement Control Order (MCO) had been made by the previous Prime Minister of Malaysia, Muhyiddin Yassin on 16 March 2020 to stop the infection of the disease. The government of Malaysia has no alternative but to extend the Movement Control Order (MCO) until the number of coronavirus (COVID-19) decreased in Malaysia.

With the initiation of the Movement Control Order (MCO), coronavirus (COVID-19) has made a serious negative impact on various businesses, specifically entertainment, transportation, tourism which showed slow recovery due to the Malaysian borders remaining closed and the entry of all tourists and foreign visitors into Malaysia were restricted since 2020. It could be said that the Tourism, Hospitality and Entertainment sector was the first to experience the effects of the coronavirus (COVID-19) impacts (Hamid et al., 2021). Furthermore, the impacts also negatively affected the Construction sector in the way that the majority of construction projects were halted throughout the Movement Control Order (MCO) (The Malaysian Reserved, 2021). Although the Movement Control Order (MCO) had been lifted in 2021, the recovery progress was too slow as there were issues arising from the strict standard operating procedures (SOPs) on health and safety measures for construction workplaces that prevented the workers to work normally, which eventually caused extra costs to the sector (Driver Trett, 2021). Hence, this study will be focused on the financial reporting disclosures in 2020 for the Travel, Hospitality and Entertainment sector, as well as the Construction sector to investigate whether coronavirus (COVID-19) related information is associated with performance disclosure in the annual reports from these two sectors which have been negatively affected.

Over and above that, it was found that the Retail sector and the Food and Beverage sector were both impacted by coronavirus (COVID-19) at different levels, both positively or negatively. The Retail sector which supplies the essential and daily necessities was able to maintain in a good condition and even with a small growth rate from coronavirus (COVID-19) impacts (Jaafar, 2021). Also, the businesses in the Food and Beverage sector which supply the at-home consumption were also earning revenue as their sales increased (Jaafar, 2021). On the contrary, the businesses in the Retail sector which sell shopping goods, and other non-essential goods were experiencing poor sales and decline in the growth rate (Malaysia Kini, 2020). The situation happened to the out-of-home consumption in the Food and Beverage sector as well due to the strict standard operating procedures (SOPs) during Movement Control Order (MCO) (Yunus, 2020). With this, both the financial reporting disclosure of 2020 for the Retail sector and the Food and Beverage sector will also be included in the study.

Far apart from the above four (4) sectors, the Healthcare sector had been running so well that more business opportunities arose from the impact of coronavirus (COVID-19). Some of the companies were not originally from the Healthcare sector, however, they were to be part of the sector as the outbreak of coronavirus (COVID-19) pandemic (Malaysia Investment Development Authority, 2021). Accordingly, the financial reporting disclosure of 2020 for the Healthcare sector is the last sector to be studied in this research to identify whether coronavirus (COVID-19) related information is associated with performance disclosure in the annual reports of companies in the particular sector.

As a conclusion, this study will include the annual reports of 2020 from five (5) sectors of Bursa Malaysia to observe the level of disclosure of coronavirus (COVID-19) related information and firm performance. It was known that these sectors had been affected on different levels, both positively and negatively. The five (5) sectors are: Travel, Hospitality and Entertainment sector, Construction sector, Retail sector, Food and Beverage sector, and Healthcare sector.

1.2 Background of Study

As the outbreak of coronavirus (COVID-19) since 2019 has affected the economic activity around the world, it showed negative impacts on financial reporting disclosure among the firms and institutions in Malaysia. To beautify the credibility and transparency of economic reporting in Malaysia, the Malaysian Financial Reporting Standards (MFRS) framework changed into followed via the Malaysian Accounting Standards Board (MASB) in full convergence with the International Financial Reporting Standards (IFRS) framework seeing that January 1, 2012 (PWC, 2022). In detail, the objective of MFRS is "to prescribe the basis for presentation of general purpose financial statements, to ensure comparability both with the entity's financial statements of previous periods and with the financial statements of other entities' (MASB, 2022). In other words, the process of accounting recording of various business transactions in a business's financial statement is referred to as the financial reporting disclosure which follows a prescribed set of accounting assumptions and reporting standards (Sultana et al., 2021). Also, the financial reporting disclosure also includes noteworthy information that is needed and necessary in the decision-making process (Sultana et al., 2021).

According to Wadesango and Wadesango (2016), financial reporting should be prepared and made available to external users in many companies internationally. Magness (2006) has mentioned that the stakeholders are now making use of the financial reporting disclosure to make available information on issues which are not financial matters (Wadesango & Wadesango, 2016). During the coronavirus (COVID-19) pandemic and its economic effects, the investors and other stakeholders required extra financial information with higher quality (Gould & Arnold, 2020). The financial and accounting reporting requirements which the financial statements preparers would need to consider before addressing the financial impacts of coronavirus (COVID-19), have been made available by the accountancy firms and regulators (Gould & Arnold, 2020).

Furthermore, in order to investigate the effect of coronavirus (COVID-19) related information on financial reporting disclosure, it is essential to include the examination of firm performance disclosure. The firm performance disclosure is important as it explains the business efficiency of the companies. Hence, the firm performance disclosure acts as the dependent variable in this research so as to observe the impact of coronavirus (COVID-19) on a particular business. Besides that, firm performance works as a primary provider to the perceptual and organization or control abilities of the companies (Taouab & Issor, 2019).

The common variables which represent firm performance are return on assets (ROA), return on equity (ROE) and return on investment (ROI) (Rosikah, 2018). Although Return on Assets (ROA), Return on Equity (ROE), and Return on Investment (ROI) are generally used signs of company performance (Rosikah, 2018), this study does no longer use these measures as based variables. Instead, it specializes in company performance disclosure as a whole, analysing how coronavirus (COVID-19) related information is communicated in the context of financial reviews. The choice to prioritize organization overall performance disclosure over specific financial metrics is motivated via the want to recognize no longer just the numerical performance, but how companies gift their operational resilience and strategic responses at some point of the coronavirus (COVID-19) pandemic. By adopting a corporate narrative perspective, this observe seeks to discover how agencies reveal their overall performance and risks in instances of exceptional uncertainty. This awareness on disclosure is critical, because it exhibits the transparency and credibility of companies' communique with stakeholders throughout the coronavirus (COVID-19) pandemic. The narratives around corporation overall performance can offer deeper insights into an agency's internal control, governance, and long-time period strategies, which are not completely captured by using monetary ratios. This method permits for a broader analysis of the firm's potential to manipulate and record overall performance amid the challenges posed by means of the coronavirus (COVID-19) pandemic, which makes this perspective in particular essential.

Previous studies have proven the financial performance of the impact of coronavirus (COVID-19) in different countries such as Bangladesh, China, United Kingdom and so on (Sultana et al., 2021; Shen et al., 2020; Hamawandy et al., 2021). Also, Lassoued and Khanchel (2021) has also studied the impact of coronavirus (COVID-19) pandemic on earning management for European firms. Besides that, the research on coronavirus (COVID-19) disclosure measurement and the association between the level of coronavirus (COVID-19) and uncertainty for United Kingdom Financial Times Stock Exchange has been carried out (Elmarzouky et al., 2021a). However, no research has been done to study the relationship between coronavirus (COVID-19) related information and performance disclosure in Malaysia.

Hence, the aim of this research is to examine the association between coronavirus (COVID-19) related information and performance disclosure in the annual reports of Malaysian public listed companies. Also, this research has adopted the study from Elmarzouky et al. (2021a) to examine the moderating effect of corporate governance on the relationship between coronavirus (COVID-19) related information and the performance disclosure in the annual reports.

Brown and Caylor (2004) suggested that firms with better corporate governance will result in better operating performance, which is the firm performance. It is due to the reason that successful and effective corporate governance will help to downsize "control rights" of the shareholders and creditors hand out to firm managers, causing the probability of positive net present value projects to be invested by managers (Shleifer & Vishny, 1997). Elmarzouky et al. (2021a) has included three (3) corporate governance mechanisms: board size, board independence, board gender diversity in the study to observe the moderating effect on the relationship between coronavirus (COVID-19) related information and the performance disclosure in the annual reports. Unlike Elmarzouky et al. (2021a), this study includes one (1) more corporate governance mechanism, which is the audit committee as one of the moderating variables. Audit committee has an important role to ensure and monitor the process of accounting in a company so as to ensure the information provided are relevant and credible to all stakeholders (Naimah & Hamidah, 2017). Luo (2019) also stated that the audit committee was defined as one of the key governance mechanisms in monitoring financial reporting quality.

With the appearance of audit committee independence, the firm performance disclosure is then to be expected to improve (Naimah & Hamidah, 2017). Zhou et al. (2018) argued that audit committees act as a monitoring bonding mechanism to reduce agency problems which leads the audit committees to play an important corporate governance mechanism. Furthermore, the interruption of managements' materiality justification on earnings trend can be alleviated as audit committee members may provide greater support to the external auditors (DeZoort et al., 2003). It was said that the longer the experience of the audit committee members have, the more support could be provided, especially for those who are certified public accountants (CPAs) (Zhou et al., 2018). The informativeness of accounting figures is also influenced by the audit committee independence and activities (Deli & Gillan, 2000). Besides that, not merely that the audit committee is positively related to firm performance (Aldamen et al., 2012). For example, the frequency of audit committee meetings is positively related to Thai firms performance, Saudi banks, banks in Indonesia, and firms in Jordan (Al Farooque et al., 2020; Almoneef & Samontaray, 2019; Chou & Buchdadi, 2017; Oroud, 2019). There were also studies that have proven that the role of audit committees has reduced internal control weakness and financial statement restatement frequency, and increasing earnings quality (Abbott, Parker, & Peters, 2004; Klein, 2002; Krishnan, 2005; Zhang, Zhou, & Zhou, 2007). Also, a high quality oversight of the internal control system and the risk management process can be guaranteed with the audit committee (Luo, 2019). Hence, it is important to include audit committee as one of the corporate governance mechanisms in the research study as it does affect both the firm performance and quality of a firm's performance disclosure.

However, there are fewer studies on the coronavirus (COVID-19) related information on financial reporting disclosure in developing countries. This is due to the fact that the coronavirus (COVID-19) pandemic has just started since 2019 and the impact was still on-going. Similarly, it was the early stage where the coronavirus (COVID-19) related information on financial reporting disclosure in Malaysia is being empirically evaluated. As mentioned on the above, this study has adopted a number of contributions to accounting, financial reporting and corporate governance literature from Elmarzouky et al. (2021a) to examine the moderating effects of corporate governance on the relationship between coronavirus (COVID-19) related information and firm performance disclosure.

1.3 Problem Statement

With the coronavirus (COVID-19) pandemic, majority of the firms, regardless big or small, are facing coronavirus (COVID-19) connected disruption due to interrupted operations, dwindling demand, the cost of mitigating actions, and financial challenges which caused the financial reporting shown a wide range of coronavirus (COVID-19) related disclosures (EY, 2022). The KPMG's Global IFRS leader, Reinhard Dotzlaw has argued that "COVID-19 poses existential threats on the ability of a business to survive, which in turn has significant financial reporting effects from going concern and liquidity to recoverability and valuation of assets" (KPMG, 2020). The International Organization of Securities Commissions (2020) acknowledged the serious impact of COVID-19 on a firm's operation, financial, and investing activities, and highlighted the significance of disclosing integrated high-quality information (KPMG, 2020). Moreover, the changes for financial statements have included the measurement of assets and liabilities, as well as the disclosure and perhaps an entity's ability to carry on as a going concern (PWC, 2020). To be specific, the implications, including the indirect impacts from lower points of economic activity, which are caused by coronavirus (COVID-19), should be considered by all entities (PWC, 2020).

The coronavirus (COVID-19) pandemic has generated extreme fall in the economy around the world since 2020. The different companies from different industries in different countries will have various levels of impact. One of the developing countries, Bangladesh has also experienced a serious effect as the GDP growth rate has dropped to 5.21% when the expected GDP was 8.20% (Sultana et al., 2021). Similar to Malaysia, Bangladesh also suffers from enormous loss during strict lockdown period and restricted movement of the people (Sultana et al., 2021). Moreover, the largest developing country in the world, China, which was the initial country to go through the coronavirus (COVID-

19) outbreak has experienced a serious effect as well. China has reported that the coronavirus (COVID-19) outbreak has resulted in the worst global recession since 1930 and the GDP of China fell by 6.8% in the first quarter of 2020 (Shen et al., 2020). The impact of coronavirus (COVID-19) has caused the declining investment scales and decreasing the total revenue which were the negative impacts on the performance of listed Chinese companies (Shen et al., 2020).

Although past studies have proven the financial performance of the impact of coronavirus (COVID-19) in other developing countries such as Bangladesh and China (Sultana et al., 2021; Shen et al., 2020). Lassoued & Iman (2021) has also determined the impact of COVID-19 pandemic on earning management practices in European firms. Mahmoud et al. (2021) has provided the coronavirus (COVID-19) disclosure measurement and investigated the association between the level of coronavirus (COVID-19) disclosure and uncertainty within annual reports for FTSE-All share non-financial firms in the United Kingdom. However, the extent of coronavirus (COVID-19) to companies in Malaysia still remains underexplored. The motive of this studies is to examine the association between coronavirus (COVID-19) related information and firm performance disclosure in Malaysian public listed companies.

Notwithstanding that it was stated Travel, Hospitality and Entertainment sector was negatively affected by coronavirus (COVID-19), however, there were strategies carried out for them to survive, or continue to earn profit during the pandemic. Deraman et al. (2021) have documented hotels strategies during coronavirus (COVID-19) in Malaysia such as cost cutting strategy, quarantine hotel strategies, and price reduction strategy, which help to reduce the negative impact of the pandemic. Furthermore, the Construction sector is also able to find its way to reduce the negative impact of coronavirus (COVID-

19). Pamidimukkala & Kermanshachi (2021) stated the strategies that have been carried out by the sector such as initiating flexible work schedules to promote social distancing, and establishing a system to maintain effective communication so as to ensure the work could be effectively on going. Moreover, the Healthcare sector was widely to have had a positive impact from the pandemic. Nevertheless, during the first stage of the Movement Control Order (MCO), the total surgeries was reported to fall by 55%, and the cancelling elective surgeries come along with a reduction or cancelation of outpatient services (Hing et al., 2022). Indeed, the healthcare sector does not completely have the positive impact of coronavirus (COVID-19). Hence, it is not compulsory for the whole particular sector to be impacted in the way as mentioned earlier, that is, the Travel, Hospitality and Entertainment sector and Construction sector impacted negatively, and Healthcare sector impacted positively. However, this research will still be looking at the impact of coronavirus (COVID-19) on the particular sector as a whole.

Furthermore, one of the past studies had also investigated one of the largest corporate scandals, Enron, which due to the failure of corporate governance (Benston & Hartgraves, 2002). The Enron scandal was mainly as a result of the failure of the board of directors and audit committee of the board as their corporate governance mechanism (Benston & Hartgraves, 2002; Elson & Gyves, 2003). The board and audit committee failed to understand, review, approve, and monitor its accounting and reporting practices adequately to cause the scandal (Benston & Hartgraves, 2002). Hence, this study will include the corporate governance mechanisms: board size, board independence, gender diversity, and audit committee to examine the moderating effect in improving the relationship between coronavirus (COVID-19) related information and the firm performance disclosure.

The coronavirus (COVID-19) pandemic has profoundly disrupted financial activities global, posing existential threats to groups and significantly impacting financial reporting disclosures. Firms in Malaysia, like the ones in other nations, have faced interruptions in operations, declining demand, and elevated prices associated with mitigation efforts. Notably, KPMG's Global IFRS leader has highlighted that those disruptions have some distance-attaining implications for economic reporting, affecting aspects which includes going challenge exams and asset valuations (KPMG, 2020). While previous studies have documented the pandemic's effect on financial overall performance in nations like Bangladesh and China (Sultana et al., 2021; Shen et al., 2020), there stays a loss of studies specifically focused on Malaysian agencies. Understanding coronavirus (COVID-19) related information disclosure have the relationship on firm overall performance in this context is important, as transparency and excellent in financial reporting can considerably affect investor self-belief and company governance throughout times of disaster.

Exploring this problem in Malaysia is particularly interesting given the various strategies employed throughout specific sectors to mitigate pandemic affects. For instance, the Travel, Hospitality, and Construction sectors have tailored via fee-cutting measures and flexible work schedules (Deraman et al., 2021; Pamidimukkala & Kermanshachi, 2021). Additionally, inspecting the role of corporate governance mechanisms—including board size, board independence, board gender diversity and audit committee effectiveness can provide valuable insights into how these elements might also moderate the connection between COVID-19-related disclosures and company performance. By specializing in those dynamics within the Malaysian context, this observe aims to make contributions to a deeper understanding of ways neighbourhood firms navigate crises and enhance their financial reporting practices to foster stakeholder accept as true with and accountability.

1.4 Research Questions

To take the above problem statement into consideration, this research seeks to answer the following research questions:

1. Does coronavirus (COVID-19) related information disclosure be associated with performance disclosure among Malaysian public listed companies?
2. Do the corporate governance mechanisms (board size, board independence, board gender diversity and audit committee) moderate the relationship between coronavirus (COVID-19) related information and performance disclosure?

1.5 Research Objectives

Based on the research question and the research background, this research was designed to achieve the following research objectives:

1. To examine the association between coronavirus (COVID-19) related information disclosure and performance disclosure among Malaysian public listed companies.
2. To examine the moderating effect of corporate governance mechanisms (board size, board independence, board gender diversity and audit committee) in the relationship between coronavirus (COVID-19) related information and performance disclosure.

1.6 Research Significance & Expected Contribution

This research will investigate the relationship between coronavirus (COVID-19) related information and performance disclosure in the annual reports among Malaysian public listed companies. It is expected that this study will make a number of theoretical contributions on accounting, financial reporting and corporate governance contribution, practitioners' contribution as well as regulators contributions.

1.6.1 Theoretical and Literature Contribution

Firstly, the study is expected to make the theoretical contribution on the Agency theory which explores the relationship between owners or shareholders of the companies and managers or executive who manage the companies on their behalf to communicate more coronavirus (COVID-19) related information and performance disclosure in Malaysia. Also, Agency theory assesses how corporate governance practices influence the quality of coronavirus (COVID-19) related information and performance disclosure, making this a valuable area of investigation, especially in countries like Malaysia where governance standards may vary across industries.

As mentioned earlier in this chapter, this study has adopted Elmarzouky et al. (2021a) to devote to the literature by investigating the relationship between coronavirus (COVID-19) related information and firm's performance disclosure. However, unlike the adopted article, this study will be including one (1) more corporate governance mechanism- audit committee as it acts as an important key to monitor financial reporting quality (Luo, 2019). As the coronavirus (COVID-19) pandemic was still relatively new, there were fewer studies related to it. Thus, the significant literature contribution that the study attempted to make was added to the existing literature of coronavirus (COVID-19) related information and firm performance disclosure. This was expected to bear significance because studies of the past mainly focused on the impact of coronavirus (COVID-19) on firm performance, other incidents affected the firm performance, or the relationship between corporate social responsibility related information with firm performance disclosure.

1.6.2 Practitioner Contribution

The study will make contributions to the practitioners to have better understanding on the relationship between the coronavirus (COVID-19) related information and firm's performance disclosure in Malaysian public listed companies. By having analysis on the coronavirus (COVID-19) related information and firm performance disclosures, it allows practitioners to have insights to compare between sectors in which coronavirus (COVID-19) related information disclosure is associated with the firm's performance disclosure.

Furthermore, the study also expects to contribute to the practitioners on the moderating effects of corporate governance mechanisms. It is important for the practitioners to have perception towards corporate governance mechanisms on firm performance disclosure. For example, one of the largest corporate scandals- Enron was due to the failure of corporate governance (Benston & Hartgraves, 2002). Unlike the study conducted by Elmarzouky et al. (2021a) which only included board size, board independence and board gender diversity as moderating variables to see the effects of governance mechanisms, this research further studies the moderating effect of audit committee which also plays an important role in ensuring and monitoring the process of accounting in a firm so as to ensure the information provided are relevant and credible to the practitioners.

1.6.3 Regulator Contribution

As an important standpoint, regulators play an important role in proposing ideas to help both internal and external users to have further understanding and take proactive action in concurrent feedback from practitioners. The Malaysian Accounting Standard Board (MASB) introduced the Malaysian Financial Reporting Standards (MFRS) framework which completely assenting with the International Financial Reporting Standard (IFRS) framework will be benefited from the study with the investigation on how firm corporate governance mechanisms: board size, board independence, board gender diversity, and audit committee, moderate the association between the coronavirus (COVID-19) related information disclosure and the level of performance information in the financial reporting disclosure among Malaysian public listed companies. Thus, it can be said that the study helps to explore the relevance of academic research for financial reporting standard setting as well as the role of academic researchers in the standard-setting process.

1.7 Organization of Dissertation

There are five (5) main chapters in this dissertation. Firstly, the introductory chapter which is followed by the second chapter that provides literature review along with the theoretical framework to provide and support a steady basis for hypotheses development. Chapter 3 discusses the research methodology, followed by results in chapter 4. The 5th and provides discussion and the last chapter will give a conclusion for the research conducted.

Chapter 1: Introduction

Chapter 1 begins by introducing the research area in a broader context. This is then followed by a discussion on the background of the research study. Next, discussion is then directed towards problem statement as a result of the research questions and research objectives to be identified. This is followed by significance and expected contribution of research study and finally the organization of dissertation.

Chapter 2: Literature Review and Hypotheses Development

Chapter 2 is based on the discussion of prior studies as it focuses on literature review. A detailed literature review in the context of this research study is conducted. The first section discusses the theoretical framework of the research study. The connections between Agency theory, coronavirus (COVID-19) related information and firm performance disclosure are illustrated. In addition, the literature regarding the concepts of coronavirus (COVID-19) related information, firm performance disclosure, and corporate governance mechanisms have been discussed in great length to provide an understanding of the context of the study. The section includes detailed discussion on the corporate governance mechanisms by highlighting the importance of board size, board independence, board gender diversity and audit committee in monitoring and enhancing the companies' disclosures. The main objective of the literature review is to outline important prior studies in the light of the research question and research objective. This discussion then leads to the development of hypotheses in alignment with research question and research objective highlighted in chapter 1. Also, the functions of performance disclosure in annual report narratives have been highlighted in the chapter as well. Next, the identification and the relationship between independent variable, dependent variable and moderating variables is done under the light of the conceptual framework that is tightly held together by the notions of the above theories. Lastly, the final section provides a brief discussion of the content of chapter 2 in the form of a summary.

Chapter 3: Research Methodology

Chapter 3 begins by a discussion on the research design of the study that content analysis to be conducted with detailed discussion on its uses and importance in the study. The subsequent sections provide detailed discussion on the sampling procedures and data collection, data analysis techniques, and variables measurement followed by a discussion on the types of variables in the study. Also, this chapter discusses the research model together with the definition of key terms. The data analysis procedures used such as data screening and cleaning, descriptive analysis, correlation analysis and other necessary analysis are included in the chapter. Lastly, a final section with a short summary of the chapter 3.

Chapter 4: Findings

Chapter 4 begins by data analysis as it focuses on data screening and preliminary data analysis, skewness and kurtosis analysis for normality, content analysis and descriptive analysis in its various sub-sections. Furthermore, a discussion on Spearman's correlation analysis followed by sections on multicollinearity test for VIF are carried out in the chapter. The next section runs regression analysis to determine the effect between variables followed by moderating effect analysis to observe the moderating effects of corporate governance mechanisms in the relationship of coronavirus (COVID-19) related information and firm performance disclosure. In this chapter, all the relevant tables are incorporated to show the various tests and their results.

Chapter 5: Discussion

Chapter 5 is based on the findings and discussion on the results of the study. The main focus is on discussion of results in the light of the conceptual framework and comparing this study's results against past literature and their findings. The final section of the chapter is a short summary of the key points of chapter 5.

Chapter 6: Conclusion

The 6th and the final chapter of thesis summarizes to draw a meaningful conclusion from the research study. The implications, limitations and future directions in the field of sustainable entrepreneurship are also outlined in an attempt to guide future researchers. The final section then provides a summary of the content of the chapter.

CHAPTER 2: LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Chapter Overview

Chapter 2 focuses on the literature review of past studies to understand the results, findings and discussion of prior studies. Each section in the chapter is based on a detailed review of the term or concepts that it tries to explain. Section 2.2 is based on the discussion of the theoretical framework- Agency theory in this dissertation. Section 2.3 and 2.4 discusses the literature of the coronavirus (COVID-19) related information and performance disclosure, which is then followed by the first hypotheses development. The discussion on the corporate governance and its moderating roles in section 2.5 followed by the concepts of each corporate governance mechanisms are discussed. It turns towards the second hypotheses development which in aligns with the second research question and second research objective highlighted in chapter 1. Next, section 2.6 will note the relationship between independent variable, dependent variable and the four moderating variables interlinked with the hypotheses under the conceptual framework. Additionally, the concepts of performance disclosure in annual report narratives are discussed in section 2.7. Finally, a summary of the entire chapter will be concluded in the last section of chapter 2.

2.2 Theoretical Assumption

This section focuses on the main theory and concept utilized for constructing the theoretical framework. Connections are illustrated between Agency theory, and coronavirus (COVID-19) related information associated with the firm performance disclosure in the context of the study.

2.2.1 Agency Theory

Agency theory, developed by Jensen and Meckling (1976), is one of the most influential theories in corporate governance, exploring the relationship between principals (owners or shareholders) and agents (managers or executives) who manage the company on their behalf. The theory centres on the potential for conflicts of interest and inefficiencies that arise when the agent's actions do not fully align with the principal's objectives. Principals typically seek to maximize shareholder value, while agents may be motivated by personal goals, such as enhancing their compensation or reducing risk exposure. This misalignment, known as the agency problem, can lead to suboptimal decision-making, misreporting, or even unethical practices if not properly managed. One of the key challenges in corporate governance is addressing this agency problem through mechanisms like performance-based incentives, monitoring by the board of directors, and ensuring transparency through accurate financial reporting.

Management decision-making regarding strategies related to coronavirus (COVID-19) related information and performance disclosure is influenced by strong governance (Broadstock et al., 2020). Therefore, effective corporate governance contributes to the enhancement of the quality of the discussion surrounding the disclosure process and the diversification of viewpoints. The agency theory posits that improved governance will alleviate the agency conflict between the management and the constituents. According to Hussainey (2020), Al-Faryan and Dockery (2020), and González et al. (2020), corporate governance plays a critical role in enabling firms to provide additional voluntary disclosure in order to better inform investors.

The level of information communicated with stakeholders that is associated with coronavirus (COVID-19) and, as a result, the firm performance disclosure could be enhanced through governance. The larger board is intended to provide stakeholders with a greater amount of information in order to mitigate information asymmetry (Buertey et al. 2020; Elmagrhi et al. 2020; Al-Faryan and Dockery 2020). Additionally, independent directors receive no financial compensation from the companies, with the exception of the fixed director salary. Consequently, their presence will enhance governance power, as companies that are better governed are more accountable. Consequently, voluntary disclosure will increase in general, and in particular, performance disclosure in the annual reports will increase in relation to coronavirus (COVID-19). Firm performance disclosure is also influenced by board gender diversity. Consequently, disclosure is expected to be enhanced by a more diverse board of directors. Consequently, corporate governance guarantees more transparent disclosure. Good corporate governance has the potential to increase the amount of coronavirus (COVID-19) related information in the annual report, thereby contributing to the quality of firm performance disclosure.

In times of economic uncertainty, such as the coronavirus (COVID-19) pandemic, the relevance of agency theory becomes even more pronounced. With the pandemic causing widespread operational disruptions, financial strain, and heightened risk, the decisions made by managers can significantly impact a firm's survival and performance. Corporate governance mechanisms, such as board oversight, audit committees, and executive accountability, become essential tools in mitigating agency problems by ensuring that management acts in the best interest of shareholders. Strong governance structures can enhance transparency, particularly in financial reporting, where accurate disclosures are critical for maintaining investor confidence and ensuring the firm's long-term sustainability. By applying agency theory in the context of coronavirus (COVID-19) related information disclosures, researchers can assess how corporate governance practices influence the quality of financial reporting and the overall performance of firms during crises, making this a valuable area of investigation, especially in countries like Malaysia, where governance standards may vary across industries.

2.3 Coronavirus (COVID-19) Related Information

The perception of investors regarding management's ability to adapt to changing environmental conditions is critical for investment decisions (Elmarzouky, Albitar, & Hussainey, 2021). In the context of coronavirus (COVID-19) pandemic, the managers could offer some forecast earning in advance to demonstrate their understanding of the firm and it provide vital advance assessment of the plans and projects that could increase the firm value. Through such sharing of the coronavirus (COVID-19) related information, the managers provide voluntary disclosure, urging the investors to increase their performance information level with any of the coronavirus (COVID-19) information (Broadstock et al., 2020). During the pandemic period, Malaysian firms are particularly urged to detail their policies and actions taken in response to coronavirus (COVID-19) crisis. Research by Jasni et al. (2020) highlights that such ESG disclosures can confer competitive advantages, underscoring the importance of transparent reporting on firm performance. Also, firms reported sustainability matters that meet regulatory requirements tend to increase their reputation (Nelson, 2017).

Elmarzouky, Albitar, & Hussainey, (2021) pointed that when the managers provide transparent and comprehensive information about organization performance, with specific focus on the impact and the response or action plan to coronavirus (COVID-19) pandemic, the stakeholders are set at peace. That is¸the managers are supposed to provide an in-depth information and on top of that during the communication, there is a need to provide performance disclosure. Broadstock et al., (2020) emphasize on communicating the actual values and accurate projections without over- or under-valuation of the performance. Through such action of performance disclosure, the investors are able to make informed decision on whether the managers or organization is able to cope with the uncertainty of coronavirus (COVID-19) pandemic.

2.4 Performance Disclosure

Performance disclosure encompasses the reporting of an employer's economic and operational metrics within annual document narratives, playing a pivotal role in how stakeholders understand an corporation's effectiveness during instances of crisis, which include the coronavirus (COVID-19) pandemic. Transparent and complete performance disclosures enable stakeholders, including traders, to gauge a corporation's functionality to utilize to be had resources efficaciously to attain pre-set up goals (Peterson, Gijsbers, & Wilks, 2003; Taouab & Issor, 2019). Firms that consistently show off strong performance are regularly assumed to generate big long-time period income, making overall performance disclosure essential for investor confidence (Taouab & Issor, 2019). Given the heightened uncertainty added with the aid of the pandemic, stakeholders have multiplied their needs for clear and well timed disclosures that illuminate a organization's financial health and strategic reaction. As noted by Devi et al. (2020), Stakeholders are specially interested by modifications in economic overall performance, which may be assessed thru analyses of monetary statements that summarize important statistics.

As the coronavirus (COVID-19) outbreak started in Malaysia since the early of 2020, it has been more than one quarter for the Malaysian public listed companies to take voluntary action to provide and come up with more information regarding how this pandemic has affected the firm's performance. With the coronavirus (COVID-19) related information to be disclosed, the stakeholders can have better understanding to predict the firm's current and future performance and to see how the firm's management responds to deal with the crisis and reduce the risk (Elmarzouky et al., 2021b). Also, the managers have started using annual reports which signal a positive effect on the market as powerful marketing tools (Christensen et al., 2019). That is, the sectors which have been positively impacted by coronavirus (COVID-19), such as the Healthcare sector, will be able to disclose well-performed results and future plans to the stakeholders as well as building investors' confidence. Besides that, the manager should communicate with the stakeholders, especially its investor on the adaptability and details their sensitivities, perceptions and actions on reporting of performance information related to coronavirus (COVID-19) through annual reports (Elmarzouky et al., 2021b).

The disclosure of coronavirus (COVID-19) related information and firm performance through annual reports implies higher level of professional judgements (Boston et al., 2021). There is a need for communication of coronavirus (COVID-19) related information to be associated with more performance disclosure in order to refrain from any under or over-valuation of the expected performance of the company (Elmarzouky et al., 2021a). As some of the ways of disclosing the information aimed to make unclear the bad news, the information has to be presented or structured in a way to ensure the investors make the right decisions (Merkl-Davies & Brennan, 2017).

Although there were unforeseeable times caused by the coronavirus (COVID-19) pandemic, the negative or ambiguous words should be avoided in the annual reports (Boston et al., 2021). The managers' preferences in increasing the confusion of information by using more uncertainty and ambiguous words have negatively affected the readability of annual reports (Efretuei, 2020). Regardless the information is positive or negative, the firm's management should ensure that all stakeholders have the correct information to make estimation for the impact of coronavirus (COVID-19) on the firm performance, hence, the level of performance disclosure is increased (Elmarzouky et al., 2021a). With the correct and appropriate standard of firm performance disclosure with coronavirus (COVID-19) related information such as safety measurements to be provided, any adverse effect on the stakeholder's sensitivities can be successfully mitigated as well.

In summary, the disclosure of coronavirus (COVID-19) related information, performance disclosure, and the mechanisms of company governance collectively impact stakeholder perceptions and selection-making procedures. As outlined, complete disclosures can reduce uncertainty in capital markets and doubtlessly enhance firm percentage fees (Broadstock et al., 2020; Erdem, 2020). The first hypothesis of this research posits that:

H1: Ceteris paribus, there is a positive association between coronavirus (COVID-19) related information and firm performance disclosure in the annual report narratives among Malaysian public listed companies.

2.5 Corporate Governance Mechanism

Corporate governance mechanisms play an essential position in shaping the practices surrounding records disclosure, specifically in the context of the coronavirus (COVID-19) pandemic. Effective governance structures ensure that management is held chargeable for presenting correct and timely records to stakeholders, that is specifically important all through unsure times. The board of administrators, as an example, has a duty to oversee the performance disclosures and ensure compliance with regulatory requirements, thereby enhancing the transparency and credibility of the records provided.

Firms that adhere to rigorous governance practices are much more likely to build investor self-assurance and support their reputations, as evidenced via research indicating that companies that meet regulatory requirements concerning sustainability disclosures revel in reputational profits (Nelson, 2017). As the pandemic opened up, many companies diagnosed the need to evolve their governance frameworks to facilitate higher communique and responsiveness to stakeholder inquiries concerning the impact of coronavirus (COVID-19) on their operations (Christensen et al., 2019). This proactive approach not simplest aids in mitigating risks however additionally reinforces stakeholder accept as true with in management's potential to navigate crises correctly.

2.5.1 The Moderating Role of Corporate Governance

Corporate governance is regarded as the system of rules, practices and processes that companies directs and controls (Monks, & Minow, 2011). An organization that exercises corporate governance is expected to check the interest of the company as well as all other stakeholders' interest, and the community. The ultimate goal is to enhance the long-term shareholder value and looking after the stakeholder's interest while promoting ethical and responsible decision-making within an organization. Thus, corporate governance plays an important role in companies to provide and offer more voluntary disclosure for stakeholders to have a better understanding of a firm's performance (Yu, 2011). With a stronger and better corporate governance, unlike opinions and the quality of the discussion concerned to the coronavirus (COVID-19) disclosure process can be improved. In other words, the agency conflict between the firm's management and the stakeholders can be precluded and mitigated with better corporate governance (Adams & Ferreira, 2009). That is, by having better corporate governance, the extent or level of coronavirus (COVID-19) information and firm performance disclosure communicated with the stakeholders can be increased (Elmarzouky et al., 2021a). This research will be using four governance mechanisms: board size, board independence, board gender diversity, and audit committee to proxy the governance power.

2.5.2 Board Size

The board size refers to the number of individuals that serves on the board of directors of an organization or corporate. It plays a fundamental role in the organization or corporate governance and has a significant implication in decision making process, organization efficiency, and the overall effectiveness of different functions. Although there are a number of factors that determines the board size such as shareholders preferences, regulatory requirements, company complexity, company size, and industry norm, factors such as cost, diversity, communication, efficiency are key factors to consider when determining the board size (Guest, 2008; Min, 2018).

One of the key determinants in monitoring the firm performance disclosures is the board size. The sum of executive and non-executive directors on a company's board is used to measure the board size (Alnabsha et al., 2017). In accordance with Laksmana (2008), the bigger the board size will bring superior occasion to include experts from various areas such as financial reporting. Ntim (2015) also stated that greater diversity as a result of larger board size, will have positive impacts on the basis of experience, firm expertise and capabilities in reducing issues, whilst improving the firm reputation.

Previous studies documented that the larger the board, the higher the level of information to be disclosed in comparison with the smaller boards (Al Bassam et al., 2018; Cunha & Rodrigues, 2018; Samaha et al., 2012). As the board size is bigger, more information will be disclosed than smaller board size due to the reason that the senior executives will be less likely to dominate the boards (Samaha et al., 2012). Hence, it is expected that the Malaysian public listed companies with larger number of members in the board which includes both executive and non-executive directors will disclose higher levels of information related to coronavirus (COVID-19) and firm performance.

However, there was found that there is no relationship between the board size and the level of performance disclosure in the United Kingdom Financial Times Stock Exchange firms (Elmarzouky et al., 2021a). Studies showed that the larger boards would create more coordination, communication and monitoring issues that caused negative effects on the disclosure (Kantudu & Samaila, 2015; Ntim et al., 2015). These studies with divergence caused the level of coronavirus (COVID-19) information and performance disclosure provided by Malaysian public listed companies to be uncertain. By applying agency theory, the board size as one of the corporate governance mechanisms will influence the amount of information to be disclosed which helps lessen the information asymmetry. With this, hypotheses 2(a) is developed:

> H2(a): Ceteris paribus, board size moderates the association between coronavirus (COVID-19) related information and firm performance disclosure in annual report narratives among Malaysian public listed companies.

2.5.3 Board Independence

The board independence can be described as having independent directors who used interchange for non-executive directors and outside directors (Alnabsha et al, 2017). Jensen & Meckling (1976) stated that board independence is a key feature of good corporate governance as the opportunistic behaviours of the executive directors can be controlled and monitored by the non-executive directors. Alnabsha et al. (2017) also stated that, with independent directors, the company's performance and operation then can be monitored independently without conflict of interest. Besides that, a greater diversity on corporate boards can be a result with independent directors (Ntim & Soobaroyen, 2013).

It is essential to nominate independent directors to perform proper oversight function in monitoring governance, internal control and so forth (Alnabsha et al, 2017). Most studies found that board independence successfully increased voluntary disclosure (Akhtaruddin & Haron, 2010; Samaha et al., 2015). Abrahamson & Park (1994) documented that the disclosure would be increased in the financial reporting with higher level of board independence as there will not be any financial benefits from the firm other than fixed director salary. In accordance with Elmarzouky et al. (2021a), the board independence can help to guarantee a good corporate governance to be practiced by the company with voluntary disclosure in general being increased, as well as in specific enhancing the coronavirus (COVID-19) performance disclosure in the company's annual reports. Thus, the amount of information disclosed on coronavirus (COVID-19) and firm performance by Malaysian public listed companies in annual reports is expected to be higher with the higher proportion of independent directors.

Nonetheless, there were studies that found that there is a negative relationship between the board independence and voluntary disclosure (Al-Moataz & Hussainey, 2013; Rodrigues et al., 2017). With this, it creates uncertainty that a higher proportion of independent directors associated with higher levels of coronavirus (COVID-19) related information and firm performance to be disclosed. Thus, the hypotheses 2(b) is developed:

> H2(b): Ceteris paribus, board independence moderates the association between coronavirus (COVID-19) related information and firm performance disclosure in annual report narratives among Malaysian public listed companies.

2.5.4 Board Gender Diversity

Gender dispersion or parity is defined as an inclusion of individuals from different gender within a group, organization, or community (Reddy, & Jadhav, 2019). In the context of business and corporate governance, gender diversity specifically addresses the representation of both men and women on boards of directors, executive teams, and within the workforce. It aims to create a more balanced and inclusive environment, recognizing and leveraging the perspectives and talents of individuals of all genders (Reddy, & Jadhav, 2019). Post et al. (2015) stated that law requires 50% gender parity on the board of every public listed firm by 2015 in France. Both men and women directors present differently on behaviour that female directors tend to be more stakeholders oriented (Adams et al., 2015), also, women are more ethically sensitive and always recognize the interest of stakeholders (Dobija et al., 2021), which they intend to reduce information asymmetry. Jain & Jamali (2016) mentioned that the firm performance disclosure is likely to be improved with more diversified board diversity to ensure the transparency of disclosure. Thus, it could be said that the presence of women on board of directors will create advantages on improving the information disclosure to reduce information asymmetry.

Stefanescu (2013) stated that there is a negative association between gender diversity and information disclosure. Besides that, Yusoff et al., (2016) also suggested that both male and female directors in the board have not worth mentioning impacts on information disclosures. However, Elmagrhi et al. (2016) and Ntim & Soobaoyen (2013) both showed that gender diversity has positive impacts on information disclosure. Previous studies also found that with female directors in the board, the quality of firms' disclosure tends to be improved (Aribi et al., 2018; Liao et al., 2015; Sartawi et al., 2014). The Malaysian Code on Corporate Governance (2024) stated that the involvement of women as the members of senior management could create the same advantages similar to the participation of women in decision-making position.

Elmarzouky et al. (2021a) suggested that having female directors on the board tends to increase the governance power to disclose more information on coronavirus (COVID-19) and firm performance. In relation to the agency theory, the quantity and quality of coronavirus (COVID-19) related information and firm performance disclosure will be improved as a result of the higher level of gender diversity in the firms' boards, which then reduce the information asymmetry. This study will look into the relationship between board gender diversity among the Malaysian public listed companies and coronavirus (COVID-19) related information and firm performance disclosure. With this, the hypotheses 2(c) is developed:

> H2(c): Ceteris paribus, board gender diversity moderates the association between coronavirus (COVID-19) related information and firm performance disclosure in annual report narratives among Malaysian public listed companies.

2.5.5 Audit Committee

Unlike Elmarzouky et al. (2021a), this study has made inclusion of the audit committee as one of the corporate governance mechanisms. Audit committee can be seen as an important factor of corporate governance as it can detect any faulty conduct of management by way of different types of monitoring processes (Bansal & Sharma, 2016). Hadrami et al. (2020) argued that the audit committees volunteer as an significant corporate governance mechanism to oversee the activities of the firm's management (Hadrami et al., 2020). Cohen (2011) stated that the effectiveness of the audit committee was influenced by its independence. With more independent members in the audit committees, the possibility of emerging fraud is likely to be reduced (Beasley, 1996). The higher the audit committee size enables workload distribution so that more time and resources can be committed to monitor management and detect fraud (Madawaki & Amran, 2013).

Previous studies argued that the quality of annual reports and performance of firms will be improved with independent audit committees (Arslan et al., 2014; Bouaziz & Triki, 2012; Yasser et al., 2011). The effectiveness of the audit committee associated with the quality of information disclosure on prior literatures was uncertain. Beasley (1996) and Song & Windram (2000) suggested that the audit committee tends to reduce reporting problems, which increases the quantity and quality of information disclosed. Furthermore, study found that the audit committee could help to lower information asymmetry of a firm by providing fair information in the annual reports (Al-Mamum et al., 2014). The audit committee is responsible to monitor and reduce the agency costs, improve the quantity and quality of information to be communicated to the company's stakeholders (Samaha et al., 2012). Also, with the audit committee, the agency cost can be reduced to guarantee the quality of the information disclosed (Alnabsha et al., 2017).

Although it is assumed that more financial reporting which might have a positive impact on the stakeholder's decisions will be produced with higher audit committee's standard of competence (Hadrami et al., 2020), however, Menon & Williams (1994) argued that there is insignificant relationship between audit committee and reporting problem. This study will investigate if the audit committee moderated the association between coronavirus (COVID-19) disclosure and performance disclosure among Malaysian public listed companies. With this, the hypotheses 2(d) is developed:

> H2(d): Ceteris paribus, audit committee moderates the association between coronavirus (COVID-19) related information and firm performance disclosure in annual report narratives among Malaysian public listed companies.

2.6 Conceptual Framework

As illustrated from diagram 2.1 below, the coronavirus (COVID-19) related information acts as the independent variable, which affects the firm performance disclosure, the dependent variable. In between of the two variables, the moderating tools are added to see how corporate governance mechanisms associated the level of the coronavirus (COVID-19) related information and performance disclosure in the annual report's narratives of Malaysian public listed companies. Moreover, both the current ratio (CR) and return on asset (ROA) will be used as the control variable in the study which represents the firm performance of the companies.

Diagram 2.1: Research Model

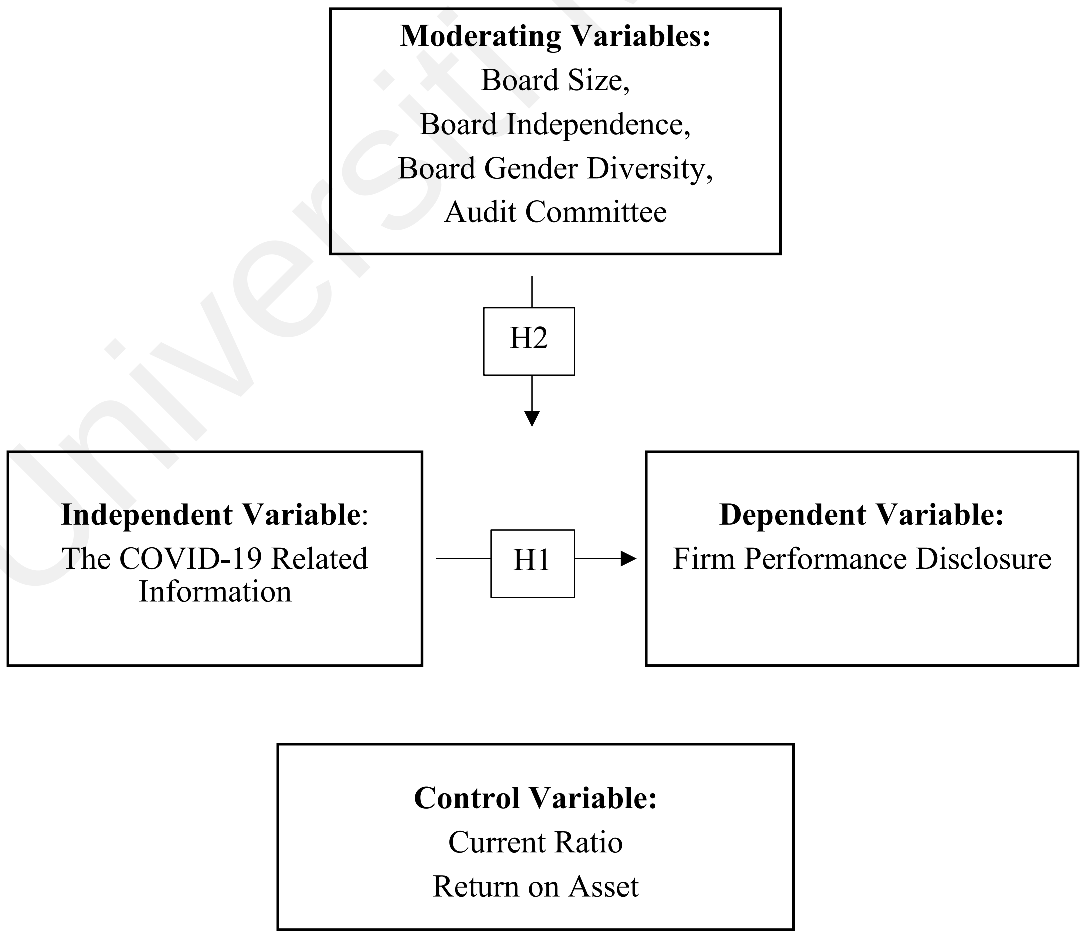

Table 2.1 below summarizes the research study in order to illustrate the extent to which the research questions and objectives address the hypotheses that have been developed by employing agency theory.

Table 2.1: Summarizing the Research Model

Research Questions	Research Objectives	Hypotheses	Variables
Does coronavirus (COVID-19) related information disclosure be associated with performance disclosure among Malaysian public listed companies?	To examine the association between coronavirus (COVID-19) related information disclosure and performance disclosure among Malaysian public listed companies.	**H1:** Ceteris paribus, there is a positive association between the level of coronavirus (COVID-19) related information and firm performance disclosure in the annual report narratives among Malaysian public listed companies.	**IV:** Coronavirus (COVID-19) related information disclosure **DV:** Firm performance disclosure
Do the corporate governance mechanisms (board size, board independence, board gender diversity and audit committee) moderate the relationship between coronavirus (COVID-19) related information and performance disclosure?	To examine the moderating effect of corporate governance mechanisms (board size, board independence, board gender diversity and audit committee) in the relationship between coronavirus (COVID-19) related information and performance disclosure.	**H2:** Ceteris paribus, corporate governance mechanisms moderate the association between coronavirus (COVID-19) related information and firm performance disclosure in annual report narratives among Malaysian public listed companies.	**MVs:** Board size/ board independence/ board gender diversity/ audit committee

2.7 Performance Disclosure in Annual Report Narratives

During the coronavirus (COVID-19) pandemic, performance disclosure in annual report narratives is an essential component of corporate governance. It offers stakeholders a comprehensive understanding of a company's strategic decision-making processes, financial health, and operational efficiency. This aspect of corporate reporting is not merely a legal obligation; it is also a crucial communication tool that demonstrates the company's dedication to stakeholder engagement, accountability, and transparency. In times of coronavirus (COVID-19) crisis, stakeholders increasingly seek detailed insights into the methods by which companies manage risks, navigate disruptions, and maintain their operations. Firms were compelled to modify their strategies, reallocate resources, and revaluate their business models in response to the unprecedented challenges posed by the pandemic. Transparent performance disclosures in annual report narratives facilitate the communication of these modifications, thereby enabling stakeholders to gain a more comprehensive comprehension of the company's crisis response (Tarighi et al., 2023).

By effectively disclosing performance-related details, firms can reduce the ambiguity that frequently afflicts capital markets during crises, thereby preserving investor confidence and safeguarding their market valuation. In contrast, performance disclosures that are inadequate or unclear may raise concerns about a company's capacity to withstand economic fluctuations, which could result in negative perceptions, a decline in investor confidence, and even higher capital costs. The coronavirus (COVID-19) pandemic also underscored the changing nature of performance disclosure, as companies are now expected to disclose a greater amount of non-financial information, including their sustainability efforts, corporate social responsibility (CSR) initiatives, and employee well-being. This change emphasises the increasing demand for transparency in the manner in which companies contribute to broader societal objectives and manage crises, in addition to their financial performance (Elmarzouky et al., 2021).

The efficacy and strength of a company's corporate governance mechanisms are inextricably linked to the quality of performance disclosure. The framework through which organisations are directed, controlled, and held accountable is known as corporate governance. It guarantees that there are sufficient checks and balances in place, which, in turn, affects the transparency and comprehensiveness of performance disclosures. The accuracy, timeliness, and reliability of the information disclosed in annual reports can be improved by effective governance structures, including an independent board of directors, diverse board representation, and active audit committees. Diverse perspectives, expertise, and insights are frequently introduced by larger boards, which can enhance decision-making processes and guarantee that comprehensive performance information is disclosed. Nevertheless, larger boards may also encounter coordination and communication challenges that could potentially impede the timely and detailed disclosure of information. A comprehensive investigation is necessary, particularly in the context of a crisis such as coronavirus (COVID-19), to fully understand the intricate relationship between board size and performance disclosure (Almaqtari et al., 2022).

Independent directors are essential in the supervision of management activities and the assurance that performance disclosures are free from managerial bias or opportunism. Nevertheless, there is a lack of consensus regarding whether voluntary disclosure is consistently increased as a result of increased board independence. The objective of this investigation is to determine whether the performance disclosure of COVID-19-related information is effectively improved by independent directors in Malaysian public listed companies. Agency theory can be employed to further comprehend the correlation between corporate governance and performance disclosure. Agency theory emphasises the inherent conflict of interest between shareholders (principals) and management (agents), which can be alleviated through the implementation of effective corporate governance structures. In summary, the transparency, accountability, and effective communication with stakeholders of a company are significantly influenced by the performance disclosure in its annual report narratives. The results will enhance the ongoing conversation regarding corporate governance and its influence on transparency, particularly in the context of crisis management and firm performance (Boshnak et al., 2023).

2.8 Chapter Summary

This chapter concentrates on past literatures to shed more light on the concepts and findings of the significant ideas of this research study. The first section is an overview of the overall chapter, followed by section 2.2 which discusses main theory and concept utilized for constructing the theoretical framework. Connections are illustrated between Agency theory, and coronavirus (COVID-19) related information associated with the firm performance disclosure in the context of the study. By applying agency theory in the context of coronavirus (COVID-19) related information disclosures, researchers can assess how corporate governance practices influence the quality of financial reporting and the overall performance of firms during crises. In section 2.3 and section 2.4, the concepts of coronavirus (COVID-19) related information and firm performance disclosure are discussed. This section also concluded that the reporting of coronavirus (COVID-19) related information in annual reports helps to reduce uncertainty in the capital market. As on-going coronavirus (COVID-19) pandemic, the stakeholders should have better understanding to predict the firm's current and future performance and to see how the firm's management responds to deal with the crisis and reduce the risk as the information are disclosed. From here, the first hypotheses is developed that there is a positive association between coronavirus (COVID-19) related information and firm performance disclosure in the annual report narratives among Malaysian public listed companies. Additionally, section 2.5 mentioned that corporate governance mechanisms play an essential position in shaping the practices surrounding records disclosure, specifically in the context of the coronavirus (COVID-19) pandemic. By having better corporate governance, the extent or level of coronavirus (COVID-19) information and firm performance disclosure communicated with the stakeholders can be increased. Section 2.5 also discussed the four (4) governance mechanisms: board size, board independence, board gender diversity, and audit committee which proxy the governance power. From here, second hypotheses developed: corporate governance mechanisms (board size, board independence, board gender diversity and audit committee) moderate the association between coronavirus (COVID-19) related information and firm performance disclosure in annual report narratives among Malaysian public listed companies. Next, section 2.6 consolidated the relevant diagram and table as the conceptual framework to study the relationship between independent variable, dependent variable, and the other four (4) moderators: board size, board independence, board gender diversity and audit committee. Last but no least, section 2.7 discussed the concepts of performance disclosure in annual report narratives which offers stakeholders a comprehensive understanding of a company's strategic decision-making processes, financial health, and operational efficiency in times of coronavirus (COVID-19) crisis as stakeholders increasingly seek detailed insights.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Chapter Overview

Chapter 3 starts from a discussion on the research design of the study that content analysis will be conducted. Section 3.3 will discuss the uses and importance of content analysis in the research study, followed by section 3.4 which provides detailed discussion on the sampling procedures and data collection. The subsequent section mentions the data analysis techniques to be used in the study. Section 3.6 sheds light on the variables measurement and a detailed discussion on the textual analysis method. Whereas, section 3.7 discusses the types of variables in the study which includes independent variable- coronavirus (COVID-19) related information, dependent variable- performance disclosure, moderating variables- corporate governance mechanisms and the control variables which are the current ratio and return on asset. The research model to be applied will be discussed in section 3.8 together with the definition of key terms. Next, the data analysis procedures used which includes data screening and cleaning, descriptive analysis, correlation analysis, regression analysis and analysis of moderating effects will be discussed. Finally, the last section of chapter 3 provides a brief summary of the overall chapter.

3.2 Research Design

This research study aims to examine the annual report of public listed companies in Malaysia in accumulating the required information for data collection to investigate towards the research objective of examining the association between the relationship of coronavirus (COVID- 19) related information disclosure and performance disclosure among Malaysian public listed companies. Specifically, this research study examines the association between coronavirus (COVID-19) related information and the firm performance disclosure as well as examines the moderating effect of corporate governance in enhancing the relationship between coronavirus (COVID-19) related information and the firm performance disclosure by using the four corporate governance mechanisms: board size, board independence, gender diversity, and audit committee. Hence, quantitative research which focuses on content analysis will be conducted in this study.

3.3 Content Analysis

The content analysis is used as it refers to a collection of procedures for the systematic and replicable analysis of text in which conclusions are drawn from the message content that the classification of parts of a text through the application of a structured and systematic coding scheme is required (Rose et al, 2015). Krippendorff (2004) stated that, "content analysis is a research technique for making replicable and valid inferences from texts to the contexts of their use". Also, content analysis is also used as a method in analysing the documents and texts in determining contents in terms of predetermined categories and in a systematic as well as replicable manner (Bryman & Bell, 2011).

Content analysis is a beneficial approach to enable the disclosure to be systematically classified; it is also useful in this study that the coronavirus (COVID-19) related information and firm performance disclosure can be easily assorted from the annual reports. That is, this study will conduct a quantitative research which focuses on content analysis related to computerized textual analysis to score the coronavirus (COVID-19) related information and firm performance disclosure in the annual reports. Content analysis requires a richer data set, thus, it will involve more work but provides some intrinsic value in return (Rajab, 2009).

Following previous content analysis research literature, Khaledi (2014) used content analysis to measure corporate risk disclosure by using the frequency of the occurrence of items of risk from companies annual reports; Also, it was found that content analysis was used to capture the extent and volume of risk disclosures in the prior study by Lajili & Zeghal (2005) that based on the disclosure of risk management information and annual reports; Mandzila & Zeghal (2016) used content analysis to examine the content of board chair reports to assess their relevance and compliance with mandated disclosure requirement to enhance corporate disclosure to investor. Thus, by referring to the prior literature, content analysis can be used to analyse the coronavirus (COVID-19) related information and firm performance disclosure from annual reports for this research study.

Furthermore, the research questions and hypotheses testing are aimed to be responded with the process and procedure of accumulating, and measurement of information toward the independent variable, dependent variable, as well as the moderating variables. According to Kabir (2016), the best solution to answer research questions is able to be captured if the study ensured the quality of data collection. Thus, it is significant and effective to involve quantitative data in this content analysis research to observe intent, messages, and consequences on communication through the annual reports published by the company (Luo, 2021).

In alignment with the selected content analysis method, this research will overview the annual reports of Malaysian public listed companies to accumulate all applicable information and statistics noted in advance, they are: coronavirus (COVID-19) information and performance disclosure. The statistics amassed from the annual reports could be secondary in nature, regarding existing facts available from diverse resources for researchers to research.

3.4 Sample and Data Collection

There are five (5) sectors that will be analysed in the research study. Two (2) sectors represent the most negatively affected sectors: Travel, Hospitality and Entertainment sector and Construction Sector (Zubair & Shamsudin, 2021; Alawag et al., 2021); Two (2) sectors represent the uncertainly affected sectors: Retailer sector and, Food and Beverage sector (Low, 2022; Naseri et al., 2021); and last sector represents the positively affected sector: Healthcare sector (Hugher et al., 2022; Mok, 2021). A total number of 137 annual reports will be collected under the above five (5) mentioned sectors: Travel, Leisure, and Hospitality sector, Construction sector, Retailer sector, Food and Beverage sector, as well as Healthcare sector from Bursa Malaysia website.

The annual reports published at the year-end of 2020 will be collected by downloading from Bursa Malaysia website. The reason of selecting the year-end of 2020 was due to that it was the first year which Malaysian government had initiated the Movement Control Order (MCO), and the industries were still in the first stage of experiencing the impact of coronavirus (COVID-19) pandemic that there was no effective and efficient strategies could be ready and had been taken. Furthermore, this research study has specifically chosen the public listed companies from the main board of Bursa Malaysia. Main board is known as the prime market for established companies that have met the standards in terms of quality, size and operations (Bursa Malaysia, nil). It can be assumed that the companies from the main board are large mature enterprises with stable profitability, thus, the coronavirus (COVID-19) related information and performance disclosure from Malaysian public listed companies can be investigated accurately.

3.4.1 Sampling Procedures

All research studies come across sampling procedures to figure out the type of data to be in part of the study (Saipei, 2021). As selecting a sub-group from a population to get involved in the study, the process is known as sampling (Ogula, 2005). Furthermore, sampling allows to diminish the number of individuals in a study which also helps reduce the cost and workload (Faculty of Public Health, United Kingdom, 2022). At the same time, sampling makes the study easier to obtain high quality information with a balance of large enough sample size (Faculty of Public Health, United Kingdom, 2022). As mentioned, sample uses to gather up the finding and provides a better understanding on the particular topic. As of this study will be focusing on the relationship between coronavirus (COVID-19) related information and firm performance disclosure, the objective of this study is to examine the association between coronavirus (COVID- 19) related information disclosure and performance disclosure among Malaysian public listed companies as well as the moderating effect of corporate governance, which included the governance mechanisms of board size, board independence, board gender diversity and audit committee, in enhancing the relationship between the two variables.

Sampling plan of this study involved a partial list of the Malaysian public listed companies which consists of five (5) sectors: Travel, Hospitality and Entertainment sector, Construction sector, Retail sector, Food and Beverage sector, as well as the Healthcare sector. The selection of the sectors was due to the reason that they were all heavily impacted in different ways by the coronavirus (COVID-19) outbreak ever since the year of 2020 with the initiation of Movement Control Order (MCO). As mentioned earlier, only publicly listed companies from the main board of Bursa Malaysia will be chosen as a sample for this study because the main board represents the prime market for established companies which met the particular standards in terms of quality, size and operations (Bursa Malaysia, nil). Furthermore, due to the maturity level of the main board public listed companies, the findings of the study will have a higher level of accuracy.

Criteria:

1. Malaysian Public Listed Company
2. Either from Travel, Hospitality, and Entertainment Sector; Construction sector; Retail sector; Food and Beverage sector; or Healthcare sector
3. Existence of annual report for the year 2020
4. Main board from Bursa Malaysia

There is a total number of 172 public listed companies from the five (5) selected sectors. There are 29, 64, 15, 39, 25 public listed companies from Bursa Malaysia under Travel, Hospitality and Entertainment sector, Construction sector, Retail sector, Food and Beverage sector, and Healthcare sector respectively. However, by meeting the criteria, only 137 public listed companies are selected for the research study. That is, 26 companies from Travel, Hospitality and Entertainment sector, 51 companies from Construction sector, 14 companies from Retail sector, 31 companies from Food and Beverage sector, and 15 companies from Healthcare sector (Bursa Malaysia, nil). Therefore, the summary (Diagram 3.1) will be as follow:

Diagram 3.1: Summary of Sampling Plan

Sampling Plan	
Travel, Hospitality and Entertainment sector	26 companies out of 29
Construction sector	51 companies out of 64
Retail sector	14 companies out of 15
Food and Beverage sector	31 companies out of 39
Healthcare sector	15 companies out of 25
Year	2020
Total Observation	137

It is critical to include industries that were affected in distinctive approaches by means of the coronavirus (COVID-19) pandemic on this examine to obtain a comprehensive information of the way that the pandemic stimulated diverse sectors. By examining sectors that skilled terrible, uncertain, and effective affects, this research can offer a greater balanced and nuanced analysis of firm overall performance disclosures. For example, sectors like Travel, Hospitality, and Entertainment, in addition to Construction, have been critically impacted due to lockdowns and regulations, leading to huge disruptions in operations (Zubair & Shamsudin, 2021; Alawag et al., 2021). On the alternative hand, sector which includes Healthcare skilled wonderful increase as demand surged for clinical components and healthcare offerings (Hugher et al., 2022; Mok, 2021). This permits the take a look at to research the differing levels of coronavirus (COVID-19) related information and performance disclosure on the way organizations in every zone spoke back of their annual reports.

Furthermore, incorporating industries that were affected in divergent methods allows the observation to evaluate the moderating position of corporate governance in mitigating these outcomes. Sectors like Retail and Food and Beverage, which faced uncertainty, offer an possibility to look at the adaptability of companies of their disclosure practices (Low, 2022; Naseri et al., 2021). The choice of sectors from exclusive effect ranges also enhances the relevance of this research with the aid of ensuring that the findings replicate the wider monetary outcomes of the pandemic across industries. This complete sampling approach, that specialize in both negatively and undoubtedly affected sectors, guarantees that the research can seize a huge range of responses to the coronavirus (COVID-19) pandemic, enhancing the robustness and generalizability of the findings.

3.4.2 Travel, Hospitality and Entertainment Sector

Ever since the outbreak of coronavirus (COVID-19) pandemic, the Travel, Hospitality and Entertainment sector was the first to experience the impact. As the Malaysian government implemented the Movement Control Order (MCO) in March 2020, this sector had been severely impacted with a drop in sales or revenue due to the travel restriction. Until the end of 2021, the Malaysian border still remains closed. All tourism activities and international travel that involves border-crossing was prohibited which led to a dramatic drop in revenue of the companies in the sector. Although interstate travel in Malaysia was allowed by the Malaysian government in the mid of 2021, however, the recovery process of lost revenue was too slow as the vaccination program was still on-going.

In accordance with one of the well-known newspapers from Malaysia- The Star, it was reported that the tourism industry and related economic activities in Malaysia have suffered massive losses which are over RM100 billion in total since the outbreak of pandemic until the year of 2021 (Chin, 2021). Additionally, the tourist arrivals to Malaysia fell by 83.4% in 2020. It was found that the three (3) significant airlines of Malaysia: AirAsia, Malindo Air, and Malaysia Airlines were in their worst situation during the coronavirus (COVID-19) pandemic, and some even suffered from a higher risk of bankruptcy as there were travel bans and low to no demands of passengers who wanted to travel (Chin, 2021).

Other than that, the hospitality sector recorded a loss of over RM6.53 billion for the year of 2020, as reported by the Malaysian Association of Hotels (MAH). Due to increased cases of coronavirus (COVID-19), it resulted in a significant fall of revenue of RM68,190,364 from the hotel room cancellation of about 170,085 hotel rooms (Waisul Karim, 2020). From here, the annual reports of 2020 from all of the publicly listed companies under the Travel, Hospitality, and Entertainment sector from the main board of Bursa Malaysia will be collected in order to analyze in this research study. There are a total number of 26 public listed companies under the Travel, Leisure and Hospitality sector (see Appendix A1) to be included.

3.4.3 Construction Sector

According to the Malaysian's newspaper- The Straits Times, it was reported that the Work Minister, Fadillah Yusof said that, "Malaysia's construction industry suffered RM18.5 billion in losses during the country's lockdown to curb the spread of the coronavirus in 2020" (The Straits Times, 2020). Moreover, the value of the construction projects awarded was also reported to have declined by 42%, from RM94.6 billion from January 2020 to October 2020 to RM55.3 billion, in accordance with Building Industry Development Board (CIDB) statistics (The Straits Times, 2020).

Hence, it is undeniably true that the construction industry was also severely impacted by the coronavirus (COVID-19) pandemic in Malaysia. It was due to the reason that the majority of construction projects were halted throughout the Movement Control Order (MCO) except for those that were classified as critical or essential services (Driver Trett, 2021). Also, their recovery progress was slow due to the reason that the contractors still continue to encounter disruption even after the Movement Control Order (MCO) had been lifted as there are issues arising from having to involve strict standard operating procedures (SOPs) on health and safety measures for construction workplaces. All these disruptions have slowed down the progress, prevented workers from working normally, and eventually led to an increase in extra cost.

As the Construction sector had been heavily affected in a negative way, this study will include the annual reports from all of the publicly listed companies under the Construction sector from the main board of Bursa Malaysia as well. There are a total number of 51 public listed companies under the Construction sector (see Appendix A2) to be included.

3.4.4 Retailer Sector

On the other hand, the retail sector had been impacted by coronavirus (COVID-19) in different levels, positively or negatively. The retail businesses that handle food and daily necessities such as supermarkets and convenience stores have remained in a good condition with a small growth rate. However, retailers of shopping goods and luxury items that are deemed non-essential such as apparel and home appliances have been recorded as poor sales or decline in growth rate.

As in line with the report from the website of Research and Markets, it was found that physical retailing recorded the largest dip in sales during the second quarter of 2020 with a negative growth rate of 30.9% when compared to the same period in 2019 (The Edge Market, 2020). The Retail Group Malaysia (RGM) had also announced that several retailers had been facing severe revenue decline which eventually led to the bankruptcy or closure of the stores (Borneo Bulletin, 2020). For example, one of the famous chains- Esprit closed their physical outlet stores in Malaysia due to the hits of coronavirus (COVID-19) pandemic (Moon, 2020). However, the retail businesses such as supermarkets which sell the essential had a minimal effect of coronavirus (COVID-19). The managing director of one of the famous retailer companies in Malaysia- AEON Group, mentioned that as their outlets are not frequented by tourists, hence, they were not badly affected by the pandemic (The Star, 2020). With this, this study will include a total number of 14 annual reports from all of the publicly listed companies under the Retailer sector (see Appendix A3) from the main board of Bursa Malaysia.

3.4.5 Food and Beverage Sector

The Food and Beverage sector was affected since the starting of Movement Control Order (MCO) in Malaysia. The social-distancing order enforced to flatten the coronavirus (COVID-19) curve had somehow affected the sector, especially those out-of-home consumption companies. It is true that the rapid shutdown of restaurants was the result of the order (Karim & Haque, 2020). It could be said that at-home consumption was enjoying good revenue performance as sales increased. However, the out-of-home consumption came to a standstill, which is similar to the non-essential retailers.

Also, the Food and Beverage sector had suffered a 90% loss in revenue throughout the Movement Control Order (MCO), as reported by Bernama (2020). Those Food and Beverage businesses which offer delivery services, or provide in-home consumptions had ensured the financial condition during the pandemic, which then to be slightly less affected by the coronavirus (COVID-19) pandemic in comparison to those out-of-home consumption restaurants. There are a total number of 31 public listed companies under Food and Beverage sector (see Appendix A4) to be included in the study.

3.4.6 Healthcare Sector

Most of the companies found the business opportunities that have arisen from the Healthcare sector due to the coronavirus (COVID-19) pandemic. These companies might not all come from the Healthcare sector, but ventured into this sector after the outbreak of pandemic. For instance, Top Glove Corporation Berhad had reached their new record on sales revenue of RM7.24 billion in 2020, which was 51% from the previous year (Top Glove, nil). Also, Supermax Corporation Berhad had also doubled their net profit to RM71.06 million (Adilla, 2020). Moreover, KPJ Healthcare Berhad reported that the healthy growth in revenue was driven by an increase in hospital activities (KPJ Healthcare Berhad, 2020). Although the share of profit was recorded to be lower due to increase in costs especially from newly opened hospitals and new hospital buildings, the Malaysia segment of KPJ Healthcare Berhad was still able to contribute to 94% of total Group revenue for the last quarter of 2020 (KPJ Healthcare Berhad, 2020).

From here, it could be seen that the Healthcare sector was positively impacted by the coronavirus (COVID-19) which the companies involved in this sector enjoyed significant growth revenue during the year 2020. Hence, the last sector to be investigated in this study will be the annual report of 2020 from Healthcare sector with a total number of 15 public listed companies from the main board of Bursa Malaysia (See Appendix A5).

3.5 Data Analysis

Statistical Package for the Social Sciences (SPSS) will be used to conduct this research. With the suitability of SPSS, the complex data of the quantitative analysis can be carried out by researchers in various disciplines (The University of British Columbia, nil). SPSS allows the study to carry out various analyses such as descriptive statistics, ANOVA analysis, regression analysis as well as other common statistical analysis (The University of British Columbia, 2021). Thus, the objective of this research can be achieved by way of SPSS on reading and testing the theoretical framework thru predictive hypotheses.

3.6 Variables measurement

Coronavirus (COVID-19) related information disclosure: An example of the original word list used for measuring coronavirus disclosure was shown in Appendix B1. The wordlist was created by Elmarzouky et al. (2021a) constructed based on the coronavirus (COVID-19) Secure Guidelines published by the United Kingdom Government. This study measures the coronavirus (COVID-19) related information disclosure by using a computerized software with textual analysis method- CFIE-FRSE tool which was developed by Lancaster University[1].

Performance disclosure: Appendix C1 shows performance-related keywords for this paper to measure the firm performance disclosure in the annual report using the computerized software with textual analysis method- CFIE-FRSE according to the performance wordlist (El-Haj et al., 2016).

[1] https://github.com/drelhaj/CFIE-FRSE (Freely available for public use)

3.6.1 CFIE-FRSE Computerized Software

CFIE-FRSE is a computerized software which was developed by Lancaster University. This software is freely for public use and can be downloaded from the website. In this study, as all 137 annual reports have been downloaded from Bursa Malaysia website, the annual reports will then be transferred into the software. Then, the original coronavirus (COVID-19) wordlist created by Elmarzouky et al. (2021a) and performance related keywords by El-Haj et al. (2016) will be inserted into the software and the total number of keywords from each variable will be shown by each annual report.

3.7 Types of Variable

3.7.1 Independent Variable (IV)- Coronavirus (COVID-19) Related Information

This variable represents the extent of facts disclosed via companies concerning their responses and variations to the coronavirus (COVID-19) pandemic. It is predicted that the level of disclosure will positively associated with companies' performance disclosure.

3.7.2 Dependent Variable (DV)- Performance Disclosure

This variable displays the extent to which companies disclose their performance and consequences in their annual reports. It is measured through the presence of specific key phrases and terms indicative of performance-related information.

3.7.3 Moderator Variables (MVs)- Corporate Governance Mechanisms

The study identifies numerous company governance mechanisms as moderator variables that may influence the relationship among coronavirus (COVID-19) related information and firm performance disclosure. Board size performs a critical function which a bigger board may also convey diverse views but may also lead to coordination challenges. Board independence is some other considerable factor, with a better share of independent directors potentially improving oversight and accountability, which could cause more transparent disclosures. Additionally, gender diversity in the board is essential, as it contributes to a broader variety of viewpoints in choice-making processes. Finally, the effectiveness of the audit committee is crucial, as this committee ensures the integrity of monetary reporting and compliance with policies. With these moderating variables, this study aims to capture how diverse factors of governance mechanisms influence the level of disclosure related to coronavirus (COVID-19) and, therefore, firm performance.

3.7.4 Control Variables- Current Ratio (CR) and Return on Assets (ROA)

These control variables represent firm performance. The current ratio measures a company's potential to pay its brief-time period responsibilities, at the same time it suggests how correctly a company makes use of its assets to generate income. Controlling for these variables facilitates isolate the results of the independent and moderator variables at the established variable.

3.8 Research Model

This research will be using regression model to examine the relationship between the coronavirus (COVID-19) related information and firm performance disclosure in the annual reports among Malaysian public listed companies. The regression model is as follow:

$$Perf = \beta 0 + \beta 1 Covid - 19 + \beta 2 BS + \beta 3 BI + \beta 4 GD + \beta 5 AC + \beta 6 CR + \beta 7 ROA + \in$$

Table 3.1: Definition of Key Terms

Terms	Definitions and Measurements	References
Coronavirus (COVID-19) pandemic	Coronavirus (COVID-19) acts as the most challenging economic turbulenece as the global financial crisis and it increases uncertainty about firm performance.	Albitar et al (2021) Elmarzouky et al (2021a)
Coronavirus (COVID-19) related information	Measured by the wordlist developed by Elmarzouky et al. (Appendix 1).	Elmarzouky et al. (2021a)
Performance (Perf)	According to Peterson, Gijsbers, & Wilks (2003) and Taouab & Issor 2019, firm performance disclosure shows the capacity and ability of a specific business to make use of its available resources efficiently to achieve goals that in line with plans of the company that have been set earlier. Measured by the performance wordlist developed by El-Haj et al.	Peterson, Gijsbers, & Wilks (2003); Taouab & Issor (2019) El-Haj et al. (2016)
Corporate Governance Mechanism	Corporate governance is regarded as the system of rules, practices and processes that companies directs and controls.	Monks, & Minow (2011)
Board Size (BS)	The board size refers to the number of individuals that serves on the board of directors of an organization or corporate. Measured by the number of directors on the companies' board.	Guest (2008); Min (2018) Allegrini & Greco (2011)
Board Independence (BI)	The board independence can be defined as having independent directors who used interchange for non-executive directors and outside directors. Measured by the percentage of independent non-executive directors on the companies' board	Alnabsha et al. (2017) Albitar (2015); Gerged et al. (2021)

Table 3.1: Definition of Key Terms, continued

Terms	Definitions and Measurements	References
Board Gender Diversity (GD)	Gender diversity is defined as an inclusion of individuals from different gender within a group, organization, or community. Measured by the percentage of women on the board of directors	Reddy & Jadhav (2019) Giannarakis et al. (2014); Husted and Sousa-Filho (2018)
Audit Committee (AD)	Audit committee monitors the process of accounting in a company in order to ensure the information provided are relevant and credible to all stakeholders. Measured by the number of audit committee size	Naimah & Hamidah (2017) Allini et al. (2016); Kao et al. (2018).
Current Ratio (CR)	Measured by current assets divided by current liabilities, and it is used as control variable.	Salem et al. (2019)
Return on Asset (ROA)	Measured by the efficiency of companies' management in generating profit from total asset, and it is used as control variable.	Allini et al. (2016); Kao et al. (2018).

3.9 Data Analysis Procedures Used

This section outlines the methods with the intention to be employed to investigate the gathered statistics from the annual reports of Malaysian public listed companies across the identified sectors affected by the coronavirus (COVID-19) pandemic. The facts evaluation may be performed the usage of the Statistical Package for the Social Sciences (SPSS), which offers a sturdy platform for handling complicated information and acting various statistical analyses. The approaches are as follows:

3.9.1 Data Screening and Cleaning

When it comes to the cleansing of dirty records, it is important to rent quite a few techniques for each dataset. Nevertheless, researchers must continually technique these issues methodically. By using a way that concentrates on the identity and determination of records elements which are incongruous with or mismatch the remaining records. These data may be irrelevant, inadequately established, comprise outliers, duplicates, or include absent values, as appropriate. This approach guarantees that the statistics is freed from any impurities and can be used with none complications. Data screening is an important aspect of quantitative research that offers the framework for figuring out considerable discoveries (Arndt et al., 2021). All variables could be genuinely defined and coded for analysis, which include unbiased, dependent, moderator, and manipulate variables as laid out in in advance sections.

3.9.2 Descriptive Statistics

Descriptive information will function the foundational step in studying the statistics amassed from the annual reports of Malaysian public listed companies throughout various sectors affected by the coronavirus (COVID-19) pandemic. This phase will involve summarizing key capabilities of the dataset to provide a clean overview of the variables beneath have a look at. Measures of crucial tendency, together with the suggest and median, will be calculated for non-stop variables, bearing in mind insights into the average ranges of coronavirus (COVID-19) related information and performance disclosure among the companies. Additionally, measures of dispersion, together with preferred deviation and variety, may be assessed to apprehend the variety within these disclosures. For express variables, frequency distributions might be applied to demonstrate the distribution of companies across exclusive sectors, board sizes, and governance characteristics. These descriptive information will now not only spotlight the overall styles inside the information, however, it will also lay the groundwork for next analyses, ensuring a complete expertise of the context in which the coronavirus (COVID-19) pandemic has stimulated company disclosures in Malaysia (Bhandari, 2021).

3.9.3 Correlation Analysis

A correlation exists between two or more types of variables, whereby a change in one variable leads to a commensurate adjustment in the other. A correlation is a statistical indicator that indicates the relationship between multiple variables. In the sense that they are said to covary, they endure covariation. However, this covariation does not necessarily result from a direct or indirect causal relationship. A negative correlation is a condition in which two or more variables undergo opposing changes. A condition in which two variables have no discernible relationship is represented by zero correlation. The Pearson correlation coefficient quantifies the distance between the line of best fit and individual data points (Makowski et al. 2020). A Pearson correlation analysis will be conducted to examine the relationships between the independent variable- coronavirus (COVID-19) related information disclosure, the dependent variable- performance disclosure, and the moderating variables- corporate governance mechanisms. This step will help identify potential linear relationships among the variables.

3.9.4 Regression Analysis

Linear regression is the subsequent stage that follows correlation. When predicting the value of one variable based on the value of another, this operator is implemented. The dependent variable is the parameter that is being examined, which is occasionally referred to as the outcome variable. The percentage of variation in a dependent variable (a singular response) that can be accounted for by a set of independent variables can be ascertained through regression analysis. The applicability of bivariate regression and bivariate correlation to situations involving a single variable is a shared characteristic. The correlation coefficient, a significant number that ranges from -1 to 1, quantifies the extent and direction of the association between two or more variables. Correlation coefficients are one form of descriptive statistics. This implies that the document provides a succinct summary of the sample data, thereby averting any inferences regarding the entire population (Hünermund & Louw, 2022). This analysis will provide insights into the strength and direction of relationships, allowing for an understanding the association between the relationship of coronavirus (COVID-19) related information and performance disclosure.

3.9.5 Analysis of Moderating Effects

Descriptive records will function the foundational step in studying the statistics gathered from the annual reports of Malaysian public listed companies throughout the five (5) sectors affected by the coronavirus (COVID-19) pandemic. This section will involve summarizing key features of the dataset to provide a clear assessment of the moderating variables in the study. This analysis will provide insights to understand the moderating effects of board size, board independence, board gender diversity and audit committee in the relationship of coronavirus (COVID-19) related information and performance disclosure.

3.10 Chapter Summary

The beginning section of this chapter provided an overview on the content of the chapter. Next section discussed the background of the research design that content analysis will be conducted to examine the association between the relationship of coronavirus (COVID-19) related information and the firm performance disclosure as well as examine the moderating effect of corporate governance in enhancing the relationship. Section 3.3 discussed the importance of content analysis to be used in the research study, with the supporting of prior literaturs. In the subsequent section, data and sample collection was discussed which came to a conclusion that a total number of 137 annual reports at the year-end of 2020 from five (5) sectors to be collected from the Bursa Malaysia website, which is also known as the secondary data collection. The five (5) sectors to be collected are: 26 companies from Travel, Hospitality and Entertainment sector, 51 companies from Construction sector, 14 companies from Retail sector, 31 companies from Food and Beverage sector, and 15 companies from Healthcare sector, where each of the sector represents the sector that was positively, negatively or uncertainly affected by the impact of coronavirus (COVID-19). From here, it guarantees that the research can seize a huge range of responses to the coronavirus (COVID-19) pandemic, enhancing the robustness and generalizability of the findings. Section 3.5 discussed that Statistical Package for the Social Sciences (SPSS) is selected as the data analysis technique to conduct analysis such as descriptive analysis, regression analysis and so on. In the subsequent section, variable measurement is discussed. Both of the variables: coronavirus (COVID-19) related information and firm performance disclosure, will be measured by using a computerized software with textual analysis method from Lancaster University- CFIE-FRSE. In this section, there was a detailed discussion on how CFIE-FRSE software was used, that the software generated the total number of keywords related to the corornavirus (COVID-19) and performance keywords list from each annual report. In section 3.7, it discussed the types of all variables used in the study. In addition, a discussion on the research model to be applied and definition of key terms in the study were provided in section 3.8. The subsequent section of 3.9 provided a discussion on data analysis procedures used in the study which includes the uses and objectives of data screening and cleaning, descriptive statistics, correlation analysis, regression analysis and moderator analysis so that the insight for next chapter can be shown.

CHAPTER 4: FINDINGS

4.1 Chapter Overview

Chapter 4 starts by describing data analysis techniques that focus on data screening and preliminary data analysis which includes outliers detection analysis, missing data analysis as well as skewness and kurtosis analysis for conducting normality tests. In next section, descriptive statistical analysis for all data as a whole and data categorized by sectors is carried out. It is to determine the mean, minimum, and maximum frequency of the independent variable- coronavirus (COVID-19) related information, dependent variable- performance disclosure and the moderating variables- corporate governance mechanisms in the 137 annual reports among the five (5) selected sector in Malaysia. Section 4.4 contains a discussion on Spearman's correlation analysis followed by sections on multicollinearity test for VIF. In section 4.6, regression analysis is carried out to determine the effect between the variables. Also, moderating effect analysis is carried out in the next section to observe the moderating effects of corporate governance mechanisms in the relationship of coronavirus (COVID-19) related information and firm performance disclosure. All the relevant tables are incorporated to support the results of the statistical tests. Lastly, the final section presents a short summary of the key points for this chapter.

4.2 Data Screening and Preliminary Data Analysis

Data collected should be systematically cleaned and screened to avoid data errors and correct if any errors occur (Huebner et al., 2020). It is also important to carry out data screening as it affects future analysis and interpretation (Huebner et al., 2020). SPSS Statistic version 26 will be used for data screening. In this study, a screening test was conducted for the 137 annual reports of five (5) selected sectors: Travel, Hospitality and Entertainment sector; Construction sector; Retail sector; Food and Beverage sector; and

Healthcare sector, for the year 2020 from Bursa Malaysia. Along with data screening, the data is checked that it has been correctly entered; or to detect any missing values when data is unavailable; or to check if the data sets align with assumptions such as normality test (Stephen, 2016). The outliers detection and analysis, missing data analysis, and normality test of skewness and kurtosis analysis will be discussed in the following sub-sections respectively.

4.2.1 Outliers Detection and Analysis

Hemmati-Sarapardeh (2020) stated that outlier detection aims to identify a group of data points that differs from other data points within a group of data sets. In this study, outliers were detected using statistical methods through SPSS version 26. Specifically, the z-scores were calculated for each variable to identify extreme values. Z-scores represent how many standard deviations a data point is from the mean of the dataset. Data points with a z-score greater than ±3.0 are typically considered outliers (Tabachnick & Fidell, 2019). Additionally, boxplots were generated to visually inspect for any data points falling outside the whiskers, which represent the interquartile range (IQR). Any values outside 1.5 times the IQR are flagged as potential outliers. Once identified, outliers were examined to determine if they resulted from data entry errors or reflected true variability in the data. The 137 annual reports collected as data was screened for outliers to avoid misrepresentation and malformation of the findings. Outliers' detection in this study shows that there is no wrong data entry and hence, no action will be taken as all 137 annual reports are workable. In this case, the analysis did not reveal any outliers that required correction or removal, affirming the accuracy and consistency of the dataset.

4.2.2 Missing Data Analysis

When the data value is not stored for a variable in the observation of interest, it is known as missing data (Kang, 2013). Missing data can affect significantly research conclusions hence reducing the statistical power of the study and producing biased perspectives. In this study, a total of 137 annual reports from five (5) selected sectors were collected from Bursa Malaysia website without encounter missing data. This is due to the completeness of the information provided on the Bursa Malaysia website. Hence, all 137 annual reports which were downloaded from Bursa Malaysia website are considered valid and workable for the study.

4.2.3 Normality Test: Skewness and Kurtosis Analysis

Before proceeding to conduct tests of the hypotheses, the skewness and kurtosis analysis were carried out to assess whether the normality for the data collected was met. Skewness is known as a measurement of asymmetry of the distribution of a variable (Kim, 2013). A normal distribution has a zero on skew values which indicates symmetric distribution (or bell-shaped distribution), whilst a positive skewness value indicates that the tail on the right of the distribution is longer, and the negative skewness value indicates that the tails on the left of the distribution are longer (Kim, 2013). Hair et al. (2010) and Bryne (2010) stated that the data is considered normal with the skewness between -0.5 to +0.5. Furthermore, kurtosis is known as a measurement of the peakiness of the distribution (Kim, 2013). Hair et al. (2010) and Bryne (2010) also argued that with kurtosis between -3 and +3, the data is considered normal. Although, the best-advocated approach of testing is finding the ratio statistic between the estimate of the skewness and the respective standard error. If the test statistic is between , then the data are said to be approximately normal, else a conclusion is drawn that the data are not from an approximately normal.

Table 4.1 below shows the skewness and kurtosis analysis computed by SPSS Statistics. This skewness coefficient indicates that only board size and board gender diversity skewness coefficients are between the acceptable range and indicates that their distribution could be from an approximately normal population. The test statistic for all the variables are 4.522, 3.010, 1.971, 0.454, 1.923, and 5.522 respectively also indicating that board size and board gender diversity coefficients are within the range of 1.960 further supporting the observation that these two variables could be approximately normal.

Besides that, the kurtosis values obtained for coronavirus (COVID-19) related information, firm performance, board size, board independence, board gender diversity, and audit committee are -0.479, -1.214, 0.582, 4.762, -1.370, and 1.946. The indication that the kurtosis coefficient for the board independence (4.762) is outside the acceptable range since it is greater than 1.960. Thus, the evidence from the skewness and kurtosis coefficients of the variables except for the board gender diversity lie outside the acceptable range which qualifies as "normal" for both dependent, independent, and moderating variables. This shows that the normality assumption is violated or not met.

Table 4.1: Skewness and Kurtosis Analysis

	N Statistic	**Skewness**	**Kurtosis**
COVID-19	137	4.522	-0.479
PERF	137	3.010	-1.214
BS	137	1.971	0.582
BI	137	0.454	4.762
GD	137	1.923	-1.370
AC	137	5.522	1.946

(COVID-19: Coronavirus (COVID-19) Related Information; PERF: Performance Disclosure; BS: Board Size; BI: Board Independence; GD: Board Gender Diversity; AC: Audit Committee; CR: Current Ratio; ROA: Return on Asset)

In addition to conduct the data distribution with the help of the use of skewness and kurtosis, a formal test was carried out using the Kolmogorov-Smirnov test since the sample is greater than 50. The hypotheses tested is that the data are from an approximately normal distribution. The test, therefore, would help in deciding whether the variables are from an approximately normal distribution or not.

Table 4.2: Normality test

	Kolmogorov-Smirnov			**Shapiro-Wilk**		
	Statistic	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
COVID-19	.236	135	.000	.828	135	.000
PERF	.259	135	.000	.845	135	.000
BS	.113	135	.000	.967	135	.003
BI	.144	135	.000	.967	135	.002
GD	.137	135	.000	.932	135	.000
AC	.386	135	.000	.727	135	.000
CR	.429	135	.000	.114	135	.000
ROA	.441	135	.000	.129	135	.000

(COVID-19: Coronavirus (COVID-19) Related Information; PERF: Performance Disclosure; BS: Board Size; BI: Board Independence; GD: Board Gender Diversity; AC: Audit Committee; CR: Current Ratio; ROA: Return on Asset)

Table 4.2 indicates the formal normality test using Kolmogorov-Smirnov test. The summary indicates there in adequate evidence to refute the null hypothesis that claims that the data are approximately normal. This observation leads to the conclusion that the variables are not from an approximately normal distribution. This shows that all variables were not approximately normal and thus the normality assumption is not met. Based on this, instead of using the parametric test, the non-parametric test should be considered. The nonparametric test is also regarded as a distribution-free test. That is, when testing the hypothesis for the relationship between variables, instead of using Pearson's correlation, Spearman's correlation should be used. This makes the results reliable since one of the assumptions of Pearson correlation is that the data are approximately normal, and the test is sensitive to this assumption. That is, Pearson's correlation is sensitive to outliers, as they can disproportionally influence the correlation coefficient leading the biased estimates. In addition, such data could lead to misrepresentation of the strength of association as nonnormal data could have a non-linear relationship and also could affect the significance testing as Pearsons's correlation assumes normality distribution (Bishara, & Hittner, 2012). Thus, since the research is dealing with non-normally distributed data, it is important to account for the limitations of Pearson's correlation and consider alternative methods or perform data transformation. Although Spearman's rank correlation or Kendall's tau are often more robust choices in such situations, herein, Spearman's rho analysis is used (Bishara, & Hittner,2012; Hu, & Plonsky, 2021).

4.3 Descriptive Statistics

Kemp et al. (2018) stated that the nature and magnitude of sensory data characteristics can be marked out by descriptive analysis. In the current context of this study, SPSS Statistic version 26 was used to determine the mean, minimum, and maximum frequency of the independent variable- coronavirus (COVID-19) related information, dependent variable- performance disclosure, as well as the moderating variables- board size, board independence, board gender diversity, and audit committee in the 137 annual reports among the five (5) selected sectors.

Table 4.3 demonstrates the statistics of all 137 annual reports from the selected sectors. The mean of coronavirus (COVID-19) related information is 21.69, with a maximum score of 89 and a minimum score of 0 in the annual reports. A minimum score of 0 represents the absencense of the coronavirus (COVID-19) related information in the annual reports. The mean of performance disclosure is 492.59, with a maximum score of 2227 and a minimum score of 0. As one of the moderating variables, board size has a mean of 7.61 (rounding into 8), with a maximum number of 15 members and a minimum number of 3 members on the boards. Next, board independence as the second moderating variable has a mean of 49.55%, with a maximum of 75% and a minimum of 0%. The women on board (board gender diversity) as the third moderating variable has a mean of 17.76%, with a maximum of 50% and a minimum of 0% of women on board among the 137 public listed companies. The last moderating variable- the audit committee has a mean of 3.43 members (rounding into 4), with a maximum number of 6 members and a minimum of 2 members in the audit committee board. In addition, the average current ratio for all the companies is 5.213 (SD = 28.744) with a minimum value of 0.01 and a maximum of 329.99 showing that there is a very high dispersity in the current ratio in companies selected in this study. This could be due to the reason that organizations selected are from different types of sectors. Last but not least, the average return on assets is found to be approximately -0.087 (SD = 1.179), with a minimum of -13.518 and a maximum of 1.041. The negative ROA indicates that most of the organizations selected in this study's net income was less than their total assets, meaning that the companies had a low ability to generate profit from their assets in the year of 2020 annual reports.

Table 4.3: Descriptive Statistics

	N	Min	Max	Mean	Std. D
COVID-19	137	0	89	21.69	25.022
PERF	137	0	2227	492.59	518.090
BS	137	3	15	7.61	2.091
BI	137	.0000	.7500	.495369	.1250913
GD	137	.0000	.5000	.177200	.1368392
AC	137	2	6	3.43	.736
CR	137	.0100	329.9900	5.212593	28.7435795
ROA	137	-13.5180	1.0406	-.086933	1.1790301
Valid N	137				

(COVID-19: Coronavirus (COVID-19) Related Information; PERF: Performance Disclosure; BS: Board Size; BI: Board Independence; GD: Board Gender Diversity; AC: Audit Committee; CR: Current Ratio; ROA: Return on Asset)

Furthermore, descriptive analysis is also carried out in accordance with the sector. Table 4.4 demonstrates the descriptive statistics for the 26 public listed companies from the Travel, Hospitality, and Entertainment sector. It found that the mean of coronavirus (COVID-19) related information is 28.31, with a maximum score of 82 and a minimum score of 0. The mean of performance disclosure is 549.62, with a maximum score of 1321 and a minimum score of zero in this sector of Travel, Hospitality, and Entertainment. The board size has a mean of 6.21 (rounding into 7), with a maximum number of 10 members and a minimum number of 3 members. The board independence has a mean of 50.62%, with a maximum of 75% and a minimum of 0%. Next, the women on board (board gender diversity) has a mean of 15.15%, with a maximum of 50% and a minimum of 0% of women on board. The audit committee has a mean of 3.23 members (rounding into 4), with a maximum number of 4 members and a minimum of 3 members in the audit committee board. The results indicate that the average current ratio for the Travel, Hospitality, and Entertainment sector was 2.60 (SD = 4.00), with the minimum current ratio reported to be 0.01 and a maximum of 15.72. Last but not least, the average ROA in the Travel, Hospitality, and Entertainment sector is -0.579 (SD = 2.642) with a minimum of -13.518 and a maximum of 0.127. The average ROA is lower than all sectors' averages which indicate that this sector was performing poorly.

Table 4.4: Descriptive Statistics for Travel, Hospitality, and Entertainment Sector

	N	Min	Max	Mean	Std. D
COVID-19	26	0	82	28.31	29.124
PERF	26	0	1321	549.62	473.552
BS	26	3	10	6.27	1.663
BI	26	.0000	.7500	.506059	.1582263
GD	26	.0000	.5000	.151239	.1291105
AC	26	3	6	3.23	.430
CR	26	.0100	15.7200	2.595769	3.9966488
ROA	26	-13.5180	.1273	-.579082	2.6424542
Valid N	26				

(COVID-19: Coronavirus (COVID-19) Related Information; PERF: Performance Disclosure; BS: Board Size; BI: Board Independence; GD: Board Gender Diversity; AC: Audit Committee; CR: Current Ratio; ROA: Return on Asset)

Table 4.5 shows that the mean of coronavirus (COVID-19) related information among 51 public listed companies from the Construction sector is 20.37, with a maximum score of 66 and a minimum score of 0. The mean of performance disclosure in this sector is 524.71, with a maximum score of 1572 and a minimum score of 0. The board size has a mean of 7.43 (rounding into 8), with a maximum number of 11 members and a minimum number of 4 members. The board independence has a mean of 50.61%, with a maximum of 75% and a minimum of 20%. The women on board (board gender diversity) has a mean of 14.77%, with a maximum of 50% and a minimum of 0% of women on board. The audit committee has a mean of 3.41 members (rounding into 4), with a maximum number of 5 members and a minimum of 3 members in the audit committee board. The average current ratio for the construction sector is found to be 8.43 (SD = 46.41). The large standard deviation deduces that there is a large dispersity or dispersion in the current ratio in this sector. This is supported by the minimum and maximum which showed a large range. The minimum and maximum current ratio are 0.23 and 329.99, respectively. The ROA has a mean of -0.0241 (SD = 0.262) and a minimum of -1.815 and a maximum of 0.1187.

Table 4.5: Descriptive Statistics for Construction Sector

	N	Min	Max	Mean	Std. D
COVID-19	51	0	66	20.37	20.387
PERF	51	0	1572	524.71	470.982
BS	51	4	11	7.43	1.769
BI	51	.2000	.7500	.506116	.1184698
GD	51	.0000	.5000	.147717	.1246559
AC	51	3	5	3.41	.669
CR	51	.2300	329.9900	8.434400	46.4147995
ROA	51	-1.8150	.1187	-.024060	0.2617635
Valid N	51				

(COVID-19: Coronavirus (COVID-19) Related Information; PERF: Performance Disclosure; BS: Board Size; BI: Board Independence; GD: Board Gender Diversity; AC: Audit Committee; CR: Current Ratio; ROA: Return on Asset)

Table 4.6 demonstrates the mean of coronavirus (COVID-19) related information among 14 public listed companies from the Retail sector is 24, with a maximum score of 76 and a minimum score of 0. The mean of performance disclosure in this sector is 501.21, with a maximum score of 1518 and a minimum score of 0. The board size has a mean of 8.21 (rounding into 9), with a maximum number of 12 members and a minimum number of 5 members. The board independence has a mean of 45.79%, with a maximum of 67% and a minimum of 33%. The women on board (board gender diversity) has a mean of 29.50%, with a maximum of 50% and a minimum of 10% of women on board. The audit committee has a mean of 3.36 members (rounding into 4), with a maximum number of 5 members and a minimum of 3 members in the audit committee board. The summary indicates that the current ratio of the organizations is found to have an average of 2.278 (SD = 1.565) in the retail sector with a minimum of 0.35 and a maximum of 5.5. Lastly, the ROA in the retail sector has an average of 0.435 (SD = 0.559), with a minimum and a maximum of -0.060 and 0.1497, respectively. The average ROA is positive an indication that this sector is more capable of making profit from existing assets.

Table 4.6: Descriptive Statistics for Retail Sector

	N	Min	Max	Mean	Std. D
COVID-19	14	0	76	24.00	28.233
PERF	14	0	1518	501.21	590.943
BS	14	5	12	8.21	1.968
BI	14	.333	.6667	.457880	.0891166
GD	14	.1000	.5000	.294813	.1183804
AC	14	3	5	3.36	.745
CR	14	.3500	5.5000	2.277857	1.5650617
ROA	14	-.0600	.1497	.043544	0.558649
Valid N	14				

(COVID-19: Coronavirus (COVID-19) Related Information; PERF: Performance Disclosure; BS: Board Size; BI: Board Independence; GD: Board Gender Diversity; AC: Audit Committee; CR: Current Ratio; ROA: Return on Asset)

Next, Table 4.7 demonstrates the descriptive statistics for the 31 public listed companies from the Food and Beverage sector. It is found that the mean of coronavirus (COVID-19) related information is 14.29, with a maximum score of 57 and a minimum score of 0. The mean of performance disclosure is 369.48, with a maximum score of 1732 and a minimum score of zero in this sector of Food and Beverage. The board size has a mean of 8.23 (rounding into 9), with a maximum number of 12 members and a minimum number of 4 members. The board independence has a mean of 47.03%, with a maximum of 75% and a minimum of 20%. Next, the women on board (board gender diversity) has a mean of 18.45%, with a maximum of 50% and a minimum of 0% of women on board. The audit committee has a mean of 3.61 members (rounding into 4), with a maximum number of 6 members and a minimum of 2 members in the audit committee board. The results further indicate that the estimated average return on asset for the 31 firms in the food and beverage sector is 0.073 (SD = 0.233) the least-earning company had an ROA of -0.405 and the highest earning was getting an ROA of 1.041.

Table 4.7: Descriptive Statistics for Food and Beverage Sector

	N	Min	Max	Mean	Std. D
COVID-19	31	0	57	14.29	18.603
PERF	31	0	1732	369.48	506.909
BS	31	4	12	8.23	2.186
BI	31	.2000	.7500	.470061	.1269006
GD	31	.0000	.5000	.184328	.1491356
AC	31	2	6	3.61	.989
CR	31	.1200	62.2900	4.548387	11.1259073
ROA	31	-.4053	1.0406	.072886	.2233217
Valid N	31				

(COVID-19: Coronavirus (COVID-19) Related Information; PERF: Performance Disclosure; BS: Board Size; BI: Board Independence; GD: Board Gender Diversity; AC: Audit Committee; CR: Current Ratio; ROA: Return on Asset)

Lastly, Table 4.8 demonstrates the mean of coronavirus (COVID-19) related information among 15 public listed companies from the healthcare sector is 27.87, with a maximum score of 89 and a minimum score of 0. The mean of performance disclosure in this sector is 530.93, with a maximum score of 2227 and a minimum score of 0. The board size has a mean of 8.73 (rounding into 9), with a maximum number of 15 members and a minimum number of 5 members. The board independence has a mean of 52.87%, with a maximum of 67% and a minimum of 33%. The women on board (board gender diversity) has a mean of 19.80%, with a maximum of 42% and a minimum of 0% of women on board. The audit committee has a mean of 3.53 members (rounding into 4), with a maximum number of 5 members and a minimum of 3 members in the audit committee board. The summary further indicates that the average current ratio for the organization in the healthcare sector is 2.971 (SD = 2.790) with a minimum and maximum of 0.78 and 12.03 respectively. Lastly, it is established that the estimated average ROA is 0.104 (SD = 0.097) a minimum of 0.02, and a maximum of 0.300. Notably, all the organizations in the healthcare sector had a positive indication that this sector has a higher net income than its total assets, which could be a result of efficient asset utilization.

Table 4.8: Descriptive Statistics for Healthcare Sector

	N	Min	Max	Mean	Std. D
COVID-19	15	0	89	27.87	36.692
PERF	15	0	2227	530.93	703.653
BS	15	5	15	8.73	2.549
BI	15	.3333	.6667	.527593	.1035561
GD	15	.0000	.4167	.197937	.1309141
AC	15	3	5	3.53	.743
CR	15	.7800	12.0300	2.971429	2.7900892
ROA	15	.0017	0.3005	.104476	.0970727
Valid N	15				

(COVID-19: Coronavirus (COVID-19) Related Information; PERF: Performance Disclosure; BS: Board Size; BI: Board Independence; GD: Board Gender Diversity; AC: Audit Committee; CR: Current Ratio; ROA: Return on Asset)

4.4 Correlation Analysis

Correlation analysis explores the strength, and direction of association between two different variables (Senthilnathan, 2019). There are a number of different statistical tests to conduct correlation analysis by using SPSS Statistic Version 26. However, this study will only be using Spearman's Correlation analysis to measure the degree of density between the independent variable, the dependent variable, the four moderating variables, and the control variables. Senthilnathan (2019) mentioned that the relationship between two variables will be stronger with the correlation coefficient being further away from zero. Table 4.9 demonstrates the correlation between coronavirus (COVID-19) related information disclosure, performance disclosure, board size, board independence, board gender diversity, audit committee, return on assets, and current ratio. As Spearman's correlation coefficient shows a positive number, it means that these two variables have a positive association, and the converse holds. Also, a p-value is more than 0.05 indicates that two variables do not have a significant association, and vice versa.

Table 4.9: Spearman's Correlation Analysis

Correlations									
		COVID19	**PERF**	**BS**	**BI**	**GD**	**AC**	**CR**	**ROA**
COVID19	**Correlation Coefficient**	1.000	.926**	0.27	-0.86	.009	-.066	-0.51	.003
	Sig. (2-tailed)	.	.000	.750	.318	.916	.444	.556	.970
	N	137	137	137	137	137	137	137	136
PERF	**Correlation Coefficient**	.926**	1.000	.015	-.095	.000	-.124	-.016	.018
	Sig. (2-tailed)	.000	.	.865	.271	.998	.150	.856	.832
	N	137	137	137	137	137	137	137	137
BS	**Correlation Coefficient**	.027	.015	1.000	-.228**	.083	.379**	.160	.257**
	Sig. (2-tailed)	.750	.865	.	.007	.335	.000	0.63	.003
	N	137	137	137	137	137	137	137	137
BI	**Correlation Coefficient**	-.086	-.095	-.228**	1.000	-.030	.101	-.069	-.136
	Sig. (2-tailed)	.318	.271	.007	.	.729	.238	.428	.115
	N	137	137	137	137	137	137	137	137
GD	**Correlation Coefficient**	.009	.000	.083	-.030	1.000	.101	.174*	.184*
	Sig. (2-tailed)	.916	.998	.335	.729	.	.241	.043	.032
	N	137	137	137	137	137	137	137	137
AC	**Correlation Coefficient**	-.066	-.124	.379**	.101	.101	1.000	.069	.094
	Sig. (2-tailed)	.444	.150	.000	.238	.241	.	.427	.277
	N	137	137	137	137	137	137	137	137
CR	**Correlation Coefficient**	-.051	-.016	.160	-.069	.174*	.069	1.000	.293**
	Sig. (2-tailed)	.556	.856	.063	.428	.043	.427	.	.001
	N	137	137	137	137	137	137	137	137
ROA	**Correlation Coefficient**	.003	.018	.257**	-.136	.184*	.094	.293**	1.000
	Sig. (2-tailed)	.970	.832	.003	.115	.032	.277	.001	.
	N	137	137	137	137	137	137	137	137

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

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

(COVID-19: Coronavirus (COVID-19) Related Information; PERF: Performance Disclosure; BS: Board Size; BI: Board Independence; GD: Board Gender Diversity; AC: Audit Committee; CR: Current Ratio; ROA: Return on Asset)

The data failed the normality assumption which makes Spearman's correlation the most appropriate test to determine whether the variables were significantly associated. The summary indicates a very strong positive significant relationship between coronavirus (COVID-19) related information and firm performance (rho = 0.926, $p < 0.05$). The association between (COVID-19) related information and board size (rho = 0.027, p =0.750), board independence (rho = -0.086, p = 0.318), gender diversity (rho = 0.009, p = 0.916), audit committee (rho = -0.066, p = 0.444), current ratio (rho = -0.051, p = 0.556), and ROA (rho = 0.003, p = 0.970), were all not statistically significant. Important to note that the intercorrelation between the independent variable, moderating variables, and the controlled variables is weak (less than 0.70) and indication that there is a low likelihood that the model would suffer multicollinearity.

4.5 Multicollinearity Test

Multicollinearity is a statistical phenomenon that occurs in multiple regression models when two or more predictors are highly correlated. Scholars indicate that when the correlation of the independent variables is greater than 0.70, there is a high possibility of serious multicollinearity (Hill, DeVault, & Belant, 2020). Although when making predictions multicollinearity is not an issue, however, it inflates the standard error and makes it difficult to isolate individual effects of the predictors. Thus, when assessing the effect of the variables, multicollinearity poses a great threat since some of the important predictors could be marked as insignificant (Shrestha, 2020). To test for multicollinearity the variance inflation factor (VIF) is used and a score greater than 5.0 is considered an indicator of serious multicollinearity between the predictor variables.

Table 4.10: Multicollinearity Test (VIF)

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
COVID19	.979	1.021
BS	.810	1.234
BI	.938	1.066
GD	.924	1.082
AC	.832	1.203
CR	.936	1.068
ROA	.987	1.013

(COVID-19: Coronavirus (COVID-19) Related Information; PERF: Performance Disclosure; BS: Board Size; BI: Board Independence; GD: Board Gender Diversity; AC: Audit Committee; CR: Current Ratio; ROA: Return on Asset)

The test results indicate that all the VIF coefficients in the multiple regression model are less than 5.00 which shows that there is low nonproblematic multicollinearity. The model standard error is not affected or inflated by high intercorrelation between the independent and dependent variables. Thus, it is inferred that the fitted model does not suffer multicollinearity.

4.6 Regression Analysis

The multiple linear regression model is assessed to determine the effect of the relationship between the dependent- firm performance disclosure and independent variable- coronavirus (COVID-19) related information. Table 4.11 deduces that coronavirus (COVID-19) related information has a significant effect towards the firm performance disclosure (= 17.37, t = 18.14, p<.05), and that of the audit committee is statistically significant (= -76.53, t = 2.15, p <.05). Nonetheless, the rest of the factors plays no significant effect towards the firm performance disclosure.

Table 4.11: Regression Analysis

	Unstandardized Coefficients		**Standardized Coefficients**	**t-statistics**	**Sig. (p-value)**
	B	**Std. Error**	**Beta**		
(Constant)	304.619	159.806		1.906	.059
COVID19	17.365	.957	.841	18.139	.000
BS	15.442	12.910	.062	1.196	.234
BI	-57.304	193.931	-.014	-.295	.768
GD	-134.603	178.472	-.036	-.754	.452
AC	-76.532	35.578	-.108	-2.151	.033
CR	.940	.849	.052	1.107	.270
ROA	9.920	20.070	.023	.494	.622
Dependent Variable: perf					
Model Summary:					
R Square Value	.736				
Adjusted R Square Value	.721				
ANOVA Results:					
F-Value	50.514				
Sig. Value	.000				
Observations	137				

(COVID-19: Coronavirus (COVID-19) Related Information; PERF: Performance Disclosure; BS: Board Size; BI: Board Independence; GD: Board Gender Diversity; AC: Audit Committee; CR: Current Ratio; ROA: Return on Asset)

4.7 Moderating Effect Analysis

The moderation analysis is fitted to assess the moderating effect of corporate governance mechanisms in enhancing the relationship between coronavirus (COVID-19) related information and firm performance disclosure by using the four (4) corporate governance mechanisms: board size, board independence, board gender diversity, and audit committee.

Table 4.12 Moderating Effect Model

		T	**P**
BS	-7.2425	-.6448	.5202
BI	-165.4284	-.9773	.3302
GD	74.2736	.3741	.7089
AC	-42.9149	-1.1922	.2353

(BS: Board Size; BI: Board Independence; GD: Board Gender Diversity; AC: Audit Committee)

Table 4.12 results indicate the moderating effect of the board size (BS) is not statistically significant (-7.24, t = -0.64, p =0.52). Also, the moderator variable- board size (BI) towards the relationship between firm performance disclosure and coronavirus (COVID-19) related information is not statistically significant (-165.43, t = -0.98, p=0.33). The results indicate that the board gender diversification (GD) moderating effect is not statistically significant (74.27, t = 0.37, p=0.709) towards coronavirus (COVID-19) related information and firm performance disclosures. Lastly, moderating effect of audit committee (AC) is also not statistically significant towards the relationship between the dependent- firm performance disclosure and independent variable- coronavirus (COVID-19) related information (-42.91, t = -1.19, p=0.235).

4.8 Chapter Summary

Chapter 4 starts with a brief overview. Section 4.2 consists of data screening and preliminary data analysis that was noted with no issues such as outlier and missing data. It is found that the outliers' detection in the study shows no wrong data entry and all data collected are considered valid and workable. This section also conducted a normality test- Skewness and Kurtosis analysis. It is found that this research is dealing with a non-normally distributed data where the normality assumption is violated or not met. From here, a formal test was carried out by using the Kolmogorov-Smirnov test since the sample is greater than 50. However, Kolmogorov-Smirnov test also shows that all variables were not approximately normal and thus the normality assumption is not met. Based on this, instead of using the parametric test, the non-parametric test should be considered that it is suggested that Spearman's rho analysis is used for correlation analysis. Next, section 4.3 constituted descriptive statistics analysis which sees the five (5) selected sectors as a whole, and categorized by sector to conduct the analysis. The minimun score and maximum score of the keywords for coronavirus (COVID-19) related information and firm performance are found in this section which there are a minimum score of 0 for both variables, and a maximum score of 89 and 2227 keywords, respectively among all companies selected in the five (5) sectors. Also, by investigating all 137 annual reports, the mean of board size, board independence, board gender diversity and audit committee are 8, 50%, 18% and 4, respectively. In addition, section 4.4 conducted the Spearman's correlation analysis to measure the degree of density between in independent variable, the dependent variable, the four moderating variables, as well as the control variables. In summary, there is a low likelihood that the model would suffer multicollinearity due to that the intercorrelation is weak, which is less than 0.70. Next, the multicollinearity test is done in section 4.5 which shows that the standard error of the model is not affected or inflated by high intercorrelation between independent and dependent variables. Hence, the model does not suffer multicollinearity. In section 4.6, regression analysis establishes the overall significance of the proposed model in the context of Malaysian public listed companies. It shows to determine the effect of the relationship between coronavirus (COVID-19) related information and firm performance disclosure. It is found that other than the relationship between independent variable and dependent variable, as well as one of the moderating variables- audit committee, the rest of the factors play no significant effect towards the firm performance disclosure. Last but not least, it comes to a summary of moderating effect analysis of corporate governance mechanisms where all are not statistically significant towards the relationship between coronavirus (COVID-19) related information and firm performance disclosure.

CHAPTER 5: DISCUSSION

5.1 Chapter Overview

Chapter 5 begins with an overview of the chapter, followed by discussion on the findings of the structural model by drawing a comparison against prior studies and findings in section 5.2. Section 5.3 shows a summary to explain the extent to which research questions, research objectives and corresponding hypotheses are addressed in the analysis. Both sections 5.2 and 5.3 severely discuss the studies findings and connects them to the theoretical framework of Agency theory. It revisits the objectives of the observe in the context of the results received from the regression and moderation analyses. Lastly, the final section presents a short summary of the key points for this chapter.

5.2 Discussion on Findings of Structural Model

The tables in the previous chapter have showed the results of both the regression analysis and moderation analysis. The following subsections shall discuss in detail of the result obtained and compare them against past literature and studies to determine if the association between the level of coronavirus (COVID-19) related information and firm performance disclosure in the annual report among the Malaysian public listed companies from the five (5) selected sectors are similar or different from the past studies and their findings.

5.2.1 Discussion on Hypotheses 1

H1: Ceteris paribus, there is a positive association between the level of coronavirus (COVID-19) related information and firm performance disclosure in the annual report narratives among Malaysian public listed companies.

As the first research objective aimed to look at the connection between firm performance and coronavirus (COVID-19) related information disclosures. The proposed structural model result in the previous chapter shows that a widespread positive relationship among coronavirus (COVID-19) related information and firm performance, where, there is a significant and positive effect between coronavirus (COVID-19) related information and performance disclosure as indicated by = 17.37, $p<.05$. Hence, hypotheses 1 is supported which there is a positive association between the level of coronavirus (COVID-19) related information and firm performance disclosure in the annual report narratives among Malaysian public listed companies. Companies that furnished extra designated and transparent disclosures related to coronavirus (COVID-19) exhibited more firm performance disclosure. This result is aligned with Elmarzouky (2021a), which conducted the similar research in the United Kingdom that also showed a positive association between the level of coronavirus (COVID-19) related information disclosure and performance disclosure in the annual reports. In addition, prior studies conducted by Peterson, Gijsbers, & Wilks (2003), and Taouab & Issor (2019) stated the importance of firm performance disclosure. It is suggested that the level of coronavirus (COVID-19) related information disclosure will also be an essential part of information in the annual reports for the stakeholders, especially when the coronavirus (COVID-19) pandemic impacted all sectors in different ways.

This finding aligns with Agency theory, as obvious disclosures reduce facts asymmetry among managers (sellers) and shareholders (principals). From an Agency theory angle, while managers divulge extra records regarding how their organization is dealing with the coronavirus (COVID-19) pandemic crisis, it alerts managerial competence and builds trust with shareholders. This transparency reduces information asymmetry, consequently mitigating the hazard of opportunistic behavior by using managers who might in any other case act in their own self-interest at the cost of shareholders. Elmarzouky, Albitar, & Hussainey, (2021) pointed that when the managers provide transparent and comprehensive information about organization performance, with specific focus on the impact and the response or action plan to coronavirus (COVID-19) pandemic, the stakeholders are set at peace. Also, the previous studies by Siddiqui (2015); Healy & Palepu (2001); Graham et al. (2005) stated that firm value will be increased as management provides information and shows their ability during the crisis to investors. In addition, the outcomes endorse that, during times of coronavirus (COVID-19) pandemic crisis, extended disclosure can function a mechanism to realign managerial actions with the great interests of shareholders, improving corporation overall performance. Boston et al. (2021) stated that higher level of professional judgements could be done by the disclosure of coronavirus (COVID-19) related information and firm performance through annual reports. Also, the stakeholders can have better understanding to predict the firm's current and future performance and to see how the firm's management responds to deal with the crisis and reduce the risk (Elmarzouky et al., 2021b).

As communication of coronavirus (COVID-19) related information to be associated with more performance disclosure in order to refrain from any under or over-valuation of the expected performance of the company (Elmarzouky et al., 2021a), this relationship also shows that firms that divulge much less can be both struggling with inner control or deliberately withholding facts, potentially eroding believe. This will be symptomatic of poor governance or a loss of responsibility to shareholders. The managers' preferences in increasing the confusion of information by using more uncertainty and ambiguous words have negatively affected the readability of annual reports (Efretuei, 2020). And, the importance of organization transparency is underscored in such a pandemic crisis situation in which shareholder confidence becomes important for survival.

In conclusion, hypotheses 1 is supported. The relationship is noted to be positive suggesting the coronavirus (COVID-19) related information and firm performance disclosure in annual reports are associated with each other. The findings of hypotheses 1 shall contribute to the existing literature of coronavirus (COVID-19) related information and firm performance disclosures where the dependent and independent variables are significantly positively related in the context of Malaysian public listed companies.

5.2.2 Discussion on Hypotheses 2

The second research objective explored whether corporate governance mechanisms—board size, board independence, board gender diversity and audit committee, moderate the association between the coronavirus (COVID-19) related information and firm performance disclosure.

H2(a): Ceteris paribus, board size moderates the association between coronavirus (COVID-19) related information and firm performance disclosure in annual report narratives among Malaysian public listed companies.

As evident from the result in chapter 4, Hypotheses 2 (a) is not supported that board size does not moderate the association between coronavirus (COVID-19) related information and firm performance disclosures in annual report narratives among Malaysian public listed companies as -7.243, p =0.5202, wherest the moderating effect is not statistically significant. This result is aligned with Elmarzouky (2021a) that no evidence showed the moderating effect of board size and coronavirus (COVID-19) related information on firm performance disclosure for the United Kingdom Financial Times Stock Exchange firms. However, this result does not aligned with prior studies by Laksmana (2008); Samaha et al. (2012) which argued that the larger the board size will have a result of greater diversity to disclose more information.

This can be interpreted from the point of view of Agency theory that, by acknowledging that larger board size might also lead to coordination demanding situations and choice-making delays. Kantudu & Samaila (2015); Ntim et al. (2015) stated that larger board size will lower the disclosure level which is caused by more communication issues. While larger boards ought to theoretically provide greater oversight and decrease business organization problems, in practice, they will emerge as unwieldy, leading to inefficiencies that dilute the potential advantageous impact on companies overall performance. The insignificant impact of board size suggests that growing the quantity of boards may not necessarily translate into better governance or enhanced company performance. Instead, the high-quality and involvement of the boards may be extra essential than the quantity. Boards that are too huge may additionally warfare to workout significant oversight, main to weakened governance, which Agency theory predicts could exacerbate facts asymmetry and managerial opportunism.

To sum up, it is noted that board size is not a moderator on the relationship bewteen coronavirus (COVID-19) related information and firm performance disclosure in annual reports suggesting that it is nonsignificant part of the overall model. As the study found that board size does not improve the association between coronavirus (COVID-19) related information and the firm performance disclosure., it might due to the large size of board causes difficulty in coordinating, difficulty with accountability or communication issues which eventually lower down the level of disclosure to the public. The findings of this research can be added into the existing framework of corporate governance mechanisms on information disclosure that the larger the board size does not guarantee the level of disclosure especially during the pandemic crisis.

H2(b): Ceteris paribus, board independence moderates the association between coronavirus (COVID-19) related information and firm performance disclosures in annual report narratives among Malaysian public listed companies.

As evident from the results in chapter 4, the insignificantly relationship shows that board independence does not moderate the association between coronavirus (COVID-19) related information and firm performance disclosure in the Malaysian public listed companies' annual reports (-165.43, p=0.3302). The coefficient is negative, yet it is not statistically significant. This result implies that percentage of board independence in companies does not affect the association of disclosure between coronavirus (COVID-19) related information and firm performance information in the annual reports. This finding does not align with Elmarzouky (2021a) that board independence moderates the relationship between coronavirus (COVID-19) disclosure and firm performance disclosure among the United Kingdom firms. Also, prior studies also suggested that a greater proportion of independent directors results in greater diversity, which leads to more information being disclosed voluntarily (Akhtaruddin & Haron, 2010; Ntim & Soobaroyen, 2013; Samaha et al., 2015). However, hypotheses 2 (b) is not supported in the context of Malaysian public listed companies.

Similarly to the first moderating variable- board size, board independence was determined not to have any large moderating effect. This end result demanding situations the belief that more unbiased boards inherently cause better governance. From the angle of Agency theory, the function of independent directors in the boards is to offer objective oversight and decrease conflicts of interest between managers and shareholders. However, in practice, the presence of independent directors on their own may not be sufficient to persuade the intensity or quality of disclosures, specially throughout a disaster just like the coronavirus (COVID-19) pandemic. Al-Moataz & Hussainey (2013) and Rodrigues et al. (2017) stated that the proportion of independent directors has a negative relationship with information disclosure.

This finding indicates that simply having independent boards is inadequate if they are no longer actively engaged in tracking and influencing management conduct. This highlights a potential issue in governance practices: independent directors can also be lacked of the requisite expertise of the companies' operations or the industry, which limits their ability to slight managerial selections correctly. In such instances, their function might also become more symbolic than purposeful, elevating concerns approximately whether or not the independence criterion alone is a meaningful degree of board effectiveness.

With this, the information asymmetry is unrelated to the board independence. Then, it is noted that board independence as non-moderating variable in the relationship between coronavirus (COVID-19) related information and firm performance disclosure in annual reports suggesting that it is also not a significant part of the overall model. Although board independence reduces the conflit of interest between the management and shareholders, however, it does not show any improvement in disclosing the coronavirus (COVID-19) related information and firm performance in the context of Malaysian public listed companies. Besides that, this result can be added to the existing framework of corporate governance mechanisms on information disclosure, especially during the period which similar to the coronavirus (COVID-19) pandemic, suggesting that independent boards should be aimed to actively engaged in tracking and influencing management conduct while having requisite expertise of the companies' operations or the industry.

H2(c): Ceteris paribus, board gender diversity moderates the association between coronavirus (COVID-19) related information and firm performance disclosures in annual report narratives among Malaysian public listed companies.

As evident from the result from the previous chapter, Hypotheses 2 (c) does insignificantly support that board gender diversity moderates the associated between coronavirus (COVID-19) disclosure and performance disclosure in annual report narratives among Malaysian public listed companies as indicated by 74.27, p=.709. This outcome is somewhat expected, given the literature that suggests diverse boards are much more likely to take into account a broader variety of stakeholder perspectives and promote transparency.It is aligned with a prior study by Elmarzouky (2021a) which found that the greater the number of women on boards will result in greater diversity to disclose more coronavirus (COVID-19) related information and firm performance information. Also, this study is also aligned the prior studies that stated gender diversity on boards improve the firms' disclosures (Aribi et al., 2018; Elmagrhi et al., 2016; Liao et al., 2015; Ntim & Soobaoyen, 2013; Sartawi et al., 2014).

In relation to Agency theory, board gender diversity or women on boards does reduce the information symmetry as it has a positive relationship in moderating the association between coronavirus (COVID-19) related information and firm performance disclosure in the annual reports among Malaysian public listed companies. From here, the policymakers of Malaysia can have attention and be noticed to this characteristic of the board of directors which has a positive impact on information disclosure. This finding ought to suggest that the presence of women on board does robotically enhance governance effectiveness, in particular if their voices are not marginalized or if their roles are not extra symbolic than major. While board gender diversity can cause greater ethical choice-making and enhance governance, its effect may be as a whole in the organization's broader organizational subculture and the way successfully diverse views are integrated into the selection-making system. This aligns with crucial theories in corporate governance, which argue that range with out inclusion is useful in reducing information asymmetry. To conclude, hypotheses 2 (c) is supported insignificantly.

H2(d): Ceteris paribus, audit committee moderates the association between coronavirus (COVID-19) related information and firm performance disclosures in annual report narratives among Malaysian public listed companies.

As evident from the results in the previous chapter, there exists a nonsignificant negative relationship between the number of audit committees and the association between coronavirus (COVID-19) related information and performance disclosure in the Malaysian public listed companies' annual reports. This result of -42.91, p=.235, implies that the level of disclosure of coronavirus (COVID-19) related information and firm performance information in the annual reports are not moderated by the number of audit committees. In simpler words, the number of the audit committee does not moderate the association between coronavirus (COVID-19) related information and firm performance disclosure in annual reports among Malaysian public listed companies. This result does not align with Arslan et al. (2014); Bouaziz & Triki (2012); Samaha et al. (2012); Yasser et al. (2011) that the level of information disclosure will be improved by the number and effectiveness of audit committees. However, it aligns with prior studies Menon & Williams (1994) stated that that audit committee has no significant relationship with firms' disclosure.

The audit committee turned into no longer discovered to significantly slight the relationship among coronavirus (COVID-19) related information and firm performance disclosures. According to Agency theory, the audit committee performs an important function in reducing agency charges by making sure correct and obvious monetary reporting. However, the lack of extensive moderation suggests that audit committees may not always be powerful in instances of disaster or may be limited through other organizational factors. The lack of a substantial moderating effect of audit committees increases questions about their efficacy in crisis control such as coronavirus (COVID-19) pandemic. This could factor to ability weaknesses in the inner control structures or a lack of authority inside the audit committee to put in force sturdy reporting practices. Another opportunity is that during the coronavirus (COVID-19) pandemic, the complexity of economic reporting and the rapid tempo of exchange may additionally have beaten the audit committee's capacity to monitor and manage disclosures correctly.

In conclusion, the larger number of audit committees does not guarantee to reduce the information asymmetry by applying the Agency theory that no better judgment can be made by stakeholders due to the lack of information asymmetry. The number of audit committee members does not affect the level of coronavirus (COVID-19) related information and firm performance information to be disclosed during the pandemic period. This is evident that the audit committee has an insignificantly negative relationship in moderating the association between coronavirus (COVID-19) related information and firm performance disclosure in the annual reports among Malaysian public listed companies in the study. Also, the result cam provide to the existing framework of corporate governance mechanism on information disclosure on the coronavirus (COVID-19) related and firm performance information that the larger number of audit committee may not always be powerful in instances of disaster.

5.3 Summary of Findings on Research Model

In summary, only the first hypotheses was found to be significant and uniquely described the variance of the model. It is important to highlight that hypotheses 1 of this study has a significantly positive relationship between coronavirus (COVID-19) related information and firm performance disclosure in alignment with the prior studies. The hypotheses 2 (c) suggested that percentage of board gender diversity also has an insignificant relationship on the moderation of the association between the independent and dependent variables- coronavirus (COVID-19) disclosure and performance disclosure. However, other sub-hypotheses of hypotheses 2- hypotheses 2 (a), hypotheses 2 (b), hypotheses 2 (d) have also a non-significant negative relationship where the size of the board, the percentage of independent directors, and number of audit committee members will not result in the higher coronavirus (COVID-19) related information disclosure and firm performance disclosure in annual reports among Malaysian public listed companies. Table 5.1 attempts to explain the extent to which research questions, research objectives and corresponding hypotheses are addressed in the analysis.

Table 5.1: Summary of Findings on Research Model

Research Questions	Research Objectives	Hypotheses	Interpretation
Does coronavirus (COVID-19) related information disclosure be associated with performance disclosure among Malaysian public listed companies?	To examine the association between coronavirus (COVID-19) related information disclosure and performance disclosure among Malaysian public listed companies.	**H1:** Ceteris paribus, there is a positive association between the level of coronavirus (COVID-19) related information and firm performance disclosure in the annual report narratives among Malaysian public listed companies.	Supported; positive relationship between coronavirus (COVID-19) related information (independent variable) and firm performance disclosure (dependent variable).
Do the corporate governance mechanisms (board size, board independence, board gender diversity and audit committee) moderate the relationship between coronavirus (COVID-19) related information and performance disclosure?	To examine the moderating effect of corporate governance mechanisms (board size, board independence, board gender diversity and audit committee) in the relationship between coronavirus (COVID-19) related information and performance disclosure.	**H2 (a):** Ceteris paribus, board size moderates the association between coronavirus (COVID-19) related information and firm performance disclosure in annual report narratives among Malaysian public listed companies.	Not supported; no effect shows larger board size moderates coronavirus (COVID-19) related information (independent variable) and firm performance disclosure (dependent variable).
		H2 (b): Ceteris paribus, board independence moderates the association between coronavirus (COVID-19) related information and firm performance disclosure in annual report narratives among Malaysian public listed companies.	Not supported; no effect shows level of independent director in board moderates coronavirus (COVID-19) related information (independent variable) and firm performance disclosure (dependent variable).
		H2 (c): Ceteris paribus, board gender diversity moderates the association between coronavirus (COVID-19) related information and firm performance disclosure in annual report narratives among Malaysian public listed companies.	Not supported; effect shows women on board moderates coronavirus (COVID-19) related information (independent variable) and firm performance disclosure (dependent variable).
		H2 (d): Ceteris paribus, audit committee moderates the association between coronavirus (COVID-19) related information and firm performance disclosure in annual report narratives among Malaysian public listed companies.	Not supported; no effect shows number of audit committee member moderates coronavirus (COVID-19) related information (independent variable) and firm performance disclosure (dependent variable).

5.4 Chapter Summary

Chapter 5 is based on the discussion of the findings from chapter 4 on the results of the model. Section 5.1 provides an outline of the content of chapter 5. Section 5.2 had a detailed discussion on both hypotheses. The discussion shed lights on previous studies and compared them with the results obtained for Malaysian public listed companies. It is found that hypotheses 1 which shows a positive relationship between coronavirus (COVID-19) related information and firm performance disclosure in annual reports. This result is aligned with Elmarzouky (2021a), which conducted the similar research in the United Kingdom that also showed a positive association between the level of coronavirus (COVID-19) related information disclosure and performance disclosure in the annual reports. In hypotheses 2, it is found that all sub-hypotheses has nonsignificant negative relationship in moderating the independent variable- coronavirus (COVID-19) related information and dependent variable- firm performance disclosure, except for the third sub-hypotheses where gender diversity insignificantly shows positive relationship in moderating the both variables. The moderating effects of board size, board gender diversity among the Malaysian public listed companies are aligned with the findings of Elmarzouky (2021a). Board size does not show moderating effect on the relationship, but yet board gender diversity moderates the association between coronavirus (COVID-19) related information on firm performance disclosure. In contrast, the percentage of board independence in companies does not affect the association between coronavirus (COVID-19) related information and firm performance information disclosure in the annual reports which does not align with Elmarzouky (2021a) that board independence moderates the relationship between coronavirus (COVID-19) disclosure and firm performance disclosure among the United Kingdom firms. Next, the relevant table in section 5.3 is incorporated to describe the extent to which the research model is explained by the findings of the statistical tests.

CHAPTER 6: CONCLUSION

6.1 Chapter Overview

The 6th and the final chapter of the thesis draws a meaningful conclusion from the research study and its findings. The chapter in addition explores the sensible implications for corporate governance, offers obstacles, and suggests areas for future research. Section 6.2 focuses on the overall discussion on research findings in the context of the research questions and their objectives in attempt to conclude the study. Section 6.3 emphasizes on the implications of the research findings followed by limitations and future research directions, which paves the way for future research recommendations in section 6.4. The subsequent section concludes the overall research findings which is then followed by the final section, 6.6 which provides a summary of the entire chapter.

6.2 Discussion on Research Findings

The results and the findings discussed in chapter 4 and 5 illustrated important points to evaluate the extent to which the main research objective and research question have been addressed in chapter 1. First of all, this study shows that there is a strong association between coronavirus (COVID-19) related information that is released and information about the performance of company in annual reports for Malaysian public listed companies. The relationship between the two variable is strong, showing that companies that actively shared how they were responding to the pandemic were more likely to share specific performance data, showing how resilient and flexible they were. This trend shows how important it is to be open and honest during crises. Sharing information about how companies deal with problems builds trust and confidence among stakeholders, especially when things are uncertain and investors and stakeholders want to know more about the company's finances and operations.

In the context of theoretical support of this study, Agency theory is a framework that focuses on understanding the interactions between shareholders and management in organizations. It addresses potential conflicts of interest and emphasizes transparency in performance reporting. Transparency can reduce information asymmetry, foster trust, and mitigate agency costs. It also enhances accountability by holding managers accountable for their decisions and actions. Transparent disclosures can strengthen long-term relationships between shareholders and management, especially during coronavirus (COVID-19) crisis recovery. Agency theory is applicable in strategic decision-making, as coronavirus (COVID-19) related information disclosures offer valuable insights for informed investments and alignment of interests. However, factors like board size, board independence, board gender diversity, and audit committee presence do not significantly moderate the relationship between coronavirus (COVID-19) related information and firm performance disclosure. In conclusion, Agency theory offers a comprehensive framework for understanding transparency and firm performance disclosure in Malaysian public listed companies.

Firstly, the study shows that board size does not have a big effect on the association between coronavirus (COVID-19) related information and firm performance disclosure, even though earlier research suggested that bigger boards encourage diversity and make disclosure better. This makes us wonder how useful bigger boards really are, and it seems like how well the people on the board work together and connect with each other might be more important. Companies should put quality over number by making sure board members are involved and on board with the companys' strategic goals and by encouraging board members to communicate and work together effectively. Secondly, the study questions the idea that making boards more independent leads to better government and more open sharing of information. Independent directors are supposed to keep an objective eye on things, but they might not know much about the business, which makes it harder for them to change the quality of disclosure, especially during crises. The results show that adding more independent directors might not be enough to improve governance. This shows how important it is to choose board members strategically so that they have the right experience and knowledge. Thirdly, gender diversity on boards can enhance the quality of information shared, making disclosures more relevant and nuanced. However, it does not significantly reduce the connection between coronavirus (COVID-19) related information and firm performance disclosures. The inclusion of women on boards brings diverse perspectives, leading to more comprehensive discussions and decision-making. To translate gender diversity into better governance and disclosure practices, female board members must have influential roles, necessitating a shift in how organizations view and utilize gender diversity in their governance structures. Last but not least, the study found that audit committees did not significantly impact the relationship between coronavirus (COVID-19) related information and firm performance disclosure. The study suggests that audit committees, expected to enhance transparency and oversight, may struggle during crises due to the rapidly changing landscape. To improve their effectiveness, organizations should provide resources, training, and support for audit committees, and ensure they have relevant crisis management expertise.

6.3 Research Implications

This study contributes to the existing literature in several ways. Firstly, extensive literature review conducted for the purpose of this research explores the relationship between owners or shareholders of the companies and managers or executive who manage the companies on their behalf to communicate more coronavirus (COVID-19) related information and performance disclosure in Malaysia. There is a lack of coronavirus (COVID-19) related research to be studied as the pandemic just happened 4 years ago. Additionally, there is a dearth of literature for developing countries on the context of coronavirus (COVID-19). Also, this research attempts to contribute in-depth by studying an important part of Malaysia, which is the Malaysian public listed companies. It is believed that this study would provide insightful information in this research area of coronavirus (COVID-19). In times of economic uncertainty, such as the coronavirus (COVID-19) pandemic, the relevance of Agency theory becomes even more pronounced. Thus, it could be said that this study makes a significant contribution by focusing on a developing country like Malaysia.

In terms of the theoretical and practical implication of this research, a few aspects may be significant. Firstly, this study focuses on the association between coronavirus (COVID-19) related information and firm performance disclosure for 137 companies from Travel, Hospitality and Entertainment sector, Construction sector, Retail sector, Food and Beverage sector, as well as Healthcare sector. An effective corporate governance contributes to the enhancement of the quality of the discussion surrounding the disclosure process and the diversification of viewpoints. Thus, the corporate governance mechanisms to act as the moderator in the study. This study collected a total number of 137 annual reports from the selected sectors of Malaysia reveal the quantity of information disclosures in a developing country like Malaysia where governance standards may vary across industries during the coronavirus (COVID-19) pandemic. By applying agency theory, we assessed how corporate governance practices influence the quality of financial reporting and the overall performance of firms during crises.

On the policy-making front, the results of this study can very well be utilized while proposing ideas. The policy makers may use these results as a reference to formulate policies that further facilitate the quality and quantity of information disclosures by the investigation of corporate governance mechanisms: board size, board independence, board gender diversity and audit committee. The results found that only women on board enchances the quality of information to be disclosed during the coronavirus (COVID-19) pandemic period. With this changing global dynamics after the emergence of the novel coronavirus (COVID-19), it has become increasingly importance that companies to reduce information asymmetry and thurs, this study contributed the relevance of academic research for financial reporting standard setting and the role of academic researchers in the standard-setting process.

6.4 Limitation and Future Research Directions

One of the main research limitations is the study's target population. The research only focuses on the association between coronavirus (COVID-19) related information and firm performance disclosures in annual report narratives among Malaysian public listed companies, without consideration of any of the companies that are not public listed. Thus, for any of the companies that are not listed in Malaysia, those firms were not considered. Also, just a few of the organization performance indexes were used. Thus, expanding the scope of the study would be imperative.

One of the study's weaknesses is the small number of performance indicators included in the analysis of coronavirus (COVID-19) related information disclosures made by Malaysian public listed companies. Subsequent investigations have to take into account on companies from diverse sectors and conduct cross-national analyses to comprehend the influence of cultural, legislative, and economic distinctions on disclosures. Incorporating qualitative data obtained from interviews or case studies may improve comprehension of the reasons for disclosures and the difficulties faced by businesses throughout the pandemic. Increasing the sample size beyond Malaysian public listed companies can enhance the findings' statistical power and generalisability. As businesses adjust to the post-coronavirus (COVID-19) a new normal, longitudinal studies may be able to monitor changes in disclosure practices over time and offer valuable insights into how corporations modify their governance frameworks to address persistent issues (Boshnak et al., 2023).

Given the research limitations, the first recommendation for future research would be to consider the companies that are not publicly listed and also those that are from other countries apart from Malaysia. Through such consideration, the research would be able to deduce the company's performance amid the coronavirus (COVID-19) pandemic outbreak. Also, through the assessment of companies from different sectors or industries, the research would be able to infer the total effect of the coronavirus (COVID-19) pandemic outbreak on the company's performance. In addition to assessing firms from different locations and countries, future researchers are encouraged to perform cross-national analysis to ensure that the results can be generalized. Further, researchers could consider using a mixed-research data analysis approach which would combine the quantitative and qualitative research design, which enabled comprehensiveness and enhanced data validity. Last but not least, since a larger target population would be considered, it would be advisable to use a larger sample which would help in improving generalizability, precision, and statistical power. The investigation concentrates on the correlation between firm performance disclosures and coronavirus (COVID-19) related information in Malaysian public listed companies. It proposes a number of suggestions for future research, such as expanding the scope of the study to encompass non-publicly listed companies, conducting cross-national analyses to assess the impact of varying regulatory, cultural, and economic environments on disclosure practices, and concentrating on regional variations to investigate local economic conditions and cultural factors (Boshnak et al., 2023).

It is also recommended that longitudinal studies be conducted to monitor the evolution of disclosure practices over time, particularly as companies adjust to the post-pandemic environment. By analysing how organisations respond to subsequent crises, it is possible to identify resilience factors and optimal disclosure strategies. In-depth analysis of gender diversity, qualitative data collection, case studies, exploration of governance mechanisms, adoption of Environmental, Social, and Governance (ESG) reporting standards, and digital communication tools are all examples of mixed-methods approaches. Furthermore, the investigation investigates the influence of technology on disclosure, specifically the manner in which digital communication tools facilitate timely disclosures during crises and increase transparency. The performance of a firm and the disclosures it makes regarding coronavirus (COVID-19) can also be influenced by the implementation of Environmental, Social, and Governance (ESG) reporting standards. In order to enhance the reliability and statistical efficacy of the results, it is advisable to use larger sample sizes (Almaqtari et al., 2022).

Future research should also evaluate the long-term performance outcomes that are linked to varying levels of coronavirus (COVID-19) related information disclosures, such as the impact on stakeholder trust, investor behaviour, and overall firm performance post-crisis. Furthermore, the research should establish a direct correlation between financial performance and disclosure, examining the direct effect of improved disclosure practices on financial metrics such as market capitalisation, return on equity, and stock prices over time. In summary, the objective of these recommendations is to broaden the current corpus of knowledge regarding corporate disclosures during crises, thereby offering valuable insights for both academic research and practical governance. Ultimately, future research can improve governance practices and stakeholder relationships by addressing identified gaps and investigating new avenues, thereby enhancing understanding of how firms can effectively communicate during crises (Tarighi et al., 2023).

6.5 Conclusion

The research was guided by two main research objectives with the primary one delving into the association between coronavirus (COVID-19) related information and firm performance disclosure in annual report narratives among Malaysian public listed companies. Companies that furnished extra designated and transparent disclosures related to coronavirus (COVID-19) exhibited more firm performance disclosure. It is to be concluded that the level of coronavirus (COVID-19) related information disclosure will also be an essential part of information in the annual reports for the stakeholders, especially when the coronavirus (COVID-19) pandemic impacted all sectors in different ways. By applying Agency theory, managers divulge extra records regarding how their organization is dealing with the coronavirus (COVID-19) pandemic crisis, it alerts managerial competence and builds trust with shareholders, yet this transparency reduces information asymmetry, consequently mitigating the hazard of opportunistic behavior by using managers who might in any other case act in their own self-interest at the cost of shareholders. It provides higher level of professional judgements which realign managerial actions with the great interests of shareholders, improving corporation overall performance from the disclosure of coronavirus (COVID-19) related information and firm performance through annual reports.

Regarding the second research hypotheses, the research has established that corporate governance mechanisms: board size, board independence, board gender diversity and audit committee moderates to enchance the association between coronavirus (COVID-19) related information and performance disclosure in the annual report narratives among Malaysian public listed companies. It was concluded that except for the third governance mechanism: board gender diversity, other mechanimsms such as board size, board independence and audit committee do not moderate the association between coronavirus

(COVID-19) disclosure and performance disclosure in annual report narratives among Malaysian publicly listed companies. Nonetheless, as for the second research objective, none of the moderating factors (corporate governance mechanisms) was found to have a significant role in the model. This finding ought to suggest that the presence of women on board does enhance governance effectiveness which women with major roles can cause greater ethical choice-making and enhance governance, its effect may be as a whole in the organization's broader organizational subculture and the way successfully diverse views are integrated into the selection-making system. On the other hand, it highlights how crucial clear communication and openness are to corporate governance. According to the research, strategic governance methods that put an emphasis on inclusion, transparency, and adaptation are essential for long-term success and stakeholder confidence in a complex and uncertain environment,. The study makes recommendations for more research to broaden our knowledge of how corporations behave in times of crisis.

6.6 Chapter Summary

The last chapter began with an overview. Section 6.2 emphasized on the overall discussion on the proposed research model backed by the statistical tests carried out in the earlier chapters. It further suggested that the findings of the study can be utilized by stakeholders during the crises like coronavirus (COVID-19) pandemic. Moreover, this study had a number of theorectical and practical implications. The primary theoretical implication is the addition of the findings of this study to existing body of litereature. And, like other study, there are a number of limitations in this study nevertheless future researchers and entrepreneurs may still benefit from the findings of the study. Future researchers may attempt to improvise on this study by working on the areas of improvement suggested in section 6.4. All in all, this study provides insightful knowledge with regards to the relationship between coronavirus (COVID-19) related information and firm performance disclosure with the moderating effects of corporate governance mechanisms in the setting of Malaysian public listed companies.

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