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AN ASSESSMENT OF THE IMPACT OF CORPORATE GOVERNANCE MECHANISMS AND PRINCIPLES ON CORPORATE PERFORMANCE: THE CASE OF THE UAE

Carina Schafer

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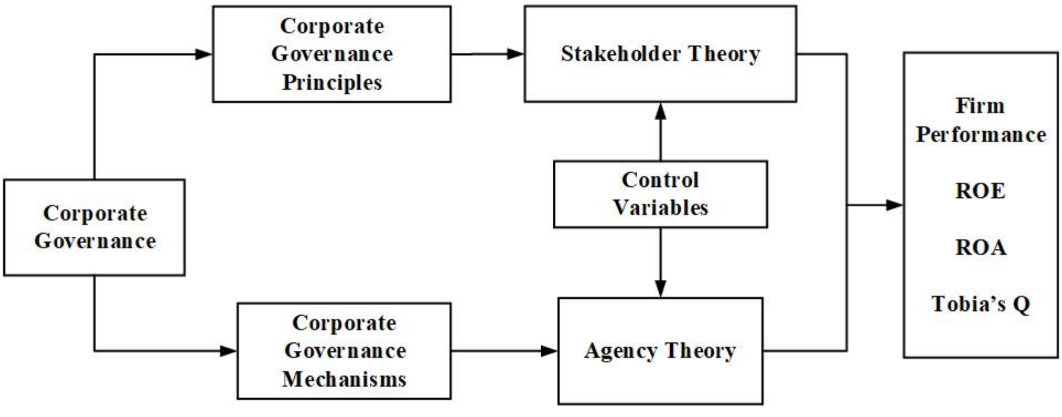

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Carina Schafer

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The interplay between corporate governance mechanisms and principles on corporate performance, adapted from Otman (2014)

Cover: Image depicting the impact of corporate governance mechanisms and principles on corporate performance

(Photo: By Carina Schafer)

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Declaration of Original Work

I, Carina Schafer, the undersigned, a graduate student at the United Arab Emirates University (UAEU), and the author of this dissertation entitled "*An Assessment of the Impact of Corporate Governance Mechanisms and Principles on Corporate Performance: The Case of the UAE*", hereby, solemnly declare that this is the original research work done by me under the supervision of Professor Khaled AlJifri, in the College of Business and Economics at UAEU. This work has not previously formed the basis for the award of any academic degree, diploma or a similar title at this or any other university. Any materials borrowed from other sources (whether published or unpublished) and relied upon or included in my dissertation have been properly cited and acknowledged in accordance with appropriate academic conventions. I further declare that there is no potential conflict of interest with respect to the research, data collection, authorship, presentation and/or publication of this dissertation.

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Abstract

This research is concerned with investigating the effect of selected internal and external corporate governance mechanisms and principles on UAE corporate performance. The UAE started to apply uniform corporate governance standards in 2009 with the introduction of Resolution No. (518) of 2009 concerning Governance Rules and Corporate Discipline by the regulator SCA. Since then, there have been various rules implemented by the regulator in 2016 and 2020. Corporate governance has been in the spotlight of academic research, particularly in the United States and Europe, due to the vital role it plays in the overall health of economic systems. In the UAE, most existing research in this area predates the implementation of the Commercial Companies Act (2015), and the UAE Corporate Governance Code (Resolution No. (7 R.M) of 2016). Studies showed that the existing research conducted under the now-repealed law Ministerial Resolution No. 518 of 2009 failed to closely engage with the applicable legal principles. Therefore, there is a gap in corporate governance research in the UAE which makes this a valuable topic for this dissertation and for future research. This research explores corporate governance reforms in the UAE and their effect on listed companies' performance from 2017 to 2020. The sample firms are listed on either the Abu Dhabi Exchange (ADX) or the Dubai Financial Market (DFM). Regression analysis and a mixed linear effects model were employed to test the hypotheses of the study, and a survey and interviews were conducted to test the principles and mechanisms of corporate governance quantitatively and qualitatively.

The conceptual framework of this dissertation describes how corporate governance principles and mechanisms impact corporate performance. In the framework, corporate governance principles are based on the Organization of Economic Cooperation and Development (OECD)

Principles of Corporate Governance. The corporate governance mechanisms are board member experience, gender, insider trading, auditor rotation, and internal controls. Corporate performance was assessed using return on assets, return on equity, and Tobin's Q. This dissertation uses both the agency and stakeholder theories to investigate how corporate governance can affect corporate performance in the UAE.

To accomplish the research objectives, a mixed methods research model was adopted using both quantitative methods (questionnaire and secondary data) and qualitative methods (interviews). Secondary data was obtained from the annual corporate governance reports of listed companies on the Dubai Financial Market (DFM) and the Abu Dhabi Securities Exchange (ADX). The data was analyzed using the Statistical Package for the Social Sciences (SPSS, Version 28) and STATA 17 statistical package. Qualitative results were analyzed using NVIVO12.

The results of the questionnaire show that corporate governance principles have been implemented in listed companies and board responsibilities, and shareholder rights have the highest scores indicating that board responsibilities are taken seriously, and shareholders' rights are protected. In the second model, auditor rotation and insider trading were statistically significant. The interviews revealed that the main priorities for the interviewees were market transparency and corporate performance.

This research will benefit listed organizations, regulators, securities lawyers, and academics. It is worth noting that the UAE has one of the most sophisticated corporate governance legal frameworks in the Middle East. Therefore, these research findings will also be beneficial to other Middle Eastern countries and their policymakers.

Keywords: Corporate governance, listed companies in the UAE, corporate performance, legal principles.

Title and Abstract (in Arabic)

تقييم لأثر آليات ومبادئ حوكمة الشركات على أداء الشركات: حالة دولة الإمارات العربية المتحدة

الملخص

يعنى هذا البحث بدراسة تأثير الآليات والمبادئ الداخلية والخارجية المحددة لحوكمة الشركات على أداء الشركات المدرجة في دولة الإمارات. وقد شرعت دولة الإمارات بتطبيق معايير موحدة لحوكمة الشركات سنة 2009 بإصدار قرار مجلس الوزراء رقم 518 لسنة 2009 بشأن قواعد الحوكمة والانضباط المؤسسي عبر هيئة الأوراق المالية والسلع. منذ ذلك الحين، طبقت الهيئة العديد من القواعد في عامي 2016 و2020. ولقد كانت حوكمة الشركات محط اهتمام البحث الأكاديمي، لا سيما في الولايات المتحدة وأوروبا، نظراً للدور المحوري الذي تمارسه في السلامة العامة للأنظمة الاقتصادية. ومعظم الأبحاث المتداولة في دولة الإمارات في هذا المجال سابقة لتطبيق قانون الشركات التجارية 2015 وقرار حوكمة الشركات الإماراتي قرار مجلس الوزراء رقم 7 لسنة 2016. وقد أظهرت الدراسات أن الأبحاث المتداولة التي أجريت استناداً للقرار الوزاري رقم 518 لعام 2009 الملغى قد قَصُرت عن التعامل الدقيق مع المبادئ القانونية النافذة. لذا فهناك فجوة في أبحاث حوكمة الشركات في دولة الإمارات ما يعطي أهمية وقيمة لهذه الرسالة وللأبحاث المستقبلية. فهذا البحث يسلط الضوء على إصلاحات حوكمة الشركات في دولة الإمارات وتأثيرها على أداء الشركات المدرجة من عام 2017 إلى عام 2020. والشركات المذكورة في البحث هي إما مدرجة في سوق أبو ظبي للأوراق المالية أو في سوق دبي المالي. وقد استُخدم نموذج تحليل الانحدار ونموذج التأثيرات الخطية المختلطة لاختبار فرضيات الدراسة، وأجريت استطلاعات ومقابلات لفحص مبادئ وآليات حوكمة الشركات من حيث الكم والنوع.

يعرض الإطار النظري لهذه الرسالة كيفية تأثير مبادئ وآليات حوكمة الشركات على الأداء المؤسسي، حيث تستند مبادئ حوكمة الشركات في هذا الإطار إلى مبادئ منظمة التعاون الاقتصادي والتنمية في مجال حوكمة الشركات. وتتمثل آليات حوكمة الشركات في خبرة أعضاء مجلس الإدارة والجنس والتداول الداخلي وتدوير المدققين والرقابة الداخلية. كما جرى تقييم الأداء المؤسسي باستخدام العائد على الأصول والعائد على حقوق الملكية ومقياس (Tobin’s Q). وكذلك تستخدم هذه الرسالة نظريات الوكالة وأصحاب المصالح في دراسة كيفية تأثير حوكمة الشركات على الأداء المؤسسي في دولة الإمارات.

وتحقيقاً لأغراض البحث، اعتُمد نموذج بحثي متنوع الأساليب باعتماد كل من الأساليب الكمية (الاستبيانات والبيانات الثانوية) والأساليب النوعية (المقابلات). حيث استخلصت البيانات الثانوية من التقارير السنوية لحوكمة الشركات المدرجة في سوق دبي المالي وسوق أبوظبي للأوراق المالية. وتم تحليل البيانات باستخدام الحزمة الإحصائية للعلوم الاجتماعية (الإصدار 28) والحزمة الإحصائية لبرنامج ستاتا 17. وجرى تحليل النتائج النوعية باستخدام برنامج نفيفو 12.

تعرض نتائج الاستبيان تطبيق مبادئ حوكمة الشركات في الشركات المدرجة واستحواذ مسؤوليات مجلس الإدارة وحقوق المساهمين أعلى المؤشرات ما يدلل على مراعاة مسؤوليات مجلس الإدارة حق الرعاية وأن حقوق المساهمين محمية. في النموذج الثاني، كان تدوير المدققين والتداول الداخلي ذا دلالة إحصائية. وكشفت المقابلات عن أن الأولويات الرئيسية لمن أجريت معهم هي الشفافية السوقية والأداء المؤسسي.

سيعود هذا البحث بالفائدة على المؤسسات المدرجة والهيئات التنظيمية والقانونيين المتخصصين في مجال الأوراق المالية والأكاديميين. وجدير بالذكر أن دولة الإمارات تحوز واحداً من أكثر الأطر القانونية تقدماً في مجال حوكمة الشركات في الشرق الأوسط. بناءً على ذلك، ستكون نتائج هذا البحث مفيدة أيضاً لدول الشرق الأوسط الأخرى وصناع السياسات فيها.

مفاهيم البحث الرئيسية: حوكمة الشركات، الشركات المدرجة في دولة الإمارات، الأداء المؤسسي، المبادئ القانونية.

Author's Contribution

The contribution of Carina Schafer to the dissertation was as follows:

I. Participated in planning of the work, had main responsibility for the data collection and processing, and evaluation of results.

II. Participated in planning of the work, had main responsibility for the experimental work, data collection and processing, and evaluation of results.

III. Sole responsibility for planning the research and conducting the experiments.

Author Profile

Carina Schafer is a lawyer with more than fifteen years of experience in highly regulated industries including oil & gas, alternative energy and industrial gases and regularly advises listed companies. She has experience in identifying, evaluating, and mitigating risks as a business and legal advisor to the board and senior management and has a proven track record of leading compliance and legal functions. Carina has extensive global compliance experience, advising companies' audit, remuneration and corporate governance committees. She was nominated for the ADCB Emirates Woman, Woman of the Year Award in 2011 as one of five finalists for developing a legal training program for UAE nationals in the private sector. Carina holds a Law Degree from the University of Cambridge, England, and an MBA from London Business School. She is admitted to practice law in England and Wales, as well as being a member of the New York State Bar and the California Bar. She lives with her family in Abu Dhabi. Personal interests include travelling, yoga, horse riding and swimming.

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Dedication

To my beloved family

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List of Abbreviations

ADX	Abu Dhabi Securities Exchange, Abu Dhabi-based stock exchange
AED	Arab Emirates Dirham
CGI	Corporate Governance Index
CMA	Competition and Markets Authority of the United Kingdom
DIFC	Dubai International Financial Center
DFM	Dubai Financial Market, Dubai-based stock exchange
FTSE350	Financial Times Stock Exchange 350 share index. A weighted index of the top 350 companies by market capitalization on the LSE.
LSE	London Stock Exchange
MENA region	Middle East and North Africa region
Minitab	Minitab Statistical Software Application
NASDAQ Dubai	Dubai-based stock exchange that lists regional and international shares in the Middle East
NYSE	New York Stock Exchange
OECD	Organization for Economic Cooperation and Development
PJSC	Public Joint Stock Company
ROA	Return on Assets
ROE	Return on Equity

SCA	Securities and Commodities Authority (UAE)
SEC	Securities and Exchange Commission (USA)
SPSS	Statistical Package for the Social Sciences (version 28), a statistical software application
Tobin’s Q	Ratio between a physical asset's market value and its replacement value
UAE	United Arab Emirates
UK	United Kingdom
USA	United States of America

List of Definitions

Decree No. (3) of 2021	Decree No. (3) of 2021 on The Listing of Joint Stock Companies in the Securities Markets in the Emirate of Dubai
Hawkamah Institute for Corporate Governance	Hawkamah, Institute for Corporate Governance is a non-profit, autonomous 'think-and-do-tank' for corporate governance in the MENA region founded in 2009
Node	Nodes are storage areas in NVIVO for references to coded text in qualitative research
NVIVO12	NVIVO 12, a qualitative data analysis application
SCA Law	UAE Federal Law Number 4 of 2000
Senate Bill 826	California Senate Bill of 2018 providing for gender diverse representation on corporate boards
SOX	The Sarbanes–Oxley Act of 2002, also known as the "Public Company Accounting Reform and Investor Protection Act" and the "Corporate and Auditing Accountability, Responsibility, and Transparency Act"
STATA17	STATA 17 statistical software application
2007 Corporate Governance Rules	Ministerial Decision No. R/32 of 2007 on Corporate Governance Codes for Joint Stock Companies and Institutional Discipline
1984 Companies Law	Commercial Companies Law (1984), Federal Law Nr. 8 of 1984

2015 Companies Law	Commercial Companies Law (2015), Federal Law Nr. 2 of 2015
2009 Corporate Governance Rules	Ministerial Resolution No. 518 of 2009 Concerning Governance Rules and Corporate Discipline Standards
2016 Corporate Governance Rules	Chairman of the Securities and Commodities Authority of the United Arab Emirates (SCA) Decree No. 7 R.M of 2016
2020 Corporate Governance Rules	Chairman of SCA Board Decision No. (03 R.M.) of 2020

Chapter 1: Introduction

1.1 Historical Background

The topic of corporate governance is vast and from a legal perspective begins with the emergence of large corporations, such as the East India Company which was formed in 1600 (Stern, 2015). Corporate governance became a key topic for law makers and regulators in the 1960s and 1970s. Eells (1960) described corporate governance as the structure and functioning of the corporate polity. According to Shleifer and Vishny (1997), corporate investors rely on corporate governance to assure themselves to obtain a fair return on their financial investment. The Securities and Exchange Commission (SEC), the independent federal government regulatory agency of the United States, implemented the first corporate governance rules in 1975 pursuant to the 1975 amendments to the Securities Exchange Act of 1934. Apart from the OECD Guidelines, one of the most important pieces of legislation for the development of corporate governance is the Sarbanes-Oxley (SOX) Act (2002) in the United States. The primary goal of the Sarbanes-Oxley Act was to address auditing issues of U.S. listed companies and to oversee and regulate their governance structure (Coates & John, 2007). The Sarbanes-Oxley Act also created requirements for listed firms to establish an internal controls function. The associated benefits should be greater transparency, more reliable financial reporting, and accountability and a lower risk from potential losses caused by fraud and theft. The Act remains a work in progress with various amendments that have been enacted over the years. It should also be noted that the investor community and listed companies were more than doubtful initially of whether the Sarbanes Oxley Act would be a success (Romano, 2004; Zhang, 2007). With the inception of the Sarbanes-Oxley Act, the financial markets started to enact legislation globally that almost replicated certain provisions of the Act (Garner et al., 2014). Corporate governance has gained further importance due to financial scandals and volatility in the global stock markets which emphasized the need to have a system of rules and checks in place to assure the longevity and sustainability of listed organizations. America's Business Roundtable proposed an updated definition of "the purpose of a corporation" and agreed that each company has a purpose not reducible to profits and needs to be aware of its purpose, integrating corporate governance and social responsibility considerations (Business Roundtable, 2016).

As the corporate environment continues to evolve, a strong emphasis on effective corporate governance remains essential as reflected by the regulators' focus on the topic in 2019 and 2020. In May 2020, the Oman Capital Market Authority (CMA) circulated draft Corporate Governance Principles for State Owned Enterprises. On 28 April 2020, the Securities and Commodities Authority (SCA) in the UAE issued Board Resolution No. (03/R.M) of 2020, an updated corporate governance code for the UAE stock exchanges. Corporate Governance practices are of key importance in the UAE as demonstrated by the ongoing legal reforms since 2009. Compliance with applicable corporate governance rules has also become increasingly important for companies listed on stock exchanges of the UAE. UAE law makers and the regulator expect to see compliance with the Companies Law and corporate governance rules. For several years, the UAE, under the auspices of the Securities and Commodities Authority (SCA) which is the regulator of the UAE's stock exchanges has attempted to attain developed market status by updating rules and regulations applicable to the listed companies, among other factors. In 2011, the UAE was upgraded from frontier market status to emerging market status by two global index compilers, Morgan Stanley Capital International (MSCI) and Standard & Poor's (S&P). This upgrade brought the UAE in the radar of global investors and increased liquidity in the UAE by increasing foreign direct investment (John, 2011). Key provisions of the Companies Law and the corporate governance rules include mandatory rotation of the external auditor every three years, compliance with insider trading rules, establishment of internal controls, gender diversity and demonstration of relevant sector specific experience by board members. The academic literature on UAE corporate governance is scarce in comparison to the United States, Germany and the United Kingdom where corporate governance cases are frequently litigated in court such as the Delaware Supreme Court case Marchand v. Barnhill (2019). Spraggon and Bodolica (2014) describe the UAE as a developing market that differs from developed economies in several important aspects, including a relatively new corporate governance regulatory framework, weak-form efficient stock market, as examined by Moustafa (2004) and more concentrated ownership structure, including partial government ownership of listed companies (Abdallah & Ismail, 2017; Zeitun, 2014). As a result, listed corporations are characterized by the dominance of internal governance mechanisms of control such as board composition and ownership structure rather than external governance mechanisms imposed by the regulator. Clearly, the recent legal developments in the field of corporate governance demonstrate the importance of this topic to the UAE economy and policy makers alike.

1.2 Context of Study

Corporate governance is a well-established research topic in developed economies and many studies have been published concerning the impact of corporate governance on performance (Shleifer & Vishny, 1997; Gompers et al., 2003; Black et al., 2006). The Harvard Law School's Program of Corporate Governance has become an important forum where industry and academic theory come together and a lot of influential literature and theory has emerged from that forum (Bebchuk & Tallarita, 2020). In developing markets, key research has been conducted by the OECD and the World Bank. Important corporate governance research, apart from publications in the MENA region, has emerged from India, Hong Kong, South Korea, and Malaysia (Goel, 2018; Claessens & Fan, 2003). The qualitative literature on corporate governance is significantly less than quantitative literature in developing markets compared to quantitative publications (Cohen et al., 2013) and we observe even fewer qualitative publications in developing economies. Mahadeo et al. (2012) conducted qualitative research in Mauritius (2012) and qualitative studies have been conducted on Malaysia which has a well-established corporate governance framework (Mat Yasin et al., 2014).

Corporate governance has become an important topic in the literature published about financial markets in the UAE (Aljifri & Moustafa, 2007; Farhan et al., 2017; Al-Gamrh et al., 2020), yet very few studies have been published analyzing the 2016 corporate governance rules in detail. As evidenced by this research, there are important developments captured in the 2016 corporate governance rules including corporate governance mechanisms that merit to be studied. In the GCC context, the Saudi and UAE models of corporate governance have been heavily influenced by the Anglo-American model, generally referred to as a “market model” or “shareholder model” (Pillai & Al-Malkawi, 2018), which relies on the agency theory and focuses on maximizing owners’ wealth as propounded by Berle (1931) and Friedman (1970).

Much of this dissertation has been written during the global lockdown caused by the COVID-19 pandemic. My research progress, particularly in attending interviews with individuals, was impacted by the social distancing restrictions imposed in light of the COVID-19 pandemic.

However, the unprecedented turn of events brought by the COVID-19 pandemic also presented new opportunities such as the use of technology to conduct the interviews for the qualitative part of my research remotely using Microsoft Teams interview and recording feature. As the world enters into a more volatile period in world financial markets and economics, driven among other factors by the effects of the COVID-19 pandemic which has severely disrupted the global economy since March 2020, ongoing inflation and global turmoil, financial markets have been shaken and governments as well as market regulators are looking for solutions to stabilize them. COVID-19 has tested the resilience of governments and businesses alike. Post the 2009 financial crisis which saw the collapse of Lehman Bank and other major institutions, financial markets have rewarded investors with persistent growth in Europe and the United States fuelled by government stimuli from central banks. COVID-19 has laid bare and exacerbated existing weaknesses in the financial markets. To some extent, COVID-19 has also been the gift of revelation of what could be considered good or bad corporate governance. COVID-19 has further shown how businesses will shape the future, especially large, listed companies in the UAE such as Etisalat, Emirates Group, Emaar, or DP World.

This study analyzes corporate governance practices of listed institutions in the UAE. Federal Law No 4 of 2000 established the Emirates Securities and Commodities Authority (SCA). SCA's function is to regulate and develop the stock exchanges in the UAE. The Dubai Financial Market (DFM) was established in March 2000 and the Abu Dhabi Securities Market (ADX) started operating in November 2000. NASDAQ Dubai, the UAE's third exchange was founded in September 2005 although it is important to note that the latter is regulated by the Dubai Financial Services Authority and not by SCA and thereby not within the remit of this dissertation. A possible consolidation between ADX and the DFM has been discussed numerous times as consolidation would be expected to boost liquidity and improve stock valuations (Gamal, 2018; Yasin, 2011; Basit, 2010). In 2020, hopes for a merger between the two exchanges were revived when the UAE Cabinet approved the merger between the UAE Central Bank and the UAE Insurance Authority (Wakalat Anba'a al Emarat (WAM) 2020). Cohen et al. (2013) stated that, "during periods of heightened regulation, political turmoil or communication advances, exchanges tend to fail or merge. Economic prosperity, increased financial speculation and high levels of market uncertainty, by contrast, drive new entries". In the UAE, Ministerial Decision No. R/32 of 2007 on Corporate Governance Codes for Joint Stock Companies and Institutional Discipline ("2007 corporate governance rules") were the first corporate governance rules issued by the Securities and Commodities Authority ("SCA"). The first comprehensive corporate governance code in the UAE was issued two years later under Ministerial Resolution No. 518 of 2009 Concerning Governance Rules and Corporate Discipline Standards ("2009 corporate governance rules"). Although the 2009 corporate governance rules were silent on the treatment of the 2007 corporate governance rules, it is unlikely that the two resolutions were meant to co-exist and the 2009 corporate governance rules should be considered as repealing the 2007 corporate governance rules. The 2009 corporate governance rules were applicable to all companies and institutions whose securities were listed on a securities market in the UAE except "(1) companies and institutions wholly owned by government; (2) banks, finance companies, financial investment companies, money exchange companies, monetary brokerage companies that are under the supervision of the Central Bank; (3) the foreign companies listed on any of the financial markets" (Article 2(c); 2009 corporate governance rules).

The 2009 corporate governance rules were comprised of sixteen articles which included:

a) the education of board members with a particular emphasis on the development of knowledge and skills; b) the maximization of individual participation of all board members in board processes; c) the responsibility of the board in establishing clear rules and practices promoting good governance; and d) emphasizing the importance of board committees, most notably the audit committee and the nomination and remuneration committee. The 2009 corporate governance rules also required the Board to implement corporate governance processes and to supervise the application of such processes. Listed companies were required to set up an internal control procedure to be verified and monitored by a compliance officer who was directly accountable to the Board.

It is also important to note that the 2009 corporate governance rules were issued when the previous Commercial Companies Law (1984), Federal Law Nr. 8 of 1984 was still in force. In 2015, the UAE issued the new Commercial Companies Law (2015), Federal Law Nr. 2 of 2015 which introduced some significant changes. All companies were required to amend their existing memoranda and articles of association to reflect, and comply with, the changes introduced by the 2015 Companies Law, and any companies that failed to make the requisite amendments by 30 June 2016 were automatically dissolved. The objective of the 2015 Companies Law was to continue the UAE's development into a global standard market and business environment and, in particular, raise levels of good corporate governance, protection of shareholders and promotion of social responsibility of companies. Notable features of the 2015 Companies Law included the recognition of the concept of holding companies, procedures for pledging shares, expert valuation of shares in kind (i.e., non-cash) and the requirement to rotate auditors (for Public Joint Stock Companies) every three years.

On 28 April 2016, the Chairman of the Securities and Commodities Authority of the United Arab Emirates (SCA) issued the Decree No. 7 R.M of 2016 (2016 corporate governance rules) which repealed the 2009 corporate governance rules.

The 2016 corporate governance rules were intended to complement the 2015 Companies Law which was introduced to continue the UAE's development into a global standard market and business environment. The 2016 corporate governance rules contain fifty-five articles as opposed to the previous rules, the 2009 corporate governance rules which only contained sixteen articles and constituted a substantial enhancement of the previous legislation, along with some important changes and clarifications. For the 2016 corporate governance rules, SCA consulted with the World Bank to ensure that the normative framework of public joint stock companies was strengthened and set penalties for non-compliance.

The most important changes introduced by the 2016 corporate governance rules are as follows:

a) Listed firms to establish a mandatory Insider Trading Supervisory Committee to oversee insider trading activities and maintaining an insiders register.

b) New provisions in relation to related parties and conflicts of interest including the requirement to keep a related parties register and a conflicts of interest register.

c) Female representation: The 2009 corporate governance rules require publicly listed companies to have at least one female board member. The 2016 corporate governance rules require publicly listed companies to ensure female representation on their board of not less than 20% of the total number of board members. Companies which do not satisfy this requirement need to disclose to SCA why such requirement is not satisfied.

d) Directors’ vetting and Directors’ knowledge and expertise: a board member candidate must have at least five years of experience in the field of the company for which he/she is nominated. Board members candidates must not have been dismissed from a previous board position in any publicly listed company in the UAE for twelve (12) months prior to the date of nomination on the board of another company.

e) Enhanced shareholder rights: The 2016 corporate governance rules allow shareholders who own ten percent (10%) of the issued share capital of public companies to call for an urgent general assembly meeting to discuss urgent matters. This rule bolsters minority shareholders’ rights.

f) Government shareholding: If the government owns five percent or more of a listed company’s shares, the government may appoint a representative to the company’s Board of Directors pro rata to its shareholding. This also mirrors Article 148 of the 2015 Companies Law.

g) Penalties: If a listed company breaches the provisions of the 2016 corporate governance rules, SCA may do any of the following: a) send a written warning to the defaulting company; b) a monetary fine up to a maximum limit stipulated in the 2015 Companies Law; c) refer the breach to public prosecution if it warrants possible criminal action.

h) Corporate Social Responsibility and Reporting: Pursuant to the 2016 corporate governance rules, it is a legal requirement for listed companies to have a policy on the local community efforts and the environment. The board of directors has the responsibility to set the policy regarding stakeholder welfare and improving the relationship between the stakeholders and the company. That policy or a separate policy should also set out the company’s engagement with the local community and the environment.

i) Internal Control System: a listed company must have an internal control system that aims to develop an assessment of the company's means and procedures for: i) risk management, ii) sound application of corporate governance rules, iii) verifying that the company complies with applicable laws, regulations and resolutions governing the company's operations.

On 15 August 2019, the UAE Central Bank Corporate Governance Regulations became an effective law to supplement Resolution 7 RM. The UAE Central Bank Corporate Governance Regulations comprise of corporate governance regulations and accompanying standards for the purpose of implementing the corporate governance at banks and financial institutions listed on a UAE exchange. Until the publication of the UAE Central Bank Corporate Governance Regulations, Resolution 7 RM did not apply to banks and financial institutions which made a comprehensive corporate governance analysis of banks and financial institutions difficult as the legal parameters were missing to do so. This dissertation deliberately omits discussion of the UAE Central Bank Corporate Governance Regulations and also omits banks and insurance companies from the sample as they were subject to different regulators and different regulatory regimes during the research period.

On 28 April 2020, the Chairman of the Securities and Commodities Authority (SCA) issued Board Resolution No. (03/R.M) of 2020 (2020 corporate governance rules) which adopted the new Corporate Governance Guide for Public Joint-Stock Companies and repealed the 2016 corporate governance rules. The 2020 corporate governance rules introduce new corporate governance rules for PJSCs in line with international best practice and aim to promote accountability, fairness, gender diversity, and transparency. Although this dissertation contains an analysis of the 2020 corporate governance rules, the data analysis is based on the 2016 corporate governance rules as there is a grace period for companies to apply with the

2020 corporate governance rules and sufficient data is not available yet for analysis.

The main changes pursuant to the 2020 corporate governance rules are as follows:

1. Uniformity: The 2020 corporate governance rules apply to all local listed companies without exception, including banks and insurance companies. There are additional separate rules that apply to banks and insurance companies issued by their regulators. The 2016 corporate governance rules did not apply to banks or insurance companies which were under the umbrella of the Central Bank and the Insurance Authority respectively.
2. Female representation mandatory quota: a minimum female representation in the board of not less than 20% of the number of board members and an obligation on the company to disclose the percentage of female representation in its annual corporate governance report, together with a requirement for the board to establish policies concerning gender diversity.
3. Mandatory Conflict of Interest Disclosure: a requirement for the board members to inform the company, on a quarterly basis of any conflict of interest.
4. Board member qualification check: more elaborate criteria for board members' qualifications and ability to serve as an officer.
5. Dual governance structure: the introduction of an optional dual governance structure whereby two board committees are formed: an executive committee and a supervisory committee.
6. Enhanced risk management procedures.

7. Enhanced disclosures regarding the content of the annual corporate governance report and the requirement to submit the report for approval at the company's annual general meeting.

8. Subsidiary company governance: the introduction of guidelines to regulate the governance of subsidiary companies, requiring the parent company's board of directors to set out and approve the group's corporate governance framework and ensure that the management of the subsidiary company adopts an appropriate corporate governance framework.

9. Requirement for revised corporate social responsibility policy.

10. A requirement that the majority of board members should be independent, non-executive members.

11. Requirement to appoint an independent board secretary.

The context of the research conducted for this dissertation focuses mainly on the 2016 corporate governance rules in contrast to the 2009 corporate governance rules. A major motivation of this study is to investigate whether the corporate governance reforms starting from 2015 with the introduction of the 2015 Companies Law in the UAE have been successful or not and if certain requirements such as the establishment of an insider trading supervisory committee for listed companies accomplished the desired purpose. To measure the effectiveness of the corporate governance reforms, this research analyses corporate governance practices using financial years 2017-2020.

In January 2021, Sheikh Mohammed bin Rashid Al Maktoum, the ruler of Dubai, issued Decree No. (3) of 2021 on the Listing of Joint Stock Companies in the Securities Markets in the Emirate of Dubai. Decree No. (3) of 2021 requires all public joint stock companies established in the UAE which have over half of their assets or profits derived from business activities in Dubai, to be listed on either the DFM or NASDAQ Dubai. If they are not already listed on the DFM or Nasdaq Dubai, they were required to do so by January 2022. Further, all existing public joint stock companies established in Dubai (including the Dubai free zones) must be listed on either the DFM or Nasdaq Dubai and in case they are not, they must do so within the same timeframe. The provisions of Decree No. (3) of 2021 mandate Dubai businesses to list on Dubai's securities exchanges in order to boost the city's capital markets. Mandatory listing is a double-edged sword. If a company has not listed on a local market, there are usually viable business reasons for not doing so. As mentioned above, the UAE has three active stock exchanges and speculation is ripe that a merger may occur and bring synergies (Gamal, 2018; Yasin, 2011; Basit, 2010). Decree No. (3) stipulates a mandatory listing requirement for Dubai based PJSCs. Making a listing mandatory is not necessarily positive for the company nor for investors. Investors want to see companies come to the public markets after a strong IPO and that can comply with the ongoing obligations of a public company, particularly around market disclosure and corporate governance. However, this requirement is subject to fulfilling the eligibility requirements of the regulator and stock exchange. This should ensure that companies that are inappropriate for listing do not come to market, despite the mandatory requirement to do so. Further, certain exchanges benefit from distinguishing themselves from competitors. NASDAQ Dubai announced in October 2020 that it will launch a "Nasdaq Dubai growth market" in 2021 to support small and medium-sized companies (Azhar, 2020).

1.3 Objectives of the Study

The primary objective of this dissertation is to investigate the impact of corporate governance principles and mechanisms on corporate performance of selected listed firms in the UAE. The research objectives are to assess the corporate governance rules in the UAE and compare them with comparable provisions in the UK and the US. Further, the dissertation will evaluate the implementation of selected corporate governance principles and mechanisms of the corporate governance rules. The dissertation will identify areas in corporate governance that have faced difficulties in implementation and examine the impact of corporate governance mechanisms and principles on the financial performance of companies listed on the ADX and the DFM. The theoretical and conceptual framework consists of the corporate governance principles, the corporate governance mechanisms, the agency theory and the stakeholder theory and their impact on corporate performance. The following research questions identify the specific objectives that this dissertation will address:

Research Question #1: How is corporate governance understood by stakeholders in the UAE?

Research Question #2: Do corporate governance reports of the UAE listed firms comply with the 2016 corporate governance code stipulated by the UAE statutory requirements?

Research Question #3: What is the impact of the 2016 corporate governance code on the performance of the UAE listed firms?

Research Question #4: Do sector-specific variations in the level of compliance exist in the corporate governance reports of these UAE firms and why?

To achieve the research objectives, seven research hypotheses have been developed to examine the nature of the relationship between corporate governance practice and corporate performance. Research Hypotheses that test corporate governance mechanisms are analyzed pursuant to the agency theory. The stakeholder theory is used to analyze corporate governance principles as the stakeholder theory focuses on the effect of the corporate activity on all identifiable stakeholders of the corporation. The overall objective of the dissertation is to gain insight into directors' and executives' perceptions of the effectiveness of corporate governance with respect to enhancing corporate performance which will be examined quantitatively and qualitatively.

1.4 Contribution and Significance of the Study

After reviewing the secondary sources, there is a research gap, especially when considering the new legislation and theoretical developments in the field of corporate governance. Alagha (2016) and Otman (2014) relied on the 2009 Code which was at a time when corporate governance was still in its infancy in the UAE. Alkuwaiti (2019) relies on the 2016 corporate governance rules, but she did not filter out the banks, financial institutions, and insurance companies which were outside the remit of the 2016 corporate governance rules. Therefore, her findings benefit from being further investigated and refined as the sample was not adjusted to the requirements of the 2016 corporate governance rules. To the researcher's knowledge, the existing scientific literature has not engaged critically with the corporate governance rules and the Companies Law. This dissertation fulfills the task and addresses the gap in the literature by focusing on a number of key corporate governance mechanisms, such as mandatory rotation of the external auditor every three years, compliance with insider trading rules, establishment of internal controls, gender diversity and demonstration of relevant sector specific experience by board members as further outlined in the methodology section. The contribution of this dissertation is unique in many respects. The majority of hypotheses under analysis have not been previously tested. To the researcher's knowledge, it is the first dissertation that applies mixed methods research on this topic in the UAE. The dissertation utilizes a unique dataset handpicked from the listed companies' corporate governance reports. More than 240 corporate governance reports were reviewed. Further, spreadsheets were produced to track insider trading, gender diversity, auditor rotation and whether companies had implemented an internal controls function aligned with the rules and as disclosed in the corporate governance report. Further, the dissertation tests the applicability of corporate governance rules to UAE listed companies and the level of compliance by the listed companies qualitatively and quantitatively. To the best of researcher's knowledge, this research will be the first research project in the UAE to consider the impact of board members occupational experience and legal insider trading on performance based on empirical data. This research will also be the first to analyze the effect of mandatory auditor rotation on corporate performance. Auditor rotation was only made mandatory in the UAE in 2015 with the introduction of the 2015 Companies Law. As further discussed in the literature review section of this dissertation, this research benefits from contributions by Goel (2018) who conducted corporate governance research over two reform periods in India and performed an industry sector specific analysis. Although Goel's research is different as it compares two reform periods, her approach to the sector specific differences was formative, as it is a recent study concerning the listed companies in India, which as a developing market economy presents some similarities with the UAE.

Otman's DBA dissertation (2014) and Alkuwaiti's DBA dissertation (2019) were also useful. Otman conducted corporate governance research post implementation of the 2009 corporate governance rules and contrasted the results with prior corporate performance. Alkuwaiti conducted corporate governance research post implementation of the 2016 corporate governance rules. With the evolution of corporate law and a revised corporate governance framework, this dissertation analyses whether the 2016 corporate governance rules have indeed generated improvements in the corporate governance process in the UAE and whether this has resulted in better performance.

The findings are succinctly presented. Model 1 which includes the data of the questionnaire responses determines that the sub corporate governance indices board responsibilities and shareholder rights have the highest means. The regression analysis of Model 1 reveals that disclosure and transparency, and board responsibilities are statistically significant, and the model has an R square of 0.435. Model 2 was analyzed using a linear fixed effects model. The interaction between insider trading and auditor rotation was statistically significant. This dissertation also finds that differences exist among the sectors concerning compliance with and implementation of corporate governance rules. This dissertation will benefit the regulator, shareholders, executive management of UAE listed companies, and academic researchers. This research will contribute to the development of theoretical and practical knowledge because not only is there very limited mixed methods research in corporate governance, but also because findings are not mature or inexistent, especially in relation to occupational experience, gender representation, insider trading and auditor rotation.

1.5 Structure of the Dissertation

The dissertation is organized as follows:

Chapter 2 reviews the literature and provides an overview of the corporate governance structure and the impact of corporate governance on performance as discussed in the literature. Empirical evidence is presented from the UAE, as well as developed economies such as the United Kingdom, the United States, and Germany. Chapter 3 presents the theoretical and conceptual framework and the two models developed for this dissertation and discusses the development of the hypotheses. Chapter three also reviews the different theories which apply to corporate governance and considers how the applicable theories could be developed further.

Chapter 4 explains the research paradigm, research methods, research design, and data collection employed in this dissertation. The chapter includes the methodology, primary and secondary data collection, questionnaire development, pilot study, response rate and secondary data collection. Moreover, it illustrates the design of the semi-structured interview questions, interview population and analysis of the data.

Chapter 5 presents the results of the questionnaire, interviews and statistical analysis, including testing of the hypotheses. Chapter 6 discusses and explains the results of the quantitative and qualitative data analysis and presents the findings regarding the role of corporate governance principles and mechanisms in improving corporate performance.

Chapter 7 provides the conclusion to the dissertation and discusses the findings, associations, and limitations of the dissertation, as well as recommendations for future research.

Chapter 2: Literature Review

2.1 Introduction

The purpose of this chapter is to present the literature review that has been published in connection with corporate governance and its impact on performance. It presents the key literature in relation to corporate governance in the UAE and the MENA region and draws on relevant examples from the United States, the United Kingdom, and other jurisdictions. This chapter also reviews the function of the OECD Principles of Corporate Governance. Corporate governance is a checks and balancing system that permeates the organization and ensures that an internal control system and delegations of authority are present. Effective corporate governance goes hand in hand with the efficient use of resources in the company and proper resource allocation should lead to better corporate performance. This chapter is structured as follows. Section 2.2 presents the empirical evidence of corporate governance and corporate performance. Section 2.3 presents the role of the OECD in shaping the corporate governance principles. The literature review of the challenges and opportunities for corporate governance in the MENA region is presented in Section 2.4. Section 2.5 presents the limitations of the existing literature and the research gap. Section 2.6 concludes this chapter.

2.2 Corporate Governance and Corporate Performance: Empirical Evidence

There is extensive literature on corporate governance that researches the effectiveness of corporate governance in corporations and its impact on performance. Most of the literature has been published in the United States and Europe. There have been some research papers focussing on Africa, Asia, and the Middle East. The laws, processes, and implementation of corporate governance are distinct when comparing developing and emergent countries with developed markets such as the United States or the United Kingdom. Therefore, this literature review focuses on a cross section of these publications to present corporate governance in developed economies, the emerging market context, and scientific literature and laws in relation to corporate governance in the UAE.

2.2.1 The Significance of Corporate Governance

Eells (1960) in his seminal work described corporate governance (corporate governance) as the structure and functioning of the corporate polity. The term has since been molded to comprise a set of control mechanisms to protect the interests of different stakeholders of a corporation. During the past ten years, post the 2009 financial crisis as well as during the COVID-19 pandemic in 2020, corporate governance has gained further importance due to the volatility in the global stock markets and the desire to have a system of rules and checks in place to assure the longevity and sustainability of listed organizations. Indeed, whether the purpose of the corporation is to generate profits for its shareholders or to operate in the interests of all of its stakeholders has been actively debated since 1932, when it was the subject of competing law review articles by Columbia Law School professor Adolf Berle (1931) and Harvard Law School professor Merrick Dodd (1932). Berle argued for “shareholder primacy”, the view that the corporation exists only to make money for its shareholders. Dodd challenged Berle’s position and he suggested that “there is in fact a growing feeling not only that business has responsibilities to the community but that our corporate managers who control business should voluntarily and without waiting for legal compulsion manage it in such a way as to fulfill those responsibilities.” He quoted the heads of several major corporations, such as General Electric, to argue that business leaders had come to recognize that corporate managers needed to consider social responsibility when running their companies.

In 1970, Friedman announced that the social responsibility of a corporation is to increase its profits, thus endorsing Berle's theory. Since then, for almost 50 years, shareholder primacy was widely viewed as the purpose and basis for the governance of a corporation. However, since 2018 we are seeing important new support for counterbalancing shareholder primacy and promoting long-term sustainable investment instead.

On 11 April 2019, the members of the National Assembly of the French Parliament adopted the PACTE Law (PACTE Law, 2019). The PACTE Law was enacted and published on 23 May 2019. As a result of this law, the French Civil Code has been amended to add, "The company shall be managed in its own interest, considering the social and environmental consequences of its activity", following the existing, "All companies shall have a lawful purpose and be incorporated in the common interest of the shareholders". This amendment was intended to establish the principle that each company shall ensure the continuity of its operations, sustainability, collective creation and innovation which are at the core of corporate governance.

In August 2019, nearly 200 CEOs as part of America's Business Roundtable, approved an updated definition of "the purpose of a corporation" and agreed that each company has a purpose not reducible to profits and needs to be aware of its purpose, integrating corporate governance and social responsibility considerations. Since its inception in 1970, the Business Roundtable has published guidance and best practices to uphold high ethical standards and deliver long-term economic value as stated in the American Business Roundtable Principles of Corporate Governance (2016). The new Business Roundtable Statement on the purpose of a corporation essentially rejects Friedman's theory (1970) who stated seeking profits for shareholders would alone allow a company to prosper, keep people employed, and fuel the economy. Instead, the Business Roundtable endorses the idea of "conscious capitalism", which proposes that a company has a broader responsibility to society, which it can better serve if it considers all stakeholders in its business decisions.

2.2.2 Relevant Aspects of Corporate Governance in Developed Economies

Many studies have been conducted testing the impact of corporate governance on corporate performance from a set of listed companies in various stock exchanges across different economies and countries. The often-cited work by Gompers et al. (2003) reports that firms with well implemented corporate governance which are listed on the New York Stock Exchange (NYSE) show higher market valuation and lower expenditure than firms with less implemented corporate governance. Bhagat and Bolton (2008) consider the endogeneity of the relationships among corporate governance, corporate performance, corporate capital structure, and corporate ownership structure. Endogeneity refers to situations in which the explanatory variables are correlated. Bhagat and Bolton conduct a number of robustness checks for stock ownership of board members, CEO-Chairman separation and two performance indices and find that stock ownership of board members and CEO-Chairman separation are significantly positively correlated with better firm performance. In 2019, Bhagat and Bolton publish "the sequel" to their original work, extending the sample period from 2002 to 2016 (Bhagat & Bolton, 2019). The findings confirm that director stock ownership is most consistently and positively related to firm performance for the years from 2003 to 2016.

Research conducted by Black et al. (2006) examines 526 Korean firms to find out whether there is a significant relationship between corporate governance and share prices. The findings of the study show that there was a significant relationship between corporate governance and share prices, i.e., that firms with better corporate governance structure performed better in terms of Return on Total Assets (ROA) and Return on Equity (ROE). This can be contrasted with Shleifer and Vishny (1997) whose research concentrates on corporate governance systems around the world, and who find that large shareholders impact corporate performance most. According to Shleifer and Vishny, corporate investors rely on corporate governance to assure themselves to obtain a fair return on their financial investment. Lehmann and Weigand (2000) use data from 1991 to 1996 for 361 German companies, of which 183 are listed on a German stock exchange. The researchers use ROA and ROE to measure corporate performance. According to Lehmann and Weigand (2000), the identity of the business's owners is important for performance. The researchers state that whether control rights are with government, family interests, allied industrial firms, banks, and holding companies, this will have an impact on corporate governance mechanisms and their implementation and in turn on performance. In the United States, dispersed ownership (as opposed to companies with controlling interests) is the most common ownership structure of public companies, especially for large-capitalization firms (Lehmann & Weigand, 2000). Lehmann and Weigand acknowledge that shareholders of diffusely held firms (institutional investors such as pension funds or companies with large diffuse shareholding such as Coca Cola or Microsoft) are viewed as outsiders. Bebchuk and Tallarita (2020) state in the Harvard Law School Forum on Corporate Governance and Financial Regulation, that "ownership structure is perhaps among the most significant corporate governance factors, as it determines the balance of power within a corporation and can directly affect governance practices and company behaviour". In Germany, Lehmann and Weigand (2000) report that there is a positive relation between firm value and ownership by institutional investors. In the United States, Shleifer and Vishney (1997), also find that there is a positive relationship between institutional ownership and corporate performance. On the other hand, other research conducted in the United States by Chaganti and Damanpour (1991) suggests that there is little evidence that corporate performance is impacted by institutional ownership. Gillan (2006) portrays a corporate governance model “beyond the balance sheet”, encompassing laws, regulations, and markets. Through the model shown in Figure 1, Gillan (Source: Gillan, 2006) classifies corporate governance mechanisms into internal and external governance and explains links between them.

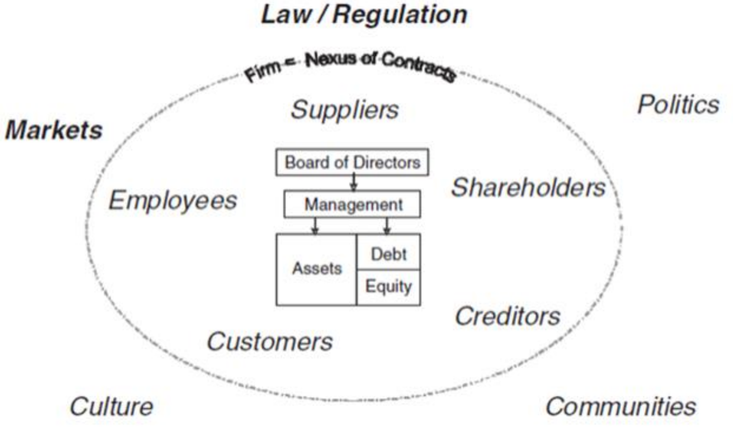

Figure 1: Corporate Governance Beyond the Balance Sheet Model

Internal governance comprises the board of directors, managerial incentives, capital structure, company’s constitutional documents, and the company’s internal control system. External governance mechanisms include laws and regulations, the capital markets, capital market information, the labour market, the product market, accounting, legal and financial services from external parties of the firm, and external oversight, such as the media and external lawsuits. In Gillan’s model, the board of directors acts as an internal corporate governance mechanism has a responsibility to advising and monitoring management who acts as shareholders’ agents in making decisions regarding corporate resources (Jensen & Meckling, 1976). Jensen and Meckling argue that there is an inherent divergence of interests between the managers and owners of the company which is representative of the agency theory. Siddiqui (2015) compares data from different legal systems, mainly mature civil law and common law countries and tests the effects of external governance mechanisms, such as new laws, and internal governance mechanisms, such as shareholder rights on firm performance. She finds that external governance mechanisms exert more influence on firm performance than internal governance mechanisms. Publications from the United States prove valuable when analysing variables such as legal (as opposed to illegal) insider trading patterns (Bebchuk & Fershtman, 1994) and the impact on corporate performance. Because of advanced legal rules in the United States and long-term observations in insider trading patterns, the scientific literature is very comprehensive and informative for this research.

2.2.3 Corporate Governance in Emerging and Developing Markets

According to the literature, it is widely recognized that implementing reliable corporate governance frameworks is a key contributor to increase market capitalization (price per share). Goel (2018) analyses corporate governance practices of Indian companies in two corporate governance reform periods in India (2012–13) and (2015–16) and estimates the impact on corporate performance. Goel concludes that the total corporate governance score is a significant predictor of the company’s market valuation and accounting performance. Many scientific studies research compliance in developing countries based on a local corporate governance code or international principles, such as the OECD principles of corporate governance. According to Vo and Nguyen (2014) who conducted research in Vietnam, the board of directors is considered "the most important factor in corporate governance, which affects the whole business and owners' interests". Azutoru et al. (2017) use data from 2011-2015 covering twenty Nigerian insurance companies and examine corporate governance mechanisms such as board size, board independence, executive directors' remuneration, non-executive directors' remuneration, directors' ownership, institutional ownership and foreign ownership and their impact on corporate performance. The researchers use a fixed effects model and regression to evaluate the effect of these corporate governance mechanisms on the financial performance of Nigerian insurance companies. The fixed effect econometrics show that, board size and non-executive directors' remuneration have a negative and significant effect on financial performance measured by ROA. The researchers find that board independence, and institutional ownership have a positive and significant impact on the financial performance using the agency theory. Ali (2016) conducts research with 100 listed companies from the Karachi Stock Exchange of Pakistan and the New York Stock Exchange to measure the impact of corporate governance on performance. Corporate governance is measured by board's ownership, efficiency, size of board, board independence, CEO and CEO duality and board's education and experience whereas the firm's financial performance is measure by ROA and ROE. Ali finds there is less adherence to corporate governance mechanisms in Pakistan, due to the mostly family-owned nature of businesses. In the survey conducted by Ali and subsequent analysis, a strong rating for corporate governance variables such as board ownership, board education and experience and CEO duality are found to have a positive relationship with company performance. Mak and Li (2001) use Singapore as an example and argue that privately owned firms are more efficient and more profitable than state owned firms. They explain that government tends to be less involved with its investments. They also claim that there is weaker accountability and monitoring of state-owned firms. Qasim and Mohammad (2014) mention that whether government ownership has a positive or a negative impact on corporate performance depends on the country under examination. In China, Xu and Wang (1999) find a negative relationship between government ownership and corporate performance. However, studies conducted in the UAE, Kuwait, Malaysia, and Singapore find a positive relationship between government ownership and corporate performance (Aljifri & Moustafa, 2007; Najid & Abdul Rahman, 2011; and Alfaraih et al., 2012). In the UAE, government owned firms may face less pressure to comply with the financial reporting requirements which could give their managers some room to select those accounting choices that improve the corporate performance measurement (Tobin's Q) (Aljifri & Moustafa, 2007). Institutional investors refer to the ownership stake in a company that is held by large financial organizations, insurance companies corporate pension funds, college endowments, commercial banks, hedge funds, mutual funds, and boutique asset management firms (Pillai & Al-Malkawi, 2018). The involvement of institutional investors has emerged as a vital force in corporate monitoring and as a mechanism to protect the interest of minority shareholders (Qasim & Mohammad, 2014).

The literature review in various developing countries shows that corporate governance still needs to be better implemented in developing countries and a lack of a strong internal control system or processes that would ensure acceptance of corporate governance principles and mechanisms. The literature also shows that there is increased attention by stock markets in developing countries to improve corporate governance.

2.2.4 Corporate Governance in the UAE

The impact of government ownership on corporate performance has been researched in the UAE since the implementation of the first corporate governance code in 2009. According to the literature (Alagha, 2016; Otman, 2014; Aljifri & Mustafa, 2007), there is a clear trend of improvements in corporate governance and corresponding best practices. Whether they improve company performance in the UAE, is less apparent.

Alagha (2016) examines the changes to corporate governance practices from 2008-2009 to 2011-2012 and their impact on financial performance. He uses the total population of all listed companies from both DFM and ADX for the period examined. His analysis mainly concentrates on the financial sector companies listed on the exchanges. The two time periods selected are very interesting for research as the first corporate governance rules in the UAE are the 2009 CG Rules. Therefore, Alagha's selected time periods contrast the effect of the first corporate governance rules in the UAE post implementation, the time period 2011-2012 with the time period 2008-2009 when no formal corporate governance practices were implemented. The findings state that good corporate governance can be an essential factor in corporate performance but also that there is not necessarily a causal link between them.

Hussainey and Aljifri (2012) examine the impact of corporate governance mechanisms on financial decisions of companies listed on the Abu Dhabi and Dubai stock markets and how this in turn affects UAE firms' capital structure. The researchers use regression analysis and descriptive statistics on data obtained from the corporate annual reports from 71 listed companies during 2006. They conclude that dividend policy is negatively associated with debt-to-equity ratio, while firms' size is positively associated with debt-to-equity ratio. The findings support that company directors and managers in the UAE may act at shareholders’ expense if no effective corporate governance mechanisms are implemented. Aljifri and Moustafa (2007) examine the impact of corporate governance mechanisms on the financial performance of companies listed on the Abu Dhabi and Dubai stock markets. Their research utilizes a sample of 51 firms using accounting and marketing data from 2004. The researchers use regression and statistical analysis to test the hypotheses. UAE corporate performance is measured by Tobin’s Q ratio because it provides an estimate of the intangible assets value, quality of management and growth opportunities. The researchers conduct regression analysis to test the hypotheses of the study and conclude that the governmental ownership, the debt ratio (total debt/total assets), and the pay out of dividends ratio have a significant impact on the corporate performance; whereas the institutional investors, the board size, the firm size (sales), and the audit type show a non-significant impact.

AlKuwaiti (2019) investigated CEO duality in the listed companies in the UAE. CEOs with significant voting power are more likely to maintain power at companies’ boards by holding the combined role of Chair of the Board and CEO. CEO and Chairman duality has been researched in detail globally and to some extent in the UAE and by 2019 most listed companies in the UAE have separated the roles of CEO and Chairman as stipulated by the 2016 corporate governance rules, Article 4(b) “The Chairman of the Board shall not hold the position of company's manager, and/or Managing Director or any other executive position in the Company”. Therefore, chairman/CEO duality will not be investigated in this dissertation.

The research on the relationship between government ownership and corporate performance in previous research is not conclusive. One school of thought suggests a negative relationship between government ownership and corporate performance, and other researchers suggest a positive relationship. In the UAE, Aljifiri and Moustafa (2007) found that institutional ownership has a negative, although insignificant, impact on Tobin's Q. Further, in the UAE, the influence of institutional investors needs to be considered and whether they exercise latent or active influence. Active power is usually in the hands of a firm's executives to control key decisions regarding investments, products, and markets. Latent power, on the other hand, is only the power to constrain certain decisions. Here, the institutional shareholding needs to be contrasted with government shareholding, as in the UAE firms with a high government shareholding are considered to benefit from "government support" which means they are able to attract cheaper loans, market their products more prominently, and benefit from regulatory exemptions.

It can be concluded from the above discussion that corporate governance is increasingly important in the UAE as it aims to establish itself as a developed economy. This is also apparent by the numerous legislative reforms from 2009 to 2020. The current research is motivated by the gap in the literature as identified in Chapter 1. It will focus on corporate governance mechanisms taken from the UAE laws that have until now not been the focus of academic research. The study also aims to evaluate the application of the corporate governance principles as established by the OECD principles of corporate governance and assess the progress of implementing corporate governance with the help of a corporate governance index. Since this dissertation reflects on the changes brought about by the corporate governance rules 2016 and the Companies Law, the hypotheses selected focus on changes brought about by the legislation introduced in 2015 and 2016.

2.2.5 Impact of Board member's Occupational Experience on Corporate Performance

An area which merits further investigation is the occupational expertise of the members of the board of directors and the impact of presence or absence of sector experience on a company's performance. This dissertation analyses whether the presence or absence of occupational expertise (sector experience) by the members of the board of directors has an impact on performance. It is widely acknowledged that investigating occupational and functional backgrounds of members of the board of directors is a valuable tool to measure performance (Goodstein et al., 1994). Several studies have investigated the influence of occupational expertise on performance with a number of these studies in the financial services and banking sector (Van Ness et al., 2010; Brown, 2006; Kroszner & Strahan, 2001). Kroszner and Strahan (2001) found that bankers and members of the board with financial experience are associated with stable stock returns. Differences among corporate directors are most properly viewed in terms of their experience and expertise (Baysinger & Butler, 1985). A recent study conducted with listed firms on the Milan stock exchange used regression analyses and proved that directors' educational backgrounds and work experience in specific professional areas are predictive of corporate performance (Rossignoli et al., 2021).

According to the literature, the applicable theory is the agency theory. Agency theorists assert that top management teams shirk responsibilities and make risk-averse, suboptimal decisions (Jensen & Meckling, 1976). Further, executive careerism focusing on short-term, labour-market value enhancing performance conflict with shareholder interests (Gupta & Bailey, 2001). The 2016 Corporate Governance Rules, Article 41(a), require that "the candidate shall have at least five years' experience in the field of the Company which he/she is nominated for its Board membership”. This research investigates the presence or absence of occupational experience (sector expertise) of the members of the board of directors of listed companies on the ADX and DFM by analysing the Corporate Governance Reports and mandatory disclosures regarding board members’ professional and sector experience. Brown (2006) and Kroszner and Strahan (2001) find evidence of a positive relation between board members occupational experience and increased performance, and it is expected that testing this hypothesis in the context of the UAE will demonstrate a positive relationship between occupational experience and corporate performance.

2.2.6 Relationship between Gender and Corporate Performance

In 2012, the UAE Cabinet made it compulsory for corporations and government agencies to include women on their boards of directors. The 2012 announcement was made by Sheikh Mohammed bin Rashid, Vice President of the UAE and Ruler of Dubai, in December 2012. However, no fixed quotas for gender representation on UAE listed companies Board of Directors were introduced in the UAE until the 2020 corporate governance rules were introduced. Pursuant to the 2016 corporate governance rules there was no firm obligation for a Board of Directors to have female members – it merely required female candidates for election. Compared to a few decades ago, today women are more educated, highly qualified and ready to assume responsibilities for high-level, highly impactful positions in the corporate world. However, progress in that direction at the UAE-listed companies seems to be slow.

Some of the literature reviewed finds a positive impact of the presence of female board members on corporate performance (Lückerath-Rovers, 2013). However, there appear to be difficulties with quantifying the impact of gender representation on corporate performance using statistical methods. Hussein and Kiwia (2009) examine the relationship between female board members and corporate performance for a panel of 250 US firms over the years 2000 and 2006. They use fixed effect regression to estimate the relationship of the effect of female board members with four measures of corporate performance (ROA, ROE, Tobin's Q ratio and price at close). The researchers find no positive and significant relationship between female board members and the four measures of corporate performance selected. However, applying the Shannon index, a diversity index frequently used in the ecological literature originally developed by Claude Shannon (1948), they find a positive and significant relationship between gender representation and firm value.

Article 40 of the 2016 Code requires that listed companies' candidates for Board membership shall be represented by at least 20% female board member candidates. The company shall disclose the reasons in case no female candidate is nominated. The rate of female representation in the Board of Directors also needs to be mentioned in the annual corporate governance Report. There are currently no penalties or consequences if a listed company has no female board member(s). In fact, still very few firms do have female board members in the UAE.

In 2020, the UAE was the first Arab country to take an active step towards introducing quotas for female board members. Article 9, paragraph 3 of the 2020 corporate governance rules states as follows:

"The Articles of Association of the Company shall specify the formation method of the Board, number of its Members and the Membership term, provided that the representation of women is not less than (20%) of the number of Members. The Company shall disclose the reasons for the failure to achieve such a percentage, and it is also required to disclose the percentage of representation of women in the Board within its annual Governance report."

and Article 59, paragraph 1:

"Set a nomination policy for membership of the Board of Directors and the Executive Management to diversification of the sexes in the formation and encourage women through incentive and training benefits and programs and provide the Authority with a copy of this policy and any amendments thereto."

At the stage of writing this dissertation less than two years have passed since the implementation of the 2020 corporate governance code, and it is still too early to assess improvements resulting from the introduction of the new code. Globally, 2020 was an important year for regulatory changes aimed at empowering women to gain board positions in various jurisdictions. In November 2020, the German government introduced a mandatory quota for women in the boards of listed German companies. Listed companies with boards of more than three members must in future include at least one woman (Chazan, 2020). This is a big step towards gender diversity in Germany, where a system of voluntary commitment to gender equality was in force since 2015 yet failed to yield results. A quota for female board participation had been discussed in German politics since the early 2000s, yet German chief executives and heads of industry had argued against a quota and that it represented unwarranted interference in the internal affairs of companies, and that there was a dearth of suitable female candidates for senior management roles. Women currently make up only 12.8% of the management boards of German companies listed on the blue-chip Dax index, according to a recent survey by the Swedish-German AllBright Foundation (Chazan, 2020).

The “soft quota” principle in effect in Germany until 2020 is comparable to the 2016 corporate governance code, Article 40, paragraph 1:

“The Company’s Articles of Association shall determine the method of formation of the Board of Directors, number of the Board members and term of membership. Candidates for Board membership shall be represented by female board members (at least 20%), the Company shall disclose the reasons in case no female is nominated; and shall also disclose the rate of female representation in the Board of Directors in its Annual Governance Report.”

The “comply or explain” model pursuant to the 2016 corporate governance code failed to materially change the number of board positions held by females of the UAE listed companies. Pursuant to the 2016 corporate governance code, listed companies needed to explain the reasons why they did not have female board members and did so in the Annual Governance Report, mandatory for companies listed on a UAE exchange. However, SCA did not assess the substance of the company’s explanation and only verified that a listed company without female board members had indeed provided one.

On December 1, 2020, the US exchange NASDAQ- New York announced the filing of a proposal with the U.S. Securities and Exchange Commission (SEC) to adopt new listing rules related to board diversity and disclosures and that companies listed on its exchange should have at least one woman and one member of an under-represented minority on their boards (Temple-West & Edgecliffe-Johnson, 2020). In its proposal, Nasdaq opts for a "comply-or-explain" model which is similar to the UAE’s 2020 corporate governance code.

This "comply-or-explain" model stands in contrast to recent legislation in California where certain NASDAQ- New York listed entities have their principal headquarters. In September 2018, California adopted Senate Bill 826, mandating representation of women on the boards of publicly held corporations based in California. Pursuant to the NASDAQ-New York proposal, the disclosure requirement in case no female board members has been appointed, is to explain the reasons why it does not have female directors. Similar to the UAE's 2016 corporate governance code, it does not assess the substance of the company' explanation but verifies that the company has provided an explanation. The current Secretary-General of the United Nations, Antonio Guterres, stated that "gender inequality is the overwhelming injustice of our age, and the biggest human rights challenge we face", (Guterres, 2020). Women are still excluded from the top table, from governments to corporate boards. The latest research by the World Economic Forum states it will take 257 years to close this gap (Guterres).

The scientific literature on this topic is divided and country specific. Lückerath-Rovers (2013) analyzes performance of the listed companies on the Dutch stock exchange and finds that gender diversity is statistically significant and has a positive impact on performance. Iren (2016), on the other hand, finds that diversity has no impact on corporate performance. If gender diversity does not affect corporate performance, the results might imply that the female board members are used as window-dressing and for image purposes (Helland & Sykuta, 2005). While it might be true that firms which have females on their boards have better financial performance, it might also be true that firms which perform better and have better governance practices choose to include women in their boardrooms.

2.2.7 Relationship between Insider Trading and Corporate Performance

Insider trading means buying and selling of stocks and shares based on significant information which is not publicly available. Federal Law Number 4 of 2000 concerning the Emirates Securities and Commodities Authority (the SCA Law) regulates and prohibits the act of illegal insider trading. The SCA Law allows insiders (executives or members of the board of the company or their dependents) to carry out insider transactions if they publish the trades to the exchange and in the corporate governance reports. According to Regulation 7 RM and ADX guidance published in 2019, the corporate governance report shall include all the details regarding the price or quantities bought or sold. Further, approval from the board of directors needs to be sought. The ADX and DFM maintain records pertaining to securities trading transactions by insiders and the exchanges must report on a daily basis to SCA (the Regulator) regarding such trades. Most sophisticated stock exchanges have similar rules. Pursuant to ssection 16(a) of the US Securities and Exchange Act of 1934, insider stock transactions on a United States stock exchange need to be filed publicly. Empirically, the most comprehensive data for legal insider trading activity can be found in the United States as a result of long-embedded rules that require public filings.

Insider trading is a term commonly used in the securities sector to describe illegal conduct. However, insider trading can both be legal and illegal and following the above process will reveal legal insider trading share sales and purchases. Only the legal insider trading can be analysed statistically using scientific methods. Since corporate insiders are unlikely to report illegal transactions that violate the rules, much of the illegal trading activity is likely unobservable in public filings (Lskavyan, 2015).

There are several possible theories of how firm value may depend on the amount of insider trading. It needs to be tested if trades using insider information will lower or increase long-term firm value. Masson and Madhavan (1991) expect that firm value could be lowered because potential investors with rational expectations recognize that insider trading is costly to them. Other researchers suggest that insider trading or insider shareholdings have a positive effect on corporate performance (Jeng et al., 2003). Ting (2013) conducted research on listed companies on the Taiwanese stock exchange and finds that insider and institutional ownership both show positive effects on performance. Cline et al. (2017) examine trades of insiders between 1990 and 2014 on the New York Stock Exchange. They find that trades by insiders who are managers or directors can have a positive impact on corporate performance and that persistence in profitability is higher in firms where insiders have informational advantages.

In February 2020, there was increased focus on the insider shareholding by the UAE media and the UK regulator, the Financial Conduct Authority (Rahman & Derhally, 2020). BR Shetty, the founder of NMC Health, a UAE healthcare conglomerate with more than 200 healthcare facilities and listed on the London Stock Exchange, resigned as director and non-executive chairman of NMC Health. Mr Shetty and the Vice Chairman of the Board were removed from the company on concerns they misstated their stakes in NMC Health. According to company filings, it emerged that shares allegedly held by Mr. Shetty, were ultimately owned by other shareholders, thus reducing the number of shares publicly held by Mr. Shetty by 9.58%. Although, NMC Health is listed on the LSE and not the ADX, NMC Health needs to be considered within the context of the UAE as it is originally an Abu Dhabi company founded in 1975. Until 2020, it was the biggest UAE healthcare provider and employed around 2,000 doctors in the UAE. The investigation by the UK's Financial Conduct Authority brought other issues to the light which were masked by the inflated shareholding and insider trading. Ahmed et al. (2020) conducted research in the UAE test the role of control mechanisms represented by foreign ownership and insider trading on listed companies' corporate performance. The study was carried out with a sample of 50 non-financial companies in 2019. The findings show that insider trading and foreign ownership had a significant impact on corporate performance.

Based on the data gathered from the corporate governance reports of listed companies in the UAE, this dissertation analyses the effect of legal insider trading on corporate performance in the UAE and determine whether there is a positive, negative or no apparent relationship between insider trading in the UAE and performance. In the statistical analysis, dummy variables are used for firms that do or do not have insider shareholdings or trades. Based on the above arguments, it is expected that there may be a positive relationship between detailed regulations and procedures for internal control and corporate performance in the UAE.

2.2.8 Auditor Rotation – Effect of changing the Auditor Periodically on Corporate Performance

Not many studies have been conducted globally that measure the impact of auditor rotation on corporate performance. One major reason for this is that most jurisdictions have only started to codify a requirement to regularly change the auditor post the global financial crisis in 2009. Hai (2019) conducted research in Vietnam investigating the impact of auditor rotation on audit quality. Hai's study finds that the rotation of the auditors has an impact on the motives and quality of the audit. Non-rotation of the auditors was at the core of world-famous bankruptcies such as Enron or WorldCom and created a need for the legislators to put in place measures which would protect companies and investors alike. In the UAE, mandatory auditor rotation has been codified in the law since 2015. Article 243(2) of the Companies Law (2015) states that an auditor’s term shall not exceed three successive years. However, listed companies are able to seek an exemption from the rule from the regulator, and exemptions have been granted. Further, there are conflicting views with regards to rotating or not rotating the auditor. According to Shockley (1981), businesses develop a long-term "trust" relationship with their auditors which can make the auditors inefficient over time. Retaining the same auditors over a long period of time can lead to the auditors making less efforts in detecting major errors and tending to agree with their clients. This is an argument in favour of auditor rotation. However, there is also a view that compulsory rotation of the auditors can cause auditor quality issues as well as increase costs to the business. Auditor relationship partners may have a profound understanding of the business which a new auditor may lack. Litt et al. (2014) find evidence of lower financial reporting quality following an audit partner change. Specifically, they find lower financial reporting quality during the first two years with a new audit partner relative to the final two years with the outgoing partner. They also find lower financial reporting quality to be more prevalent for larger clients. These are arguments in favour of retaining the same auditor and same audit engagement partner and against the mandatory rotation rule.

In the UK, the mandatory auditor rotation rule became effective from 1 January 2015. The UK Competition and Markets Authority (CMA) requires companies listed on the FTSE350 to tender their statutory audit services not less frequently than every ten years pursuant to The Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities) Order (2014). In the United States, Section 203 of the Sarbanes-Oxley Act

(2002) (SOX) mandates that the lead partner in an audit firm be rotated off an audit project every five years. In 2002, SOX accelerated the rotation period for the lead audit partner from seven to five years. As a result of Section 203 (SOX), if the lead audit partner continues to conduct audits for a customer for more than five years, such auditors will no longer be considered independent. However, further attempts by the US Public Company Accounting Oversight Board to introduce mandatory auditor rotation rules such as the ones which are in force in the UAE and the UK, have not been successful.

To the best of the researcher’s knowledge, auditor rotation has not been scientifically researched in the UAE, partly because it is still a new topic because mandatory auditor rotation every three years as prescribed in Article 243(2) of the Companies Law (2015), has only been introduced in 2015 and was not included in the previous Commercial Companies Law (1984). Using handpicked data from the corporate governance reports of listed companies, the researcher will determine whether there has been an auditor change over a four-year sequence and whether such change or absence of a change has an effect on corporate performance.

2.2.9 Impact of Internal Controls on Corporate Performance

Not many studies have been conducted globally that measure the impact of internal controls on corporate performance. One major reason for this is that internal controls regulations and procedures are still a relatively new research area. In the United States, SOX (2002) requires public companies to maintain a solid internal controls framework. It is important to mention that the control environment, i.e., the detailed regulations and procedures for internal control are only one element to assess the internal control system. Other components include the risk assessment, control activities, information and communication, and monitoring. It is important to focus on the detailed regulations and procedures for internal control as these are most prominent in the applicable UAE legislation.

In the UAE, pursuant to the 2016 corporate governance rules, listed companies are required to implement and maintain strict internal control policies and consult directly with the board on internal control matters. Article 43 of the 2016 corporate governance rules requires "Taking the necessary procedures to ensure efficient internal control of the workflow in the Company, including:

"Setting written and detailed regulations and procedures for internal control, which determines the duties and responsibilities in compliance with the policy approved by the Board of Directors and the general requirements and objectives stipulated in the applicable legislations, including this Decision.

Establishing an internal control department to follow up compliance with the applicable laws, regulations, and resolutions; requirements of the supervisory bodies; and the internal policy, regulations, and procedures set by the Board of Directors.

Setting written procedures to manage conflict of interests and deal with potential cases of such conflict for Board members, the Senior Executive Management, and shareholders, and setting the procedures to be taken in cases of misuse of the Company's assets and facilities or misconduct resulting from transactions with Related Parties."

This dissertation explores whether solid internal controls through written and detailed regulations and procedures can enhance corporate performance. In the United States, Ashbaugh-Skaife et al. (2009) conducted research on this topic and estimated the relation between market value and internal control by using a residual income model. Firms with weak internal controls are identified as those that disclose material weaknesses in internal controls in periodic filings to the US regulator as required by SOX rules. The empirical results show that firms with weak internal control mechanisms have lower market value. Al Thuneibat et al. (2015) conducted research of internal control mechanisms in Saudi Arabia. The results of the study reveal that the effect of internal control on ROA and ROE is significant and positive.

2.2.10 Impact of Compliance on Corporate Performance

The UAE's choice of corporate governance regulations is heavily influenced by the Anglo-Saxon corporate governance framework, whereas de-facto realities in the UAE corporate environment are quite different from the United Kingdom or the United States. The UAE capital market is characterized by a concentrated ownership structure through institutional and government shareholdings (Hussainey & Aljifri, 2012) and family-based business groups. In the UAE, scientific literature on compliance and corporate performance is developing. Tariq and Abbas (2013) conduct research in Pakistan over a period of eight years (2003 to 2010) to assess compliance since the introduction of the Pakistan corporate governance code in 2002. The researchers evaluate the efficacy of a rule-based code of governance and find a significant and positive impact of compliance on corporate performance (ROA and ROE). The research also finds that compliance is not linearly related with corporate performance as highly compliant firms are less profitable than average or low compliant firms. Goncharov et al. (2006) conduct research in Germany and report that firms with a higher degree of compliance have share prices priced at a premium in contrast to firms with a lower degree of compliance. Akbar et al. (2016) conduct research in the UK between compliance and corporate performance of UK non-financial publicly listed companies from 1999-2009. The results suggest that compliance is not a determinant of corporate performance. Izquierdo et al. (2020) evaluate the impact of compliance on corporate performance in Spain pursuant to the Spanish Unified Good Governance Code. The researchers find that increasing compliance is not a relevant factor for better corporate performance. Outa and Waweru (2016) analyze the impact of compliance as set by Kenya's corporate governance guidelines on corporate performance. The researchers construct a corporate governance index based on the Kenyan corporate governance guidelines and find that compliance is positively and significantly related to corporate performance. The researchers evaluate how compliance steered financial performance and firm value from 2002 to 2014. These are very interesting results based on rule-based compliance with corporate governance codes. From the literature reviewed, only the research conducted in Kenya purports to demonstrate an important relationship between compliance and corporate performance. The results from the UK, Germany, Spain and Pakistan suggest that compliance with corporate governance regulations is not a determinant of corporate performance. Based on the results from multiple jurisdictions, the results from the Kenyan study may be biased and would merit further research.

2.2.11 Sector Performance after Corporate Governance Reforms

It is of major interest to the regulator and investors whether there are differences between different sectors and their performance. In India, Goel (2018) observed that different sectors improved differently in the second reform period of corporate governance reforms. She reports that "specifically, the pharmaceutical and chemical sectors registered a substantial increase and are at the top of the table in the cumulative score". The transport and auto sectors were at the bottom of the list in both reform periods. This may be attributable to the fact that pharmaceutical and chemical companies are often multinational companies and subject to multiple layers of compliance, such as Food and Drug Administration (FDA) clearance in the United States, or the equivalent in other jurisdictions, which is subject to a stringent approval process. Palaniappan and Rao (2015) investigate the effectiveness of corporate governance reforms on companies listed on the NSE stock exchange in India and find that reforms have a significant impact on the financial performance of manufacturing companies. Mansur and Tangl (2018) analyze the impact of corporate governance reforms on the performance of different sectors on the Amman stock exchange in Jordan. They observe that banking, insurance, and service sector companies listed on the Amman stock exchange perform better after the introduction of the corporate governance reforms.

In this dissertation, the analysed sectors represented on the ADX and the DFM are consumer staples, energy, transport and logistics, real estate, construction, services, telecommunication and medical.

2.3 The Role of the OECD in shaping Corporate Governance Principles

The Organisation for Economic Co-operation and Development (OECD) was the first organisation to offer an international code of corporate governance principles which was first published in 1999, revised in 2004, and revised again and endorsed by the G20 in 2015 (Blume, 2017). According to the OECD, corporate governance is: “Procedures and processes according to which an organization is directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among the different participants in the organization – such as the board, managers, shareholders and other stakeholders – and lays down the rules and procedures for decision-making" (OECD, 2015).

As stipulated by the OECD principles, good corporate governance should ensure fairness, transparency, and accountability in the management of corporate resources. Fairness requires that controlling shareholders, the Board of Directors, and management should treat all shareholders fairly and equally. Transparency indicates that the corporate operations should be transparent both in terms of the decision-making process and the disclosure of information. Accountability requires that the Board of Directors and management of the company should be accountable for the company's performance to shareholders as well as other stakeholders. The OECD 2015 guidelines are very influential and have been shaped post the 2009 financial crisis and provide recommendations on corporate governance practices with emphasis on disclosure and transparency, and the responsibilities of the board. The OECD corporate governance principles became the basis of codes developed in many countries and currently have 36 members across the globe. To date, no Arab country is an OECD member. However, the principles set out by the OECD are valid and accepted tools for corporate governance research in emerging economies (Aljifri & Moustafa, 2007; Otman, 2014). The OECD corporate governance principles encompass concepts of corporate governance to ensure the basis for an effective corporate governance framework, shareholder and stakeholder rights and responsibilities including the rights and equitable treatment of shareholders and key ownership functions. Other OECD corporate governance principles focus on the role of institutional investors, stock markets, and intermediaries, disclosure and transparency and responsibilities of the board of directors. In this dissertation, the OECD corporate governance principles (2015) have been operationalized in a questionnaire containing ninety questions to collect responses from respondents representing listed companies in the UAE.

2.3.1 Rights of Shareholders

According to Jesover and Kirkpatrick (2005), the OECD Principles have gained worldwide recognition as an international benchmark for good corporate governance beyond non-OECD countries. Shareholders' rights include a number of rights such as transfer of share ownership, participation in company profits through dividends, obtaining regular updates about the company, voting rights for members of the board of directors, adequate and timely information about company meetings, discussion of the external auditor's report at the annual general meeting, information about the capital structure of the firm, information regarding fundamental corporate changes, rights to inspect documents and rights to sue the corporation for wrongful acts (Gillan, 2006). In the UAE these corporate governance principles are embedded in the Companies Law (2015) and the Disclosure and Transparency Rules. Klapper and Love (2004) emphasize that corporate governance practices are essential in countries with weak legal systems and weak shareholders rights. The legal framework in the UAE has been significantly improved since 2009 through various updates as detailed in the previous chapter. This has increased shareholders' faith in the UAE stock exchanges which can be observed by two factors, higher trading volumes on the stock exchanges as well as increased foreign direct investment. In 2021, one year after the Covid-19 pandemic, traded values on the ADX rose by 407% and foreign direct investment rose to 30% (Mansoor, 2022).

2.3.2 Equitable Treatment of Shareholders

Companies should ensure the equitable and fair treatment of shareholders. All shareholders should have the possibility to obtain effective redress for the violation of their rights (OECD, 2015). Processes and procedures need to be in place ahead of general shareholder meetings that ensure the equitable treatment of all shareholders (Brudney, 1983; Jesover

& Kirkpatrick, 2005). Aragon et al. (2021) conduct research whether weak shareholder protection exacerbates capital fragility and observe that shareholders in emerging markets may not be adequately protected. In the UAE, the 2015 Companies Law provides some protections to minority shareholders, such as the right for minority shareholders to receive the annual audited accounts of the company and the right for minority shareholders to inspect the company's books and records. Foreign investors have long struggled with the 51% local ownership requirement under UAE law and until recently certain stocks were not tradable by foreigners. In 2021, many listed entities in telecommunications and the energy sector obtained internal approvals to raise the ownership limits for non-UAE nationals to own up to 49 % (Nair, 2021). Equitable shareholder rights are most likely achieved by a strong implementation of corporate governance rules and a strong internal control system (Khamis et al., 2020; Ahmed et al., 2020).

2.3.3 Role of Stakeholders in Corporate Governance

The stakeholders' principles focus on the relationship between the corporation and stakeholders in creating value (OECD, 2015). This principle covers stakeholder rights that are established by law, such as mechanisms for employee participation, stakeholders' compensation and legal damages, stakeholders' rights to obtain accurate and timely information, legal protection for whistleblowers, creditor rights in bankruptcy scenarios, and the external auditors' ability to perform their duties and exercise professional care.

Bebchuk and Tallarita (2020) argue in favour of pluralistic stakeholderism where independent weight is given to stakeholder interests, and they are balanced with shareholder interests. Stakeholders are a wide group including employees, creditors, suppliers, and shareholders. Bebchuk et al. (2021) argue that firms should voluntarily choose to be stakeholder-oriented with no expectation to produce material benefits for stakeholders. This concept has been embraced by the wider business community including the Business Roundtable Statement on Corporate Governance and the Davos World Economic Forum Manifesto on Stakeholder Capitalism. The UAE Companies Law does not yet support all the principles set out above, for instance there is not yet a definition of whistleblowing under UAE law and no protections for whistleblowers. The UAE Penal Code imposes obligations on all persons to report crimes. However, this reporting requirement is difficult to enforce under the UAE Penal Code. Jensen and Meckling (1976) find that firms cannot maximise their value without taking into consideration the interests of their stakeholders. The principle of enlightened shareholder value is at the heart of the UK's Companies Law 2006. Section 172 of the UK Companies Law 2006 sets out the director's duty to promote the success of the company for the benefit of its members as a whole, and, in doing so have regard amongst other matters to the likely consequences of any decision in the long term.

2.3.4 Disclosure and Transparency

The corporate governance framework should ensure that timely and accurate disclosure is made on all material matters regarding the corporation, including the financial situation, performance, ownership, and governance of the company (OECD, 2015). SCA's Resolution No. (3) of 2000 concerning Disclosure and Transparency Regulations and the DFM Disclosure and Transparency Rules (2018) are the applicable rules in the UAE to ensure that financial results are appropriately disclosed, disclosure of key shareholders, disclosure of risk factors, disclosure of executives and board members' remuneration, annual audit to be conducted by an external auditor, annual publication of the corporate governance report, preparation of accounts in line with international reporting standards, and disclosure of related party transactions. The disclosure efforts by the listed companies need to be in line with the laws and regulations (Adawi & Rwegasira, 2011). Increased transparency and improved disclosure by listed companies lead to better communication between the company and its stakeholders (Janadi et al., 2012). Companies with lower transparency and disclosure tend to be valued less than companies which accurately disclose to the stock exchanges (Hassan, 2009). One of the key objectives of corporate governance is to improve transparency (Fung, 2014).

2.3.5 Responsibilities of the Board of Directors

The corporate governance framework should ensure the strategic guidance of the company, the effective monitoring of management by the board, and the board's accountability to the company and its shareholders (OECD, 2015). The main responsibilities of the board are to act in the best interest of the company, take into account stakeholder interests, monitor the effectiveness of the company's governance practices, elect, monitor and replace executives, when necessary, oversee the performance of the CEO, set a tone at the top that demonstrates the company's commitment to integrity and legal compliance. The Board needs to manage potential conflicts of interests and supervise the process of disclosure and communication. There is consensus in the literature that the board needs to be well functioning and effective in order to implement corporate governance (Hannoon et al., 2021). In the listed companies in the UAE, the board is responsible for approving and implementing policies and procedures to control the affairs of the company. Implementing policies to ensure compliance with the law and acting in good faith can help reduce the agency problem between principals and agents of the company (Donadelli et al., 2014).

2.4 Challenges and Opportunities for Corporate Governance in the Middle East

Since 2005, the OECD has maintained the MENA-OECD Working Group on Corporate Governance to build a regional knowledge platform on corporate governance that promotes stock market development, enhances market transparency and disclosure, improves the corporate governance of state-owned enterprises and supports women's participation in corporate leadership. The overall objective is the implementation of international standards embodied in the G20/OECD Principles of Corporate Governance which are also the focus of this study in the analysis of the corporate governance index. According to the OECD's annual meeting of the MENA-OECD Working Group on Corporate Governance (2019), the OECD noted that corporate governance priorities in the MENA region are changing with more focus being put on risk management and social responsibilities. The report identified that businesses would play a key role in leading growth in the region in the post-crisis period which is aligned with the stakeholder theory of corporate governance. The OECD also recognized that despite laws being implemented to promote women in leadership positions, corporate boardrooms in the MENA region still need more gender diversity. The OECD further recognized that enhancing transparency and disclosure goes beyond regulations that have been implemented. There is overall consensus that improving transparency and disclosure practices attracts investors. The onus is on the companies to lead the efforts to move towards more robust transparency and disclosure practices. The latter point may be subject to debate as in mature economies disclosure and transparency requirements are set by the stock exchange regulators. In 2021, one-year post-Covid-19, traded values measured by buy and sell volumes on the Abu Dhabi Securities Exchange (ADX) rose by 407% from AED 45 billion in 2020 to AED 739 billion in 2021, driven by domestic and international investment (Mansoor, 2022). Local investors accounted for 70% of the ADX's traded value, while foreign institutional investors accounted for 30% which is the highest percentage of foreign investment in MENA (Mansoor, 2022). This shows that foreign investors have faith in the UAE exchanges and in particular ADX. Previous research demonstrates that foreign investors are willing to pay a premium for well-governed companies (Litvak, 2007).

Prior to the implementation of corporate governance rules in the UAE in 2009, the Hawkamah Institute for Corporate Governance set out the key challenges to implementing corporate governance in its 2007 report. At that time, the Hawkamah Institute identified weak protection of shareholder rights, weak legal environment, and lack of transparency as the key obstacles to implementing corporate governance in the UAE. As set out above, the maturity of the stock exchange is an important factor for listed companies to establish effective corporate governance frameworks. This research will investigate the perceived barriers and enablers of corporate governance by using primary research in form of a questionnaire.

2.5 Limitations of Existing Literature and Identifying Research Gaps in the context of the UAE

The literature review shows that most studies considered focus on the OECD principles of corporate governance and corporate governance mechanisms contained in the 2009 corporate governance rules such as shareholders rights, chairman/CEO duality, disclosure and transparency rules. Many studies investigate the difficulties in implementing corporate governance in the MENA region and the UAE, and recommendations have been made by the OECD and the scientific literature to solve these problems. This dissertation is motivated by the gaps in the existing literature. Firstly, to the researcher's knowledge no previous study has assessed the adoption of corporate governance mechanisms (auditor rotation, insider trading, directors' experience, and internal controls) in the UAE. Secondly, no prior study has investigated the relationship between corporate governance and corporate performance in the UAE qualitatively by conducting interviews with board members and executives. Interviewees were sought from the same pool of respondents that had previously replied to the questionnaire thus ensuring homogeneity of the sample and a high-profile respondents pool. Further, this dissertation will measure corporate performance by using three established measures of corporate performance ROA, ROE and Tobin's Q in line with previous research conducted in the field.

As the literature shows, there have been important improvements in corporate governance in the UAE since 2009 which have significantly improved investor confidence in the stock exchanges (Mansoor, 2022). Yet, reforms are needed. The literature on corporate governance in the UAE is also still limited with sparse publications. This dissertation will make an original contribution by utilizing quantitative and qualitative methods and exploring legal, social, and economic factors. It will also explore the corporate governance mechanisms based on the 2016 corporate governance rules and the perceptions of stakeholders on potential obstacles and enablers of corporate governance quantitatively and qualitatively.

2.6 Conclusion

This chapter presented and discussed an overview of the literature of corporate governance principles and mechanisms and their impact on corporate performance. It identified the relevant literature and the research gap. Further, this chapter discussed the role of the OECD principles of corporate governance and ongoing efforts by the OECD to improve governance in the MENA region. The legal developments that have been made since 2009 in the UAE show that important progress has been made to establish a corporate governance framework pursuant to which companies are managed transparently and fairly. This dissertation intends to build on the prior research by exploring relevant corporate governance mechanisms that have not been discussed in scientific research in the UAE. This dissertation contributes to the literature of corporate governance by filling a research gap and presenting in depth findings on the impact of corporate governance on corporate performance.

Chapter 3: Conceptual Framework and Hypotheses Development

3.1 Introduction

The purpose of this chapter is to present the conceptual framework and development of the hypotheses that form the basis of this dissertation. The literature review in the previous chapter has shown the limitations of the previous research and the research gap concerning selected corporate governance mechanisms for this dissertation. To the researcher's knowledge, there is no previous research using mixed methods that measures how and if corporate governance principles and corporate governance mechanisms impact corporate performance. This chapter is structured as follows. Section 3.2 presents the applicable theories to corporate governance research. Section 3.3 develops the theoretical framework. Section 3.4 presents the conceptualization of the variables and model specifications. Section 3.5 includes the hypotheses development and Section 3.6 presents the conclusion.

3.2 Applicable Theories

Corporate governance has become instrumental for policy making for listed corporations and there is an ongoing debate about the applicable theories (Branston et al., 2006). There is no uniform definition of corporate governance which has led to researchers proposing different theoretical views (Brickley & Zimmerman, 2010). There are four broad theories to explain corporate governance worldwide: (i) Agency Theory; (ii) Stakeholder Theory; (iii) Stewardship Theory and (iv) Sociological Theory (Clarke, 2004). There is no unifying theoretical framework which applies to corporate governance. In the literature, however, mainly three theories are used, the agency theory, the stakeholder theory, and the stewardship theory.

Depending on the country-specific and jurisdictional context, it becomes clear that different theoretical approaches need to be considered when analysing corporate governance. The most popular theoretical framework, the agency theory, led to the evolution of the Anglo-Saxon model of corporate governance which is prevalent in developed economies. The Anglo-Saxon model of corporate governance has been used widely to develop governance codes around the world, including the UAE (Hart, 1995; Pande & Ansari, 2014).

3.2.1 Agency Theory

Agency theory analyzes the principal agent conflict stemming from the agent's representation of the principal. Applied to the corporate governance context, the agent (manager) represents the principal (shareholder). The agency problem is a conflict of interest inherent in any relationship where one party is expected to act in another's best interests. The principal-agent problem occurs when the interests of a principal and agent conflict. Corporate governance can be used to minimize the situations where conflict occurs through solid corporate rules and policies that help the board of directors in curtailing excessive powers in the hands of management. Further, the agency theory focuses on a checks-and-balances type of governance. This includes, for instance, that the CEO and Chairman of the Board are two distinct persons. Vo and Nguyen (2014) point out that the agency theory plays an essential role to explain the functions of the board of directors on corporate performance. Especially, when the size of a listed company grows very large, in diffuse shareholdings such as Coca Cola or Microsoft, shareholders use their effective control when the company is run by the management (agents). This dissertation analyses the conflicting interests occurring between principals and agents in context of the UAE. It is also important to note that since the early 1970s, the purpose of the organization has been questioned and challenged in order to embrace a wider stakeholder group as is possible under the agency theory. Eisenhardt (1989) propounds that the agency theory no longer seems an adequate theory to support the notion of the company as a social enterprise (Eisenhardt, 1989). However, as demonstrated by the literature, the agency theory still remains the most applicable theory to analyze and theorize corporate governance mechanisms. The separation of ownership and control for publicly traded companies can result in an agency problem between management and shareholders. The separation of control and ownership in publicly listed corporations has caused agency problems, and a series of corporate governance mechanisms have been implemented to mitigate them. Corporate governance mechanisms such as information disclosure to the stock exchange, insider trading rules, board member experience, and auditor rotation were introduced to control the agency problem between shareholders and managers to ensure that managers act in the best interest of the shareholders (Homayoun, 2015). The agency theory is applied to analyse the mechanisms of corporate governance under analysis in this dissertation.

3.2.2 Stakeholder Theory

The stakeholder theory states that an organization is impacted by its employees, suppliers, the local community and creditors. It acknowledges that officers and directors should take into consideration the interests of all stakeholders in the governance process, thus addressing ethics and values in managing an organization. In practice, this theory is well suited to large corporations that have a profound impact on the community, and which need to discharge their responsibility in more sectors of the society rather than focusing solely on their shareholders (Dao & Tran, 2017). Since 2019, the stakeholder theory has had a bandwagon of support from business leaders that consider the stakeholder theory a solution to address a company's accountability and role within society. The OECD principles of corporate governance state that companies should consider their stakeholders, not only their immediate shareholders. The OECD has extensively published on negative corporate externalities, i.e., the harm that a corporation does to a third party. For example, power plants may emit mercury, but not pay for the damage that mercury causes to those who live near the plant. To fulfill its promise for improving human wellbeing, the stakeholder theory can be applied to develop regulatory reforms (Biglan, 2011; Bebchuk & Tallarita, 2020; Bebchuk et al., 2021). The stakeholder theory will be applied to analyse the principles of corporate governance under analysis in this dissertation in response to results obtained from analyzing the questionnaire. Agency theory and stakeholder theory are two important perspectives that provide significant insight into corporate governance mechanisms, such as the size of the board of directors, independence and skills of board members, as well as CEO characteristics.

3.3 Theoretical Framework of Research

The theoretical framework for this dissertation includes the agency theory to support the corporate governance mechanisms and the stakeholder theory to support the corporate governance principles. Based on the above discussion, it is clear that a comprehensive theoretical framework is required to support the analysis of corporate governance principles and mechanisms. The agency theory ensures that mechanisms are put in place to curtail excessive powers of management. According to the agency theory, mechanisms such as auditor rotation, insider trading rules, and internal controls assist in the process to monitor management which may lead to better corporate performance. The stakeholder theory suggests that company management should consider the different interests of the stakeholders of the company. Bebchuk and Tallarita (2020) advocate that the stakeholder theory should be adopted for ethical and moral reasons without an expectation of material gains for the company. The OECD Principles of Corporate Governance encompassing shareholders' rights, the equitable treatment of shareholders, the role of stakeholders in corporate governance, disclosure and transparency obligations and the responsibilities of the board of directors are based on the stakeholder theory. Figure 2 below sets out the theoretical and conceptual framework. The theoretical and conceptual framework (Figure 2), as conceived by Otman (2014) and updated by the researcher, illustrates the link between the theories, corporate governance principles and mechanisms, the control variables and the dependent variables.

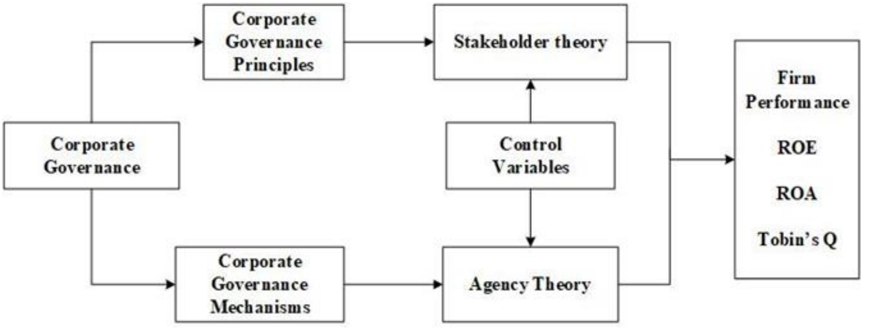

Figure 2: Theoretical and Conceptual Framework

3.4 Conceptualisation of the Variables and Model Specifications

Corporate performance is measured by the dependent variables ROA, ROE and Tobin's Q. Two models are set up to scientifically analyze the impact of corporate governance principles and mechanisms respectively on corporate performance.

The first model tests the relationship between the corporate governance principles results obtained from the questionnaire and corporate performance. The second model tests the relationship between corporate governance mechanisms obtained from the secondary data analysis and corporate performance. The independent variables are the corporate governance principles (questionnaire results) in the first model and the corporate governance mechanisms (secondary data analysis) in the second model. Corporate performance is the dependent variable in both models. Combining the two models with qualitative research is designed to provide an in-depth and detailed understanding which allows for deeper engagement with the research topic as the researcher is able to probe and ask follow-up questions to the respondents. Here, one assumption involves the data and its value. It is assumed that the data collected from the respondents during live interviews would be relevant to the hypotheses. Qualitative data collection allows the researcher to observe the respondents in their current settings, thereby understanding their perspectives and goals more clearly (Bloomberg & Volpe, 2012).

3.4.1 Description of First Model

The first model investigates the effect of the corporate governance principles on corporate performance. Table 3.1 presents the independent variables and their measures. The first model uses cross-sectional data of 2020. Cross-sectional data is a type of data collected by observing many subjects (such as individuals, firms, countries, or regions) at one point of time. The model is estimated as follows:

$$\text{Corporate performance} = \boldsymbol{\beta 0} + \boldsymbol{\beta 1}\ (\mathbf{CGI}) + \boldsymbol{\beta 2}\ (\mathbf{SIZE}) + \boldsymbol{\beta 3}\ (\mathbf{LEVG}) + \boldsymbol{\varepsilon i}$$

Table 3.1: Independent Variables of the First Model

Symbol	Variable Name	Descriptions and Measures
CGI	Corporate governance principles	Rights of shareholders Equitable treatment of shareholders Role of stakeholders in corporate governance Disclosure and transparency Board responsibilites
SIZE		Firm Size
LEVG		Leverage

3.4.2 Description of Second Model

The second model investigates the effect of corporate governance mechanisms on corporate performance. Firm size and leverage are included as control variables. Five corporate governance mechanisms and two combinations of mechanisms were used: Board member experience, gender, insider trading, auditor rotation, internal controls, auditor rotation*insider trading and internal control *gender. In addition, the following sector specific analysis was carried out: sector*board experience, sector* insider trading, sector*size and sector*leverage.

The second model relies on data from 2017-2020 and a mixed linear effects model was applied. According to Kalaian and Raudenbush (1996), the mixed effects linear model is appropriate to a) allow for different subsets, (b) incorporate multiple effects per study and (c) treat each effect as a realization from a population of possible effect sizes. The mixed linear effects model allows for a more detailed analysis than the pooled OLS regression model that treats a dataset like cross-sectional data and disregards that the data has time and individual dimensions. The mixed linear effects model allows for a year-by-year observation and distinguishes between the individual dimensions such as industry sectors, consumer staples and food and beverage, energy, transport and logistics, real estate, construction, services, telecommunication and medical which were coded in the data set. The model is estimated as follows and as further set out in Table 3.2 below:

Corporate performance = $\boldsymbol{\beta 0}$ + $\boldsymbol{\beta 1}$ (BEXP) + $\boldsymbol{\beta 2}$ (GEN) + $\boldsymbol{\beta}$3 (ITRAD) + $\boldsymbol{\beta}$4 (AUDROT) + $\boldsymbol{\beta}$5 (INTCON) + $\boldsymbol{\beta 6}$ (SIZE) + $\boldsymbol{\beta}$7 (**LEVG**) + $\boldsymbol{\beta}$8 (SECTOR) + $\boldsymbol{\beta}$9 (TIME) + $\boldsymbol{\beta}$10 (AUDROT* INTRAD) + $\boldsymbol{\beta}$11 (INTCON*GEN) + $\boldsymbol{\beta}$12 (SECTOR*BEXP) + $\boldsymbol{\beta}$13 (SECTOR*INTRAD) + $\boldsymbol{\beta}$14 (SECTOR*LOGASSETS) + $\boldsymbol{\beta}$15 (SECTOR*LEVG) + $\boldsymbol{\varepsilon i}$

Table 3.2: Independent Variables of the Second Model

Symbol	Variable Name	Descriptions	Measures
BEXP	Board experience	Sector experience of members of the board	Percentage of board members on relevant board with sector experience
GEN	Gender	Presence of female board members	Percentage of women on the board
ITRAD	Insider Trading	Legal Insider Trading as disclosed in corporate governance Reports	Percentage of insider trading based on number of trades by the board/management and connected persons
AUDROT	Auditor Rotation as per the law	Auditor rotation every three years or more frequently	Percentage of companies having rotated the auditor after three years of implementing Companies Law 2015
INTCON	Internal Control	Presence or Absence of an internal control function in the company	Dummy variable for presence or absence of internal control mechanisms
SIZE	Firm Size	Log10 of total assets	Natural logarithm of firm's total assets
LEVG	Leverage	Firm's leverage	Measured by ratio of total debt to total assets
SECTOR	Sector	Industry Sector	Listed firm's industry sector
TIME	Time	Time period selected	Measures data from 2017 to 2020

3.4.3 Measurements of the Dependent Variable (Corporate Performance)

Most studies on corporate governance apply accounting-based performance measures, such as ROE and ROA, in addition to market-based measures, such as Tobin's Q, as proxies for corporate performance (Otman, 2014; Alkuwaiti, 2019). Mokhtar and Muda (2012) conduct a comparative study on performance measures and attributes between ISO and non-ISO certified companies utilizing eight different performance measures ROA, ROE, Tobin's Q, Working Capital (WC), Return on Sales (ROS), Cash Flow (CF), and Economic Value Added (EVA). They report that there is no agreed consensus on which performance measure is the most appropriate.

3.4.4 Return on Equity (ROE)

ROE is a ratio that provides investors with insight into how efficiently a company is run. It measures the profitability of the firm in relation to stockholders' equity. The higher the ROE, the more efficient a company's management is at generating growth. ROE is calculated as the net income divided by total equity multiplied by one hundred (Bloomberg, 2022):

$$\mathbf{ROE} = \frac{Net\ income}{Total\ equity} * 100$$

3.4.5 Return on Assets (ROA)

ROA refers to a financial ratio that indicates how profitable a firm is in relation to its total assets. ROA is used to determine how efficiently a company uses its assets to generate a profit. ROA is calculated as the net income divided by total assets multiplied by one hundred (Bloomberg, 2022):

$$\mathbf{ROA} = \frac{Net\ income}{Total\ assets} * 100$$

3.4.6 Tobin's Q

Tobin's Q is the market value of a security divided by its asset replacement cost. Tobin and Brainard (1977) theorized that a securities' market value divided by its replacement cost should be in equilibrium around 1. In contrast, a ratio below 1 is likely indicative of negative growth expectations. Tobin's Q is calculated by adding market capitalization, total liabilities, preferred equity, and minority interests divided by total assets (Bloomberg, 2022):

$$\textbf{Tobin's Q} = \frac{Market\ capitalisation + total\ liabilities + preferred\ equity + minority\ interests}{total\ assets}$$

3.4.7 Control Variables and their Measurements

Control variables are included in regression analysis and mixed linear effects models to estimate the causal effect of a treatment on an outcome by controlling for variables that are distinct. Control variables could strongly influence the results if they were not held constant to test the relationship of the dependent variables on the independent variables. The use of control variables is now a hallmark of sophisticated research (Gordon, 1968).

3.4.7.1 Leverage

Explaining the role of leverage in a firms' performance has been researched by economists since the 1950s. A firm's leverage is measured by the ratio of total debt to total assets (LEVG). Modigliani and Miller (1958) argue in their influential research that a firm's value is unaffected by its capital structure in a perfect market. However, the Modigliani and Miller model (1963) uses debt in the company's capital structure and demonstrates how debt can increase the firm's value when interest expenses are tax deductible. However, in the UAE, interest expenses are not tax deductible. Therefore, one view is that a firm's leverage (LEVG) influences a company's performance in the UAE negatively, as "issuing debt in GCC is not motivated by tax deduction but by need" (Zeitun, 2014). Highly leveraged companies are perceived to have greater risk of default (Ashbaugh-Skaife et al., 2009) and a higher level of debt increases the risk of bankruptcy.

Fargher et al. (2001) find that debt covenant violations are associated with significant increases in both systematic and unsystematic risks. They also show that the change in unsystematic risk associated with technical default is a significant predictor of future exchange delisting, even after controlling for other factors typically associated with increasing financial distress. Other research finds that financial leverage positively affects corporate performance. Dessí and Robertson (2003) explain firms with low growth potential depend on borrowing in order to invest this money in profitable projects. Further, there is important literature which suggests that debt reduces the agency problem. By issuing debt, the company is obliged to make periodic payments of interest and principal. These periodic payments reduce the amount of free cash flow. Further, the use of debt also increases the monitoring of managers' activities via the bank. Frierman and Viswanath (1994) contend that debt can be used to reduce the tendency towards excessive risk taking in a firm that includes debt in its capital structure. Financial leverage is measured with the debt-to-equity ratio. It is expressed as: total liabilities/ total assets.

3.4.7.2 Firm Size

Firm size is an important control variable. The literature contains contrasting views whether large firm size is positively or negatively associated with performance. Burke et al. (1986) contend that larger firms more often adopt more comprehensive governance principles and thus attract more attention from stakeholders. Mura (2007) explains that, due to economies of scale, larger firms are expected to be more profitable. Alkuwaiti (2019) states that larger firms can access cheaper resources and funds which in turn should increase firm profitability. On the other hand, other studies find that firm size is negatively associated with corporate performance. Jensen and Meckling (1976) find that larger boards which are common in larger firms lead to greater agency costs. AlAwadhi (2018) identifies a negative impact of UAE firms' size on their performance. This control variable is measured by the natural logarithm of the company's total assets.

3.5 Hypotheses Development

This section sets out the hypotheses that have been developed based on the conceptual framework. Seven research hypotheses have been developed to test the relationship between corporate governance practice and corporate performance. Research Hypotheses that test corporate governance mechanisms are analyzed pursuant to the agency theory. The stakeholder theory is used to analyze corporate governance principles as the stakeholder theory focuses on the effect of the corporate activity on all identifiable stakeholders of the corporation.

Hypotheses 1-5 (H1, H2, H3, H4 and H5) will be tested and relate to the agency theory which suggests that corporate governance mechanisms can minimize the principal-agent conflict. These hypotheses propose that board members' occupational experience, gender representation, legal insider trading, changing the auditor periodically and solid internal controls (corporate governance mechanisms) lead to better corporate performance. Therefore, it is assumed that there is a positive relationship between corporate governance mechanisms and corporate performance. H6 relates to compliance and the corporate governance principles that relate to the stakeholder theory. H6 suggests that compliance has a positive effect on corporate performance. H7 investigates compliance amongst sectors of the listed companies and suggests that there are differences amongst the sectors.

3.5.1 Hypothesis of Board Members Relevant Occupational Experience and Corporate Performance

The first hypothesis of the dissertation relates to the board members' occupational experience and its effect on corporate performance. The corporate governance reports from 2017 to 2020 suggest that most of the directors of the listed companies are generalists. In view of this consideration, the relationship of relevant occupational experience on corporate performance was assessed both qualitatively and quantitatively. There is evidence that occupational and functional backgrounds of the board members is a valuable tool to measure performance (Goodstein et al., 1994; Kroszner & Strahan, 2001; Van Ness et al., 2010; Brown, 2006). The literature also recognizes that there is not necessarily a direct linear relationship between occupational experience and corporate performance as directors' short-term goals can impact their decision making (Gupta and Bailey, 2001). From the relevant studies presented in this study, the first hypothesis is formulated as follows:

H_1: There is a positive relationship between the percentage of board members who have relevant occupational experience and corporate performance.

3.5.2 Hypothesis of Gender and Corporate Performance

The second hypothesis relates to the role of gender in impacting corporate performance. This hypothesis was assessed both qualitatively and quantitatively. The existing literature on this topic is extensive but nonconclusive. Some of the literature reviewed finds a positive impact of the presence of female board members on corporate performance (Lückerath-Rovers, 2013). Hussein and Kiwia (2009) find no positive and significant relationship between female board members and corporate performance. Based on the relevant studies discussed in this study, the second hypothesis is formulated as follows:

H_2: There is a positive relationship between gender representation of board members and the UAE listed corporate performance.

3.5.3 Hypothesis of Insider Trading and Corporate Performance

Monitoring and reporting insider trading transparently ensures that no trades take place for insiders during a trading window closure. As put forward by the agency theory, the monitoring function of insider trading can mitigate the agency problem. The existing research shows that there can be a positive link between legal insider trading and corporate performance (Jeng et al., 2003; Ting, 2013; Cline et al., 2017; Ahmed et al., 2020). Based on the relevant studies discussed in this study, the third hypothesis is formulated as follows:

H_3: There is a positive relationship between insider trading and the UAE listed corporate performance.

3.5.4 Hypothesis of Auditor Rotation and Corporate Performance

The fourth hypothesis concerns the effect of auditor rotation on corporate performance. This hypothesis was assessed both qualitatively and quantitatively. According to the agency theory, auditor rotation can assist the shareholders in monitoring management activities, such as exacerbated reliance on an external auditor that has been retained for many years and thus reduce the potential danger from withholding information or misrepresenting information in the annual reports. Catanach and Walker

(1999) assess arguments for and against mandatory auditor rotation and suggest that audit quality is deemed to be a function of performance. They also assess to what extent auditor tenure impacts performance. However, they do not find conclusive evidence that auditor rotation impacts performance positively. Hai (2019) finds that the rotation of the auditors has an impact on the motives and quality of the audit. Litt et al. (2014) find evidence of lower financial reporting quality following an auditor change. Rotating the auditor has an essential function in mitigating the agency problem (Islam et al., 2010). Based on the relevant studies discussed in this study, the fourth hypothesis is formulated as follows:

H_4: Changing the auditor periodically has a positive impact on the UAE listed corporate performance

3.5.5 Hypothesis of Internal Controls and Corporate Performance

The fifth hypothesis measures the impact of internal controls on corporate performance. Using data from the corporate governance reports and the interviews, the hypothesis was assessed both qualitatively and quantitatively. It is generally assumed that the credibility of a firm's disclosure is enhanced when there are measurable policies and procedures in place led by an independent department/function, the internal control department or an officer that reports directly to the board. With the passage of the corporate governance rules 2016, listed firms must include a statement about the quality of their internal control system in the corporate governance report. In accordance with the agency theory, a solid internal control system mitigates the agency problem and can enhance corporate performance (Teru et al., 2017; Alabdullah, 2021). This dissertation considers the internal control system as presented in the listed companies' corporate governance reports. Based on the relevant studies discussed in this study, the fifth hypothesis is formulated as follows:

H_5: Solid internal controls through detailed regulations and procedures for internal control have a positive impact on the UAE listed corporate performance

3.5.6 Hypothesis of Compliance and Corporate Performance

The sixth hypothesis will be tested and interpreted pursuant to the stakeholder theory. The stakeholder theory suggests that companies act taking into consideration the needs of all stakeholders. Pursuant to the latest OECD report in the MENA region (2019), corporate governance improves interactions amongst management, with the board, the company's shareholders and other stakeholders. Literature exists that supports that compliance has a positive impact on corporate performance, yet the same researchers also find that high levels of compliance can have a negative impact (Tariq & Abbas, 2013). Padgett and Shabbir (2005) argue that compliance with the law is more than a box-ticking exercise but makes a real change to the governance of listed companies for which investors are willing to pay a premium. Bebchuk and Tallarita (2020) propose that firms consider the interests of stakeholders regardless of whether it has an impact on corporate performance. Based on the relevant studies discussed in this study, the so sixth hypothesis is formulated as follows:

H_6: Compliance has a positive impact on corporate performance

3.5.7 Hypothesis of Sectors and Corporate Performance

There are differences in compliance with corporate governance rules amongst industry sectors in the UAE listed companies. The corporate governance reports are used for this analysis. This dissertation investigates whether differences in compliance amongst sectors exist based certain governance mechanisms selected in Model 2. The literature reviewed suggests that differences exist in how different sectors react to corporate governance reforms (Palaniappan & Rao, 2015; Mansur & Tangl, 2018; Goel, 2018). In this dissertation, the 51 selected companies are coded in accordance with their respective sector.

H_7: There are differences in compliance amongst industry sectors in the UAE based on the corporate governance reports.

3.6 Conclusion

This chapter presented the main theories applicable to this dissertation. The theoretical and conceptual framework consists of the corporate governance principles, the corporate governance mechanisms, the agency theory and the stakeholder theory and their impact on corporate performance. This chapter also presented the hypotheses development and the research gap.

Chapter 4: Research Methodology

4.1 Introduction

This chapter presents the research methodology utilized in this dissertation and its contribution to the dissertation's objectives. This chapter discusses the research methodology used to test the study hypotheses. Both quantitative and qualitative research methods have been used to analyse the variables in the hypotheses of the dissertation. The chapter is set up as follows. Section 4.2 identifies the research paradigm. Section 4.3 presents the research methodology including the data collection methods utilized for the dissertation (questionnaire, interviews and secondary data analysis). Section 4.4 presents the conclusion.

4.2 Research Paradigm

A research paradigm is a set of common beliefs and agreements shared amongst scientists about how the research should be understood and assessed (Kuhn, 1962; Mingers & Brocklesby, 1997; Shah & Abdullah, 2013; Makombe, 2017). The research paradigm should be constructed before the research design is commenced. Research paradigm is defined as "an integrated cluster of substantive concepts, variables and problems attached with corresponding methodological approaches and tools" (Kuhn, 1962). There are three questions that the researcher needs to ask before beginning the actual research:

1 The ontological inquiry: What is the reality that the researcher wants to explore and know?

2 The epistemological inquiry: What is it (the ontology) that is available to explore and how to reach it?

3 The methodological inquiry: What are the methods and procedures that will make this inquiry possible?

All of the three above questions are part of the research paradigm. The paradigm includes the methodology, approach, ontology, and epistemology to conduct the research. In one paradigm there can be several methodologies and the methodologies are approaches to research that help conduct a systematic research. Positivist paradigms relate to scientific research whereas interpretive paradigms are suitable for the qualitative research method. The positivist paradigm focuses on an objective description of facts and observations. The positivist research approach is generally quantitative and deductive.

Qualitative research is the systematic inquiry into social phenomena which assists in answering why a particular phenomenon has occurred. The process of qualitative research is inductive in that the researcher builds abstractions, concepts, hypotheses, and theories from details. Most qualitative research emerges from the interpretive paradigm. In many doctoral studies, the scientific method is the predominant approach to research, with little attention given to qualitative approaches of social inquiry. Morgan (2007), who is a supporter of mixed methods research, argues that instead of focusing on the differences between qualitative and quantitative methods, such as opposing research paradigms, it will be more valuable to look for ties or themes that connect quantitative and qualitative research, and look for the benefits of blending quantitative and qualitative methods. The term conceptual framework is more commonly used in qualitative research, while the term theoretical model usually appears as a tool in quantitative research. Both the conceptual framework and the theoretical model refer to the key theories, models and ideas that exist in relation to the topic under analysis in this dissertation.

As discussed in Chapter 2, the main theories applicable to this research are the agency and the stakeholder theories. The agency theory is used to analyse the corporate governance mechanisms whilst the stakeholder theory is used to analyse the corporate governance principles. The research paradigm provides guidance to structuring the research questions and in turn the research questions that form the bedrock of this dissertation. This dissertation's research paradigm draws heavily from US and UK studies, case law, the 2015 OECD Principles of Corporate Governance, the 2016 corporate governance rules and previous and subsequent corporate governance rules in the UAE.

4.3 Research Methodologies

The research methodology can be quantitative, qualitative or mixed methods (both quantitative and qualitative) and within each of these methodologies there are several research techniques. For the purpose of this dissertation and investigation of the research questions, a mixed-methods methodology is most suitable to provide an in-depth analysis founded on scientific principles. Alkuwaiti (2019) relied solely on secondary analysis for her dissertation. Alagha (2016) and Otman (2014) both conducted questionnaires. After reviewing the secondary sources and results of previous questionnaires, there is a research gap, especially when dealing with the new legislation and theoretical developments in the field of corporate governance. Alagha and Otman relied on the 2009 Code which was at a time when corporate governance was still in its infancy in the UAE. Alkuwaiti relies on the 2016 corporate governance rules, but she did not filter out the banks, financial institutions, and insurance companies which were outside the remit of the 2016 corporate governance rules. Therefore, her findings benefit from being further investigated and refined as the sample was not adjusted to the requirements of the 2016 corporate governance rules.

Triangulation refers to the use of multiple research methods to develop a comprehensive understanding of the phenomena (Jogulu & Pansiri, 2011). Jogulu and Pansiri indicate that triangulation is a research strategy that can enhance the validity and credibility of the findings. Mixed methods research has a number of advantages. Combining qualitative with quantitative research means the study will benefit from detailed, contextualized insights offered by the qualitative data and the generalizable, externally valid results offered by the quantitative data.

According to Rossman and Wilson (1985), mixed methods research has four distinct purposes: corroboration, elaboration, development, and initiation. Corroboration refers to the classical triangulation where different methods are used to test the results for consistency. Elaboration refers to enrichment of the study's findings thus offering perspectives which would not be achieved if only one research method was used. Development refers to the corroboration of the results generated by one method which are then validated or corroborated by the other research method. Initiation suggests that results obtained from one research method can unveil a paradox or contradiction leading to novel ideas. By employing the qualitative and quantitative methods, this dissertation yields greater richness in data and findings were compared through different instruments (quantitative and qualitative) which enabled cross check results. Further, statistical results were further tested qualitatively with descriptions and explanations that were obtained from the interviewees. As a result, the researcher could make inferences confidently (Jogulu & Pansiri, 2011). Initially, as part of the quantitative research, validity and reliability were tested under a positivist research paradigm to ensure the objectivity of the quantitative analysis.

This research uses quantitative and qualitative methods of data gathering. The quantitative research method applies to the questionnaire and secondary data collection and the qualitative research method applies to the interviews. Quantitative research emphasizes "the measurement and analysis of causal relationships between variables" (Denzin & Lincoln, 1995). The quantitative approach develops research reliability by objectivity. In line with the objectives of this dissertation, a positivist deductive approach is applied to the questionnaire and secondary data analysis in the two quantitative models under analysis.

The quantitative research findings can be confirming explanatory, and predictive. The questionnaire technique follows a deductive approach (Neuman, 1996). This dissertation adopts the quantitative method to analyse financial panel data (longitudinal) and the primary data collected from the questionnaire. Sample selection criteria is limited to companies listed on either DFM or ADX from 2017 to 2020. The reliability and validity of the data is ensured by using the appropriate statistical tests.

4.3.1 Questionnaire (Quantitative)

The questionnaire was used to collect input in relation to the OECD corporate governance principles as applied in the UAE and supplemented by relevant questions drawing from the corporate governance rules. A number of studies conducted on corporate governance employ a questionnaire (Otman, 2014; Alagha, 2016). The structured questionnaire employs a five-point Likert scale. In total, there were 134 companies listed on DFM and ADX during the research period. Insurance, banks and financial companies amount to 70 listed institutions. After subtracting the 70 banks, iinsurance, and financial companies and companies with incomplete data 51 target companies remain which form the population of this dissertation. All target companies received the questionnaire, either to their Investor Relations officer (mandatory function for listed companies) for forwarding to an executive or directly to the executives. The respondents include executives, board members, investment officers, lawyers and accountants. This respondent group is similar to sample groups that participated in prior research on corporate governance (Otman, 2014; Alagha, 2016).

4.3.2 Questionnaire Instrument Design

The questionnaire was developed based on pre-existing survey instruments in corporate governance that have tested corporate governance standards with high reliability and validity (Otman, 2014). The questionnaire was updated to align with the 2016 corporate governance rules in relation to insider trading, auditor rotation and sector experience of directors. The questionnaire was then divided into five sections with ninety questions in total covering: a) concepts of corporate governance; b) OECD Principles of Corporate Governance; c) obstacles to implementation; d) enablers of corporate governance practice in the UAE; and e) demographic information of participants. Each corporate governance principle measured has several indicators: Principle 1 The Concept of Corporate Governance: (3 indicators); Principle 2 Right of Shareholders: (11 indicators); Principle 3 Equitable Treatment of Shareholders: (6 indicators); Principle 4 Role of Stakeholders in Corporate Governance: (7 indicators); Principle 5 Disclosure and Transparency: (13 indicators); Principle 6 Responsibility of the Board of Directors: (16 indicators); Principle 7 Obstacles that affect corporate governance: (15 indicators); Enablers of corporate governance: (19 indicators).

The questionnaire reflects the legislative updates to the corporate governance principles in the UAE and utilises a five-point Likert scale (‘strongly disagree’, ‘disagree’, ‘neutral’, ‘agree’, ‘strongly agree’) and does not contain open-ended questions. In constructing a questionnaire, open and closed format questions can be used. Whether open or closed ended questions are appropriate, depends on various factors: purpose of the questionnaire, data analysis tools, proposed format for communicating findings. As this dissertation pursues mixed-methods research, and to ensure scientifically reliable results, the questionnaire was structured with closed-ended questions, with each question requiring a rating from 1-5 as set out above.

Results will be presented in Chapter 5 principle by principle. The more indicators used to measure a principle, the stronger is the scale (Pelz, 2020). Descriptive statistics is an appropriate technique for questionnaires. The normality of the data population also needs to be tested so that appropriate statistical methods can be used.

4.3.3 Questionnaire Pilot Study

The questionnaire was cross reviewed by the Advisor and the Co-Advisor to ensure it was comprehensive, up-to-date, and clear. Based on their feedback, the questionnaire was revised. The researcher conducted the pilot questionnaire gathering data from 34 respondents from the same target population that completed the final questionnaire and evaluated the data statistically to confirm the survey's reliability and validity. In research there are four types of validity that need to be supported. Construct validity refers to whether the questionnaire measures the concept that it is intended to measure. Content validity attests whether the questionnaire is representative of what it aims to measure. Face validity assesses whether the content of the questionnaire is suitable for tis aims and criterion validity assesses whether the results accurately measure the outcome they are designed to measure. The questions used in the questionnaire are succinct and to the point. The results obtained by the pilot study indicated that the questionnaire instrument is valid. The pilot study questionnaire was submitted from the university email with a cover letter explaining the research objectives. The cover letter explained that all results would be treated confidentially and that participation in the study would be voluntary and unpaid. The pilot study process took place from May to July 2020.

4.3.4 Construction of Corporate Governance Index

In order to measure the quality of corporate governance for the firms, the researcher constructed a Corporate Governance Index based on both internal and external mechanisms of corporate governance. The index encompasses the G20/OECD Principles of Corporate Governance (the "OECD Principles"). The Organisation for Economic Cooperation and Development ("OECD") is an intergovernmental economic organisation with thirty-eight member countries, founded in 1961 to stimulate economic progress and world trade. The OECD Principles help policy makers evaluate and improve the legal, regulatory, and institutional framework for corporate governance. The OECD Principles were first published in 1999 and have since become an international benchmark. In 2015, the updated Principles were endorsed by the OECD Council and the G20 Leaders Summit. The six OECD Principles are:

1) Ensuring the basis of an effective corporate governance framework
2) The rights of shareholders and key ownership functions
3) The equitable treatment of shareholders
4) The role of stakeholders in corporate governance
5) Disclosure and transparency
6) The responsibilities of the board

The questionnaire was structured in line with the OECD Principles for Corporate Governance (2015) (presented in detail in the previous chapter), covering the following:

1) The concepts of Corporate Governance: (3 indicators);
2) Right of Shareholders: (11 indicators);
3) Equitable Treatment of Shareholders: (6 indicators);
4) Role of Stakeholders in Corporate Governance: (7 indicators);
5) Disclosure and Transparency: (13 indicators);
6) The Responsibilities of the Board of Directors: (16 indicators);
7) Obstacles that affect corporate governance: (15 indicators);
8) Enablers of corporate governance: (19 indicators).

Under each section, closed ended questions were used as this is the most appropriate question format for Likert scale questionnaires (Taylor-Powell, 1998). The OECD Principles are widely used in scientific corporate governance research (Otman, 2014; Alagha, 2016). The questionnaire in this study (Appendix A) builds on previous research and uses additional indicators taken from the 2016 corporate governance rules to allow for a more granular view of how the corporate governance framework is perceived in the UAE. The 90 questions were coded 1 to 5 depending on respondents' perceptions to what extent they agree or disagree with a statement. The sub-indices were created by computing the total items in each sub-index for each participant. Finally, the mean of the respondents' answers for each company was determined. The index includes respondents' input in relation to all sub-indices. The CGI was computed using the formula below as previously tested by Otman (2014):

CGI = (rights of shareholders + equal treatment of shareholders + role of the stakeholder + disclosure and transparency + responsibilities of the board).

4.3.5 Reliability Testing and Statistical Technique

Cronbach's alpha is a common test score reliability value which measures internal consistency and assesses how closely related a set of items are as a group (Taber, 2018). Cronbach's alpha ranges from 0 to 1 and the larger the reliability coefficient, the more repeatable or reliable are the test scores. Durham et al. (2017) suggest taking 0.670 as the minimum acceptable alpha value although some studies recommend to not use Cronbach's alpha unconditionally (Sijtsma, 2009). This dissertation uses Cronbach's alpha to measure the reliability of the responses to the questionnaire. Reliability tests were carried out for: Principle 1 The Concept of Corporate Governance: (3 indicators); Principle 2 Right of Shareholders: (11 indicators); Principle 3 Equitable Treatment of Shareholders: (6 indicators); Principle 4 Role of Stakeholders in Corporate Governance: (7 indicators); Principle 5 Disclosure and Transparency: (13 indicators); Principle 6 Responsibility of the Board of Directors: (16 indicators); Principle 7 Obstacles that affect corporate governance: (15 indicators); Enablers of corporate governance: (19 indicators). The main statistical technique to be applied for the first model is descriptive statistics.

There are two types of statistical techniques: parametric and non-parametric. Parametric statistics are used with continuous, interval data that shows equality of intervals or differences. Non-parametric methods are applied to ordinal data such as Likert scale data involving higher or lower ranking data such as a scale from 1-5. Non-parametric statistics is based on either being distribution-free or having a specified distribution but with the distribution parameters unspecified. In the first model, corporate governance principles from the questionnaire are used as independent variables and corporate performance is the dependent variable. The Box-Cox transformation process (Box & Cox, 1964) is designed to determine an optimal transformation of Y with the aim to satisfy the assumptions of the linear regression model. Often, an appropriate transformation of Y both stabilizes the variance and makes the deviations around the model more normally distributed. The basic assumption of Box-Cox is data must be positive with no negative values. In the second model, corporate governance mechanisms (board member experience, gender, insider trading, auditor rotation) are independent variables, while corporate performance is a dependent variable. By including dummy variables in a regression model, the researcher needs to be cautious of the dummy variable trap. The dummy variable trap is a scenario in which the independent variables are multicollinear, which means two or more variables are highly correlated. The degree of linear association between two variables ranges from +1 to -1, where a correlation of ±1 means that there is a linear relationship between the variables (Maxwell et al., 2004).

A linear mixed-effects model was applied to Model 2. In the literature, linear mixed-effects models are also described as multilevel models (Goldstein, 2010) or hierarchical linear models (Raudenbush, 2009). Linear mixed-effects models play an important role in statistical analysis and offer many advantages over more traditional analyses, such as standard linear models. Linear mixed-effects models allow between groups factors as well as a within groups subjects (repeated measures) and are an extension of the multiple regression (Maxwell et al., 2004). Linear mixed-effects models make several assumptions, in particular about the distribution of residual and random effects (Schielzeth et al., 2020). However, violations of these assumptions are common in real datasets, and it is not always clear to what extent these violations matter to accurate and unbiased estimations. Schielzeth et al. (2020) evaluate the effects of skewed and heteroscedastic residual variances and find that linear mixed effect models are usually robust to the violation of assumptions. Skrondal (2000) and LeBeau et al. (2018)

use Monte Carlo simulation to explore the relationship between assumption violations and model performance. Monte Carlo simulation, also known as Monte Carlo method, is a computational algorithm that predicts the probability of different outcomes when the intervention of random variables is present. The exploratory data analyses with simulations confirmed the overall robustness of the linear mixed-effects model. Recent research suggests that Gaussian models are remarkably robust to non-normality over a wide range of conditions, meaning that P-values remain fairly reliable except for data with influential outliers (Knief & Forstmeier, 2020). In scientific literature, linear models are typically said to be robust to the violation of the normality assumption when it comes to hypothesis testing and parameter estimation as long as outliers are handled properly (Warton et al., 2016), yet authors seem to differ notably in their interpretation on how serious we should take the issue of non-normality. Based on the literature, this dissertation argues that violating the normality assumption in linear-mixed models bears risks that are limited and manageable. A P-value of less than 0.05 is statistically significant. It indicates strong evidence against the null hypothesis, as there is less than five percent probability the null is correct. Regression coefficients signify whether there is a positive or negative correlation between each independent variable and the dependent variable. The application of the mixed effects model is appropriate for the data and produces statistically significant results. The model includes both fixed effects which are model components used to define systematic relationships such as changes over time from 2017 to 2020.

4.3.6 Ethical Considerations

There are ethical considerations for all research projects regardless of the methodologies used and ethical issues need to be considered during all phases of the study (Saunders et al., 2012). Particularly, in studies that involve primary data collection, there are ethical issues which the researcher will need to address. This dissertation abides by the rules and guidelines outlined in the UAEU's DBA Policy on Ethics.

In studies involving primary collection of data, for example by way of questionnaire or interview, voluntary participation of respondents in the research is important. Moreover, participants have the right to withdraw from the study at any stage if they wish to do so. Respondents should participate on the basis of informed consent. The principle of informed consent involves the researcher providing sufficient information and assurance about taking part so that respondents understand the implications of participation and to reach a fully informed, considered and freely given decision about whether or not to do so, without the exercise of any pressure or coercion. Both the questionnaire and the semi-structured interview obtained consent from the UAEU's Ethics Office in April 2020. The questionnaire was completed by email and online using the UAEU's online platform. Strict confidentiality of the participants was maintained as participants were not asked to disclose their names or personal data. The participating organizations' names were also not disclosed nor requested in the questionnaire or the semi-structured interview. Since the semi structured interviews were held in a live environment, additional ethical considerations are applicable as set out below.

Ethical approval for the semi-structured interviews was obtained in April 2020 upon obtaining feedback regarding the content of the semi-structured interview questions from the advisor and the co-advisor, who confirmed that the content of the interview questions was appropriate and conducive to answering the research questions under investigation (Willett, 2014).

4.3.7 Further Ethical Considerations Applicable to Interviews

Ethical considerations of interview design involve obtaining the subjects' informed consent to participate in the study, securing confidentiality, and considering the possible consequences of the study for the subjects. The researcher also needs to ensure that there is no bias and no prompting of responses. With any direct gathering of data such as during an interview, the researcher needs to avoid embarrassment, stress, discomfort, pain or harm and maintain an objective and impartial lense at all times (Cowles, 1988).

All interviewees received adequate information about the purpose of the research study in the form of an official letter and transcript of the semi-structured questions (Appendix B). The researcher also obtained interviewees' verbal consent during the interviews so that interviewees could reconsider their participation. The data collected was electronically stored in password-protected files on the researcher's computer and respondents were assured that their data would be destroyed after the research is completed. As illustrated above, the researcher complied with the additional requirements of live data collection at all times.

This dissertation also uses secondary data extracted from annual reports, corporate governance reports and stock market data. The corporate governance reports contain personal data of company executives and board members, as well as salary details and share ownership details. In connection with these sources, any type of misleading information, as well as representation of primary data findings in a biased way must be avoided.

Ethical considerations in business research mean "a code of conduct or expected societal norm of behavior while conducting research" (Sekaran, 2006). Another ethical consideration on relationships between researchers and participants stems from the notion that interaction between researchers and participants is vital to unearthing "subjugated knowledge", the lived experiences of research participants and the meanings they ascribe to those experiences (Hesse-Biber & Johnson, 2015). Mixed methods designs with qualitative components can provide balance (Chiu et al., 2013).

4.3.8 Qualitative Research: Semi-Scripted Interviews

There is an increasing body of work outside of the UAE that recognizes the epistemological foundations of qualitative research and demonstrates how qualitative research can contribute to the richness of the research and contribute to its credibility (Patnaik, 2013). Interviews can test theories, generate theories and provide explanations to gaps identified in the quantitative research. As is the case with quantitative research, qualitative research needs to ensure a high quality of data collection, including validity and reliability of the data. Interviews were transcribed, coded, categorized, analyzed, and themes were examined and coded in NVIVO12. NVIVO12 helped with the in-depth analysis, collection of emerging themes, and comparison of perspectives in alignment with the literature and the applied theories.

The research interview, one of the most important qualitative data collection methods, has been widely used in conducting field studies and ethnographic research (Palinkas et al., 2015). Qualitative research focuses on analyzing texts collected in interview formats from individual participants. This dissertation uses the qualitative approach to evaluate the interviews the researcher conducted to obtain a real understanding whether the corporate governance reforms in the UAE were successful. The qualitative results will assist in explaining the quantitative results further, particularly in instances where there is a perceived contradiction in results or where the quantitative analysis is inconclusive. Qualitative research goes beyond the numbers and investigates opinions and thought processes in depth. The research aim of research question #1 of this dissertation, “How is corporate governance understood by stakeholders in the UAE?” also needs to be analyzed qualitatively. Further, qualitative research elucidates why stakeholders and research respondents take a certain position or action.

Previous research on this topic analyzed and measured the corporate governance mechanisms and principles quantitatively, leaving a research gap for future research to adopt qualitative methods. According to the literature, in order to select interviewees, the following strategies apply purposive sampling and probability sampling. Purposive sampling is known as selective or subjective sampling during which the researcher relies on his or her own judgment when choosing members of the population to participate in the study. Probability sampling is the random selection of respondents. For the interviews, interviewees needed to be selected based on certain characteristics and in line with the study. They also needed to have completed the questionnaire as a gate-keeping criteria to ensure they belonged to the same group of respondents (population) qualified to take part in the study. Therefore, the purposive sampling technique was adopted for the qualitative part of this research.

While there is a large and growing literature on methods for qualitative research, one area that remains underdeveloped is sample size estimation (Hagaman & Wutich, 2017). Calculating the adequacy of probabilistic sample sizes is generally straightforward and can be estimated mathematically, even in qualitative research (Galvin, 2015). However, there are many challenges to determining the appropriate size needed for purposeful samples used often in qualitative research. Guest et al. (2006) focus on reaching study-wide saturation (i.e., reaching the point at which no new themes emerge). Guidelines for determining non-probabilistic sample sizes are virtually non-existent. Purposive samples are the most commonly used form of non-probabilistic sampling, and their size typically relies on the concept of "saturation", or the point at which no new information or themes are observed in the data (Guest et al., 2006). As the researcher is interested in obtaining in-depth information purposive sampling is the most appropriate technique for identifying high quality interviewees. Cohen et al. (2013) conducted interviews with 22 experienced directors from U.S. firms about the effectiveness of the Sarbanes-Oxley Act in promoting high-quality financial reporting and good corporate governance. Cohen indicates that the quality of the responses is saturated.

The primary value of the qualitative analysis of this dissertation is to provide (1) a cross-check of my method against the results obtained from the quantitative analysis and (2) richer data that provides answers to some of the questions conjured up by the quantitative research.

4.3.9 Semi-scripted Interviews: Sample Size and Data Collection

The qualitative data has been obtained from semi-structured interviews. The participants were from the same population that participated in the questionnaire and principally CEOs and C-Suite executives from listed corporations in the UAE; auditing and consulting firms based in the UAE, as well as investors in UAE stock. Other participants included experts in corporate law and corporate governance. Following Carlsen and Glenton's (2011) guidelines, and in line with the qualitative literature on corporate governance reviewed, the researcher planned in advance the number of interviews, due to time and resource constrains. Twenty-two interviews were conducted for this dissertation. This is an appropriate and common sample size for qualitative research for the subject matter and data saturation was reached as the researcher collected overlapping answers as confirmed by the literature reviewed (Van Rijnsoever, 2017; Roy et al., 2015).

Interviews fall into three categories: unstructured, semi-structured, and structured. The unstructured interview is a data collection method that relies on asking interviewees questions with no set pattern or arrangement. Semi-structured interviews are based on a list of themes and questions that the interviewer covers. Structured interviews are standardized and systematic. The same predetermined questions are presented to all candidates.

The semi-structured in-depth interviews explore issues identified as relevant during and after conducting the pilot study questionnaire and gather vital primary data that corresponds to this dissertation's objectives and helps answer the dissertation's research questions. Usually, personal contact and face-to-face interviews would be important for qualitative research as interviewees may benefit from building up a more personal rapport which increases their confidence and trust in the interviewer. As a result of the Covid-19 pandemic all interviews were conducted remotely using Microsoft Teams, Skype or the telephone.

4.3.10 Targeting Interviewees

The next step was to contact target respondents. Formal cover letters were sent by email to respondents of the questionnaire requesting them to participate in an interview with semi-scripted questions on the topic. The letter introduced the researcher and the research project, outlined potential benefits of the research, and assured recipients that confidentiality would be safeguarded at all times. If there was no response within two weeks', the researcher would follow up by email. In total, twenty-two participants completed interviews.

Finding the “right person” for an interview is of key importance in qualitative research as it has a direct impact on the data quality obtained. Interviewees need to have the requisite experience and be able to share it freely. For high profile interviewees, it is important for the interviewer to be familiar with the background and profile of each participant. Prior to each interview, the researcher familiarized herself with the listed company and profile or biography of the interviewee. This assisted in building a rapport from the start of each interview. Respondents were assured that there were no right or wrong answers. The researcher also sought individual permission to record the interview.

Notes were taken by the researcher during each interview, regardless of whether it was recorded or not. For non-recorded interviews, notes were the main source for data analysis; while for interviews that were allowed to be recorded, taking notes was also a useful way to capture the main points. Further, the perceptions of the interviewees and the manner in which they process and interpret information could potentially be influenced by the multiple accountabilities each participant has, such as being accountable to the board as well as being accountable to the legislation in their own business experiences. The overall objective of the dissertation is to gain insight into directors’ and executives’ perceptions of the effectiveness of corporate governance with respect to enhancing corporate performance. The criterion for assessing effectiveness is that the legislation has achieved what it intends. The researcher took notes of salient features during the interview in addition to the recording. For interview that could not be recorded, the notes were key for the data analysis. All notes were saved in Microsoft word in a password locked file prior to being transferred into NVIVO12.

4.3.11 Interviewer's Knowledge and Credibility

For qualitative data research, the researcher's knowledge and credibility are particularly important (Patnaik, 2013). This is especially important in the context of interviews, as the interviewer must have highly technical and interpersonal skills. For this dissertation, the researcher is a corporate lawyer and with more than fifteen years' experience in regulatory and compliance matters in the UAE, the US and the UK. The researcher's credibility from the interviewees' perspective is strengthened by the researcher's academic knowledge on the topic (Patnaik, 2013).

4.3.12 Validity and Reliability

For qualitative data research, the researcher's knowledge and credibility Validity exists when the findings reflect and represent the reality (Saunders et al., 2012). Maxwell distinguishes amongst five types of validity in qualitative research: descriptive validity, interpretive validity, theoretical validity, generalizability and evaluative validity (Maxwell, 1992). Maxwell adopts a realist approach to validity based on the kinds of understanding at which qualitative research aims. Maxwell's understanding of validity can be aligned with Patnaik's in that validity is relative to and dependent on the method of inquiry chosen by the researcher. Descriptive validity can pertain to statistically descriptive aspects of accounts, such as a claim that a certain phenomenon was frequent, typical or rare. The data must accurately reflect what the participant has stated. Descriptive validity therefore forms the base on which all other forms of validity are built on. According to Maxwell (1992), interpretive validity captures how well the researcher reports the participants' understanding of the questions asked. Interpretive validity is a matter of inference from the words and actions of the participants. Theoretical validity addresses the theoretical constructions that the researcher develops during the study. Theoretical validity in qualitative research evaluates the validity of the researcher's concepts and the theorized relationships among those concepts. Generalizability refers to the ability to apply the theories resulting from the research universally (Maxwell, 1992). This is problematic in qualitative research as generalizability often contradicts with interpretive validity. Qualitative research studies a select group, so the results from qualitative research may only be applicable to a similar group. Evaluative validity distances itself from the data and tries to assess the evaluation by the researcher himself or herself. In the context of this dissertation evaluative validity is particularly important as the qualitative research helps to plug gaps left by the quantitative research.

For reliability to be established in quantitative research, the measurement needs to be consistent. Reliability is different from validity. If different observers or methods produce descriptively different data or accounts of the same events or situation, this puts into question the reliability of the data. Data can be considered reliable if different observers or methods achieve the same results qualitatively. In qualitative studies, reliability depends on the stability of responses to a dataset but also on a philosophical assumption that the data presented is accurate and true (Guest et al., 2006). It is acknowledged that human behaviour is never static. As a result, qualitative studies can rarely be replicated. Avoiding observer bias, observer error, and participant error are crucial to ensure reliable qualitative results.

4.3.13 The Process of Conducting Semi-Structured Interviews

Data collection of twenty-two interviews occurred from May 2020 to March 2021. Selected interviewees were provided a cover letter and a printout of the semi-structed interview questions in advance (Appendix B). Interviewees were also assured that all answers would be treated confidentially and that they could terminate the interview at any time.

Further, they were informed that the data would be used anonymously and that neither the interviewee nor his or her organization would be identified as part of the study. Both skype and Microsoft teams have recording features, and ahead of the interview, interviewees were given the option to conduct a recorded interview. For recorded interviews, the interviewee was again assured that recording could be stopped at any time. Following the initial demographic questions, the interviewees were guided by the interview protocol. When, during the interview, follow-up questions arose, the researcher provided further explanations and follow-up questions to probe further. For this reason, the length of the interviews varied, ranging from 45- 90 minutes approximately. Every interview was transcribed within 24 hours (Halcomb & Davidson, 2006) allowing the documentation of relevant comments.

4.3.14 NVIVO 12

This dissertation utilized Computer-Assisted Qualitative Data Analysis Software (CAQDAS) to analyze the qualitative data. The selected CAQDAS is NVIVO12, the predecessor of which was taught during the DBA Program. In order to familiarize herself with NVIVO12, the researcher took an additional training course. The searching and coding tools of NVIVO12 allow detailed data interrogation. All transcribed interviews were directly imported to NVIVO12. The searching tools of NVIVO12 allow "auto coding". The analysis obtained with this software allows to validate or reject some of the results obtained from the quantitative analysis. The introduction to NVIVO12 states that a node is a specific theme, place, person or area of interest. Nodes can be coded manually or automatically by coding sources such as interviews. The nodes then provide the storage areas (tree nodes or node matrices) for themes and subthemes. NVIVO12 facilitated the analysis and provided a clear audit trail enhancing confidence in the results. Nodes were first gathered automatically and then renamed and merged into a hierarchical structure to allow in depth analytical coding based on the research questions. The final structure and scaffold of the hierarchical layout of all nodes were generated and showed the final nodal structure of the qualitative analysis, incorporating fifteen nodes as set out in Table 4.1 below:

Table 4.1: NVIVO12 Coding

	Node Names	**Files**	**References**
1.	Audit	10	42
2.	Board	13	61
3.	Business	14	23
4.	Capitalism	9	26
5.	Change	8	26
6.	Compensation	11	22
7.	Compliance	9	27
8.	Control	13	51
9.	Governance	14	54
10.	Information	14	68
11.	Internal control	9	29
12.	Law	13	29
13.	Protection	13	24
14.	Results	15	23
15.	Returns	6	42

NVIVO12 contributed to the validity of the results by ensuring that results were probed. The qualitative research needs to be based on selective inquiries to ensure the data is thoroughly interrogated. The researcher found that NVIVO12 helped identify key issues underlying the research and assisted in achieving an in-depth analysis.

4.3.15 Pilot Interviews

Prior to conducting the interviews, the researcher conducted three pilot interviews to confirm the suitability of the interview questions (Reiter, 2011). The sample of the pilot study should represent 10% of the overall sample size (Johanson & Brooks, 2010). Taking into consideration that the researcher conducted twenty-two interviews, three pilot interviews were deemed appropriate. The pilot study revealed that each interview would be about 60 minutes, which was longer than expected. Interviewees also referred to the 2020 corporate governance rules occasionally as they came into effect in April 2020, albeit with a grace period until 31 December 2020. The results of the pilot study confirmed that the target group (population) was suitable to answer all questions with an appropriate level of depth and first-hand experience. Moreover, the semi-structured approach helped collect the most appropriate and relevant aspects under inquiry.

4.3.16 Interview Questions

The mechanisms of corporate governance (gender representation, occupational experience, auditor rotation, compliance, internal control) are investigated using open-ended questions.

The interview questions are semi-structured to allow the interviewer to follow up and probe the respondents' answers. The researcher, through her experience as a practicing lawyer in the field of corporate governance in the UAE, acquired an in-depth understanding of the theoretical and legal background of the topic. During interviews, the researcher was also flexible with timing which led to interviews being between forty-five to ninety minutes long. The interview questions aim to reveal the respondents' perspectives on the impact of corporate governance principles and mechanisms on corporate performance. The aim of posing analyzing the research questions and hypotheses twofold is to be able to correlate the respondents' perspectives as well as the data analysis qualitatively and quantitatively.

4.3.17 Interview Profiles

Twenty-two interviews were conducted. All interviews were one-to-one interviews. The interviews lasted from forty-five minutes to one-hour and twenty minutes. COVID-19 prevented conducting face-to-face interviews. Ten interviews were carried out by telephone, and all other interviews were conducted using Microsoft Teams or Skype. Subject to permission from the interviewees, eighteen interviews were recorded and transcribed for analysis with NVIVO12. Appendix C provides the overview of the interviewees. Nine of the twenty-two interview participants were CEOs, six were lawyers, four investment officers, two executives and one a board member of the UAE listed companies. All of the CEOs had audit committee experience. The interviewees had between 5 to 20+ years' professional experience as a director or in an executive capacity with average experience of approximately 15 years. The companies represented many sectors of the economy including Services, Real Estate, Construction and Energy. The interview sample reflects a highly experienced, diverse group of executives with significant corporate governance experience before and after the 2016 corporate governance reforms.

4.3.18 Template Analysis for Qualitative Results

Template analysis is an approach that involves applying a template (categories) based on prior research and theoretical perspectives. Template analysis is well suited to NVIVO12 precisely because this method offers in-depth data analysis to examine and interpret the data and data nodes identified with NVIVO12.

4.3.19 Secondary Data Collection and Measurement

Secondary data is an essential method of data collection, especially in the field of corporate governance which is rule and theory based. Secondary data measures the following four corporate governance mechanisms: Board member experience, gender, insider trading, auditor rotation, ROE, ROA, and Tobin’s Q. For the purpose of this dissertation, data was collected from 2017 to 2020. This is an important time period as it is a post-reform period following the implementation of the 2016 corporate governance rules and the 2015 Companies Law. The sample size of the dissertation consists of 51 listed companies out of overall 132 listed companies. After excluding banks, insurance, financial companies, foreign companies and companies with incomplete data, 51 companies remain. Companies for which no data was available, such as missing corporate governance reports, were excluded from the dissertation. The corporate governance principles in Model 1 are evaluated by the questionnaire where respondents rate each of the principles on a Likert scale from 1-5 (1 meaning “not at all agree” and 5 meaning “strongly agree”). The data to evaluate the corporate governance mechanisms in Model 2 is obtained from the listed companies corporate governance reports from 2017 to 2020.

4.3.20 Secondary Data Statistical Analysis

The statistical software package SPSS version 28 is used for the statistical analyses. In addition, linear mixed effects models are performed with the help of the statistical software package STATA 17. Linear mixed effects models are an extension of simple linear models to allow for both fixed and random effects. Data can be analyzed at multiple levels, either within a group, such as companies in one sector or among groups, comparing sectors or performance per year. Minitab statistical software is used for the Box-Cox power transformations in both models. When working with non-parametric data, Minitab selects the best mathematical function for this data transformation and the Box-Cox transformation is a scientifically recognized option to transform residual data into normality.

4.4 Conclusion

This chapter sets out the research paradigm and the research methodology. The adopted methodology was justified by the positivist research paradigm. Although positivism was traditionally considered to be chiefly associated with quantitative methods, the positivist paradigm is also applicable to qualitative research conducted as part of mixed-methods research (Kuhn, 1962). A deductive approach to make predictions and analysis based on previously established theories was applied for this dissertation. In line with the theory presented, this dissertation adopts a mixed methods research (survey, interviews and secondary data analysis). The qualitative and quantitative data collection process and software packages used are set out in this chapter. The chapter also emphasizes the importance to comply with applicable ethical guidelines.

Chapter 5: Data Analysis

5.1 Introduction

This chapter uses data from the questionnaire, audited financial statements and the Corporate Governance Reports of the UAE listed companies. Data in relation to board members' qualifications and legal insider trading was obtained from the Corporate Governance Reports. The hypotheses are tested with two research models. The first model has been developed using data from the questionnaire. The second model analyzes the relationship between corporate governance mechanisms (insider trading, gender, auditor rotation, board member expertise) and corporate performance.

Section 5.2 includes the descriptive data analysis of the responses to the Questionnaire (Model 1). This is followed by multicollinearity diagnostics for Model 1 in Section 5.3. Section 5.4 presents the regression analysis for Model 1. Descriptive statistics of Corporate Governance Mechanisms is presented in Sections 5.5. Section 5.6 contains the descriptive analysis amongst sectors. This is followed by multicollinearity diagnostics for Model 2 in Section 5.7. The Linear Mixed Effects Model Analysis for Model 2 is presented in Section 5.8. Section 5.9 discusses the results of the interviews (qualitative research), and Section 5.10 addresses the hypotheses. Section 5.11 concludes.

5.2 Descriptive Analysis of the Questionnaire (Model 1)

The questionnaire was distributed using the university's bespoke electronic survey tool Blue Platform© by UAEU. Only executives, board members, accountants, audit committee members, internal audit, legal counsel or investment officers of the listed entities in the UAE could participate. Potential respondents were invited via email from the researcher's UAEU account (via the HR department or Investor Relations Department of the listed entity). Questionnaire data was collected for the pilot study from May to July 2020 and the main study from July 2020 to March 2021. As mentioned for the pilot questionnaire, questionnaires were sent to the participants. The questionnaire was sent to 155 target participants. After several reminders, the researcher collected a total of 54 completed and valid questionnaires. The response rate was 34.8%. Table 5.1 below presents an overview of the response rate and groups of participants.

Table 5.1: Received Questionnaires and Response Rate

Groups	**Received Questionnaires and Response Rate**
Executive	26
Board members	1
Accountant	1
Auditor	1
Lawyer	10
Investment officer	15
Total and overall response rate	54/155 = 34.8%

Table 5.2 presents the highest academic qualification for the five groups of respondents. 22.2% of respondents had completed their bachelor's degree. 52.0% hold a master's degree and 14.8% had a PhD. In aggregate, 89% of respondents are holders of a bachelor's degree or higher. Only 11.0% of respondents had a diploma or secondary school as their highest qualification. This reflects the high level of education of the respondents.

As illustrated in Table 5.3, 68.5% of respondents were male and 31.5% of respondents were female. 48.1% of respondents were executives, 27.7% were investment officers and 18.5% were lawyers as shown in Table 5.4 Table 5.5 shows that 91% of respondents had more than 11 years of professional experience. This is testimony to the seniority of the respondents who participated in this research.

Table 5.2: Distribution of Frequency and Percentage of Educational Qualification of Respondents

Education	**Frequency**	**Percentage**
PhD	8	14.8
Master	28	52.0
Bachelor	12	22.2
Diploma	3	5.5
Secondary	3	5.5
Total	54	100

Table 5.3: Distribution of Frequency and Percentage of the Gender of Respondents

Gender	**Frequency**	**Percentage**
Male	37	68.5
Female	17	31.5
Total	54	100

Table 5.4: Job Positions

Position	Frequency	Percentage
Executive	26	48.1
Board member	1	1.9
Accountant	1	1.9
Auditor	1	1.9
Lawyer	10	18.5
Investment officer	15	27.7
Total	54	100

Table 5.5: Work Experience

Experience	Frequency	Percentage
Less than five years	3	5.5
5–10 years	2	3.5
11–15 years	13	24.0
16–20 years	28	52.0
More than 20 years	8	15.0
Total	54	100

Cronbach's alpha measures the internal consistency between items on a scale. Cronbach's alpha can be used to measure the internal consistency of a questionnaire or survey. Cronbach's alpha ranges between 0 and 1, with higher values indicating that the survey or questionnaire is more reliable. For reliability testing using Cronbach's alpha, Khanna et al. (2011) recommend a minimum level of 0.6. Nunnally and Bernstein (1978) recommend a minimum level of 0.7. Cronbach alpha values are dependent on the number of items on the scale. When there are a small number of items on the scale (fewer than 10), Cronbach alpha values can be quite small. In this situation, it can be better to calculate and report the mean inter-item correlation for the items. Average inter-item correlation is a way of analysing internal consistency reliability. The ideal range of the average inter-item correlation is 0.15 to 0.5, if the result was less, the items would not be well correlated and do not measure the same idea or construct. If the value is higher than 0.5, that is a sign that the items are so close that they are repetitive. In this case, five sub- indices have been created with the results of the questionnaire. Internal consistency for the sub-indices is measured with both inter item correlations as well as Cronbach's alpha. Inter-item correlations for the five sub- indices are set out in Table 5.6 below.

Table 5.6: Inter-Item Correlations

Corporate Governance Index No.	**Corporate Governance Index**	**Inter-Item Correlation**
1	Rights of shareholders	0.272
2	Equitable treatment of shareholders	0.241
3	Role of stakeholders in corporate governance	0.253
4	Disclosure and transparency	0.250
5	Responsibility of board of directors	0.248

Cronbach's alpha was measured for each subscale of the questionnaire which contains 90 questions in total as set out in Table 5.7 below. Reliability was tested for: The Concept of Corporate Governance: (3 indicators); Principle 1 Right of Shareholders: (11 indicators); Principle 2 Equitable Treatment of Shareholders: (6 indicators); Principle 3 Role of

Stakeholders in Corporate Governance: (7 indicators); Principle 4 Disclosure and Transparency: (13 indicators); Principle 5 Responsibility of the Board of Directors: (16 indicators); Obstacles that affect corporate governance: (15 indicators); Enablers of corporate governance: (19 indicators).

Table 5.7: Cronbach's Alpha

Reliability Analysis of the Questionnaire			
No.	**Statements**	**Number of Items**	**Coefficient Alpha Value**
1	Concept of corporate governance	3	0.191
2	Rights of Shareholders	11	0.876
3	Equitable Treatment of Shareholders	6	0.838
4	Role of Stakeholders in Corporate Governance	7	0.933
5	Disclosure and Transparency	13	0.928
6	Responsibility of the Board of Directors	16	0.966
7	Obstacles that affect corporate governance	15	0.875
8	Enablers of corporate governance	19	0.941

Cronbach's alpha is consistently above 0.8 except for the concepts of corporate governance which has a Cronbach alpha of .191 which was expected as this item only contained three indicators which elicited different responses from respondents which had therefore no internal consistency. Items 2, 3, and 7 yield a Cronbach's alpha above 0.8 which is very good and Items 4, 5, 6 and 8 yield a Cronbach's alpha above 0.9 which is excellent and demonstrates high internal consistency of the questionnaire. Items 2-6 are used to construct the corporate governance index which is used for the regression analysis of Model 1 whilst Items 1, 7, and 8 are analysed using descriptive statistics. The descriptive results show that for Item 1, the second statement representing the stakeholder theory, “Corporate governance refers to an organisation’s relationship with all its stakeholders who are affected by or affect the organisation’s operations and decisions”, has the highest mean (4.19), followed by the first statement representing the agency theory (4.00), “Corporate governance refers to an organization’s relationship with its shareholders to ensure that it acts in accordance with the interests of those shareholders”. The third statement representing the extended stakeholder theory, “ccorporate governance refers to an organization’s relationship with all members of society, irrespective of whether they affect or are affected by the organization’s operations and decisions”, has the lowest mean (3.63). This implies that according to the respondents, the stakeholder model is the most appropriate for the UAE. Items 7 and 8 focus on the obstacles and enablers of corporate governance in the UAE. The questionnaire results show that amongst the obstacles, a weak internal control system (mean of 4.09) is perceived as the highest possible obstacle to the implementation of corporate governance, followed by a lack of board members with the right skills (3.96) and lack of transparency in relation to insider trading (3.85) and poor financial and non-financial disclosure (3.85). The least important obstacle was the state of the UAE economy (2.89). Amongst the enablers, ‘Establishing a robust evaluation process of the board of directors, senior management and committee members’ was ranked highest, with a mean score of 4.46. The second highest ranked enabler was ‘An effective compliance program including policies and procedures for handling concerns related to potential violations of law has a positive effect on corporate performance, with a mean score of 4.39. The third highest ranked enabler was ‘Senior management and board development and succession planning need to be engrained in the company's culture' and the fourth highest ranked enabler was 'An effective internal control function over financial reporting and its disclosure controls and procedures has a positive effect on corporate performance'. The least ranked enabler was 'ensuring gender diversity at board level' with a mean of 3.83.

As shown in Table 5.8, board responsibilities (RBD) with a mean score of 4.07 and shareholders' rights (RSH) with a mean score of 4.05 represent the highest scores compared to other principles indicating that board responsibilities are taken seriously, and shareholders' rights are protected. The role of stakeholders (TRHS) follows with a mean score of 4.01 signifying that stakeholders' interests are safeguarded. The Disclosure and Transparency index (DT), with a mean score of 3.98 and the Equitable Treatment of Shareholders (ETSH) with a mean of 3.89, score lowest. In general, the average Corporate Governance Index (CGI) is 4.0 (SD = 1.019) of the analyzed items. The standard deviations of the sub-indices are similar (ranging from 0.97 to 1.03) which indicates approximately equal variation in the sub-indices.

Table 5.8: Descriptive Statistics of Corporate Governance Index and Sub-Indices

Variable	Mean	Std. Dev.	Min.	Max.	Skewness	Kurtosis
Rights of shareholders	4.05	1.018	1.64	5	-0.789	-0.256
Equitable treatment of shareholders	3.89	1.033	1.33	5	-0.592	-0.181
Role of stakeholders in corporate governance	4.01	1.05	1.462	5	-1.021	0.712
Disclosure and transparency	3.98	0.97	1.462	5	-0.827	0.438
Responsibilities of board of directors	4.07	1.027	1.125	5	-1.134	1.016
CGI	4.0	1.0196	1.474	5	-0.8726	0.3458

In Table 5.8, the statistics reveal that the maximum implementation is represented by the responsibilities of the board of directors, with a score of 4.07. In contrast, among all of the corporate governance principles, the minimum implementation principle is equitable treatment of shareholders with a score of 3.89. Overall, the average Corporate Governance Index (CGI) is 4.0 which indicates a high level of compliance of the listed companies as perceived by the respondents.

Skewness is a measure to determine the lack of symmetry. If the skewness is between -1 and -0.5 (negatively skewed) or between 0.5 and 1 (positively skewed), the data is moderately skewed. If the skewness is less than -1 (negatively skewed) or greater than 1 (positively skewed), the data is highly skewed. According to George and Mallery (2019), a range between -2 and +2 may still be a normal distribution for skewness. It is observed that the responsibility of the board of directors represents a maximum standard skewness of -1.134, while the equitable treatment of shareholders sub-index shows a minimum standard skewness of -0.592. Kurtosis measures how flat or peaked the distribution is. According to Wan et al. (2014), the data is considered normally distributed if the standard kurtosis statistics fall within the range of -1 and +1. According to George and Mallery (2019), a range between -2 and +2 may still be a normal distribution for kurtosis. In terms of kurtosis statistics, the responsibility of the board of directors shows a standard kurtosis of 1.016, and the shareholders' rights shows standard kurtosis of -0.256. The corporate governance index represents a standard skewness of -0.8726 and kurtosis of 0.3458.

5.3 Multicollinearity in Model 1

Table 5.9 shows that the highest Variance Inflation Factor (VIF) at 8.233 and the lowest at 1.065. VIF is a measure of the amount of multicollinearity. The lowest tolerance coefficient is 0.121. According to the literature, there is no concern with a VIF of less than 10 (Gujarati & Porter, 2009; Shan & McIver, 2011) and correlations of less than 0.9. Based on the results of the VIF, there does not appear to be a multicollinearity issue among the variables. There is one tolerance variable above 0.9, the CGI-Index 1 at 0.939 but this should not be of concern as the corresponding VIF value for the variable is small.

Table 5.9: Multicollinearity of Model 1

Variable	**Collinearity**	**Statistics**
(Constant)	Tolerance	VIF
CGI – Index 1	0.939	1.065
CGI – Index 2	0.289	3.457
CGI – Index 3	0.121	8.233
CGI – Index 4	0.383	2.609
CGI – Index 5	0.175	5.720

5.4 Regression Analysis of Model 1

The *results of the Shapiro-Wilkes* test found that the data of Model 1 is not normally distributed (P-value < 0.001). In statistical research, the normality assumption is met when the P-value in the Shapiro-Wilkes test is > 0.05. Values less than 0.05 would cause the researcher to reject the null hypothesis that the data follows a normal distribution. The scientific literature recommends the use of transformations when data is not normally distributed (Bishara & Hittner, 2012; Puth et al., 2014). A frequent assumption of parametric methods is that errors are normally distributed (Lumley et al. 2002). The "normality assumption" underlies the most commonly used tests for statistical significance, such as techniques of regression. The choice of the best transformation is usually not obvious, especially with data gathered from the social sciences.

In order to analyze the impact of corporate governance as measured by the Corporate Governance Index on corporate performance, regressions were run with different performance measures (ROA, ROE & Tobin's Q) as the dependent variables and the sub-indices: shareholders' rights index, equal treatment of shareholders index, role of the stakeholder index, disclosure and transparency index, and responsibilities of the board index as the explanatory variables along with the control variables leverage and company size. The time period of the questionnaire and the performance measures was 2020.

To study the appropriate transformation needed for RoE, RoA and Tobin's Q, the researcher uses the Box–Cox parametric power transformation function in the Minitab statistical software. Minitab selects the best mathematical function for this data transformation. For Tobin's Q (2020), Box-Cox proposed to raise Tobin's Q by the power of -1. This fixed the violation of the normality assumption, and the test of normality was satisfied. Shapiro-Wilks P-value is 0.189. In the regression results for the year 2020, the R-squared value is 0.435. and Leverage and sub-indices 4 (Disclosure and Transparency) and 5 (Responsibilities of Board of Directors) were both significant. The F-test (4.517) for the regression is significant (P-value < 0.001).

Regressions carried out with ROE (2020), and ROA (2020) did not contain coefficients that were statistically significant. This is likely because both ROA and ROE for 2020 contained a high number of negative numbers because of the poor economic performance of the companies in 2020. As shown in Table 5.10 for Tobin's Q, the results show that the model has satisfactory explanatory power regarding the relationship between the dependent and independent variables and adequately describes the data. This is confirmed by the results of the R-squared for Tobin's Q which is 43.5% indicating that 43.5% of the change in Tobin's Q is explained by changes in the corporate governance index. The model is capable of explaining a variability of 43.5% in the performance of the listed companies in the UAE. The impact of index 4 (Disclosure and Transparency) is inversely proportionate and in fact positively related to Tobin's Q. Sub-index 5 (Responsibilities of the Board of Directors) negatively affects

Tobin's Q and is statistically significant. When the value of sub-index 5 increases, holding all the other variables constant, Tobin's Q decreases.

Table 5.10: Regression Coefficients of Model 1

Variable	**Significance**	**Outcome**
Size 2020	0.233	*Not significant*
Leverage 2020	0.006	*Significant*
CGI – Index 1	0.117	*Not significant*
CGI – Index 2	0.126	
CGI – Index 3	0.112	
CGI – Index 4	0.022	*Significant*
CGI – Index 5	0.002	*Significant*

a. Dependent Variable: TOBQ2020_inv

5.5 Descriptive Statistics of Corporate Governance Mechanisms (Model 2)

In this part, descriptive statistics are shown for the variables selected for this dissertation. As shown in Table 5.11, gender and board experience are expressed as percentages. For board experience the maximum statistic is 1 meaning that 100% of the directors of that observation had the relevant board expertise. For gender, the maximum statistic is 25% meaning that one fourth of the board members of that observed board was female. The minimum statistic for gender is 0 meaning for that observation there were no female board members on that board of directors. The minimum statistic for board experience is 14% meaning that 14% of that board had the relevant expertise.

Table 5.11: Descriptive Statistics of Model 2

Variable	Mean	Std. Dev.	Min.	Max.	Skewness	Kurtosis
Gender	0.028	0.571	0	0.25	1.714	1.692
Board Experience	0.434	0.182	0.14	1.00	0.403	-0.437
Tobin's Q	0.662	0.647	0.00	5.46	3.496	18.341
RoE	3.412	20.428	-68.83	69.12	-0.750	3.948
RoA	2.175	8.743	-32.28	31.89	-0.885	2.709
LogAssets	22.417	3.818	17.61	56.56	5.796	43.464
Leverage Debt/Assets	23.951	32.738	0.00	329.37	6.557	54.859

Concerning the standard skewness statistics, it is observed that gender represents a skewness of 1.714 and kurtosis of 1.692 which indicates that the data for gender likely does not follow a normal distribution. According to George and Mallery (2019), a range between -2 and +2 may still be a normal distribution for skewness and kurtosis. Wan et al. (2010) consider +1/-1 the appropriate range for a normal distribution for skewness and kurtosis. It is observed that board experience represents a skewness of 0.403 and kurtosis of -0.437. Regarding, the corporate performance measures, the mean value for Tobin's Q is 0.662, with a minimum value of 0.00 and a maximum value of 5.46. The mean value for ROE is 3.41, with a minimum of -68.83 and a maximum of 69.12. The ROA averages around 2.17, with a minimum value of -32.28 and a maximum value of 31.89. The descriptive statistics show that the corporate performance data is not normally distributed.

Regarding the control variables, it can be observed that the mean firm size is 22.41 (log assets), with a minimum of 17.61 (log assets) and a maximum of 56.56 (log assets). Leverage has the greatest variation, ranging from a minimum of 0.00 for a listed company with no debt and a maximum of 329.37, and the mean leverage is 23.95. The skewness and kurtosis results show that the data is not normally distributed.

As shown in Table 5.12, internal control and auditor rotation are dummy variables indicating that a company has implemented solid internal controls (1) or has a weak internal control system (0). Auditor rotation is expressed as (1) for auditor rotation took place and (0) for no auditor rotation took place.

Table 5.12: Frequency Reporting for the Corporate Governance Mechanisms Auditor Rotation and Internal Control

Variable	**Frequency**	**Percent**
Auditor Rotation	57	27.9%
No Auditor Rotation	147	72.1%
Solid Internal Control	93	45.6%
Weak Internal Control	111	54.4%

Pursuant to the law auditor rotation is mandatory every three years, so for the observed period from 2017 to 2020 every company should have rotated the auditor once. The sample consists of 51 companies that are observed over four years resulting in 204 observations. Auditor rotations took place 57 times which means the companies largely complied with the auditor rotation requirement every three years. Pursuant to the 2016 corporate governance rules, it is mandatory that an internal control system is maintained at all times. The observed frequencies are 93 positive observations of a solid internal control system and 111 observations of a weak internal control system. This means the majority of companies

(54.4%) were not compliant with the requirement to establish and maintain a solid internal control system pursuant to the 2016 corporate governance rules.

5.6 Descriptive Analysis of Sectors – Kruskal-Wallis and Mann-Whitney U Tests

To determine whether there are significant differences in compliance with corporate governance amongst industry sectors, the Kruskal-Wallis and Mann–Whitney U non-parametric tests were used to determine whether there are significant differences among the eight industry sectors (Cleophas et al., 2006). The following eight sectors, as shown in Table 5.13, were considered in this dissertation. Compliance was tested both with the corporate governance index and its sub-indices as developed for Model 1 and the corporate governance mechanisms insider trading, gender and board experience from Model 2. The data for Model 1 relates to 2020. The data for Model 2 includes observations from 2017 to 2020.

Table 5.13: Industry Sectors

	Sector	**Number of Listed Companies**
1	Consumer staples, F&B	8
2	Energy	3
3	Transport & Logistics	3
4	Real Estate	4
5	Construction	18
6	Services	11
7	Telecommunication	2
8	Medical	2

There were no significant differences among the eight sectors based on the results of the questionnaire (Model 1). As set out in Table 5.14, the results were not statistically significant. The corporate governance index is based on the fifty-four questionnaire responses collected in 2020. It is likely that due to the small sample size, no statistically significant results could be achieved in this instance.

Table 5.14: Independent Samples Kruskal-Wallis Hypotheses Test Summary Model 1

Null Hypothesis	**Significance**	**Decision**
The distribution of CGI - Index 1 is the same across categories of Sector.	0.309	Retain the null hypothesis of no difference regarding shareholders' rights across the eight sectors.
The distribution of CGI - Index 2 is the same across categories of Sector.	0.313	Retain the null hypothesis of no difference regarding equitable treatment of shareholders across the eight sectors.
The distribution of CGI - Index 3 is the same across categories of Sector.	0.584	Retain the null hypothesis of no difference regarding the role of stakeholders across the eight sectors.
The distribution of CGI - Index 4 is the same across categories of Sector.	0.471	Retain the null hypothesis of no difference regarding disclosure and transparency across the eight sectors.
The distribution of CGI - Index 5 is the same across categories of Sector.	0.495	Retain the null hypothesis of no difference regarding responsibilities of the board of directors across the eight sectors.

a. The significance level is 0.05.

Analyzing compliance using the corporate governance mechanisms, produced statistically significant results. The Kruskal- Wallis test highlights, in Table 5.15, that there are differences in the distribution of Gender across different sectors and the result is statistically significant. Insider trading across different sectors was not statistically significant. Therefore, the null hypothesis needs to be retained in this case. The Kruskal–Wallis test also shows that there are significant differences in the distribution of board experience. The corporate governance mechanisms auditor rotation and internal controls could not be analyzed with Kruskal-Wallis as dummy variables were used. Table 5.16 shows that female gender representation on listed companies ranked highest at 132.06 in the telecommunications sector followed by consumer staples at 118.31. The lowest representation of female directors can be found in the energy and medical sectors at 80.50. Table 5.17 shows that board experience ranked highest at 138.89 in the consumer staples sector followed by real estate at 115.75 and services at 115.70. Board experience ranked lowest in telecommunications at 31.0 and the medical sector at 29.0.

Table 5.15: Independent Samples Kruskal-Wallis Hypotheses Test Summary Model 2

Null Hypothesis	Significance	Decision
The distribution of InsTrad is the same across categories of Sector.	0.109	Retain the null hypothesis of no difference regarding insider trading across the eight sectors.
The distribution of Gender is the same across categories of Sector.	0.018	Reject the null hypothesis of no difference regarding gender diversity across the eight sectors.
The distribution of BoardExp is the same across categories of Sector.	<0.001	Reject the null hypothesis of no difference regarding board members' experience across the eight sectors.

a. The significance level is 0.05.

Table 5.16: Independent Samples Kruskal-Wallis Mean Ranks of Corporate Governance Mechanisms: Gender

Gender	Sector	N	Mean Rank
	Consumer Staples	32	118.31
	Energy	12	80.50
	Transport & Logistics	12	111.17
	Real Estate	8	103.50
	Construction	80	95.25
	Services	44	106.26
	Telecommunication	8	132.06
Total observations		204	

Table 5.17: Independent Samples Kruskal-Wallis Mean Ranks of Corporate Governance Mechanisms: Board Experience

Board Experience	**Sector**	**N**	**Mean Rank**
	Consumer Staples	32	138.89
	Energy	12	109.08
	Transport & Logistics	12	61.54
	Real Estate	8	115.75
	Construction	80	99.01
	Services	44	115.70
	Telecommunication	8	31.00
	Medical	8	29.00
Total observations		204	

The Mann–Whitney U test is useful for comparing two sample means on a continuous measure to specify whether two population means differ significantly. This technique is used to test the difference between two independent groups (here industry sectors) (Cleophas et al., 2006). In this study, the Mann–Whitney test is used to verify which pairs of sectors are significantly different (see Table 5.18). The pairwise comparisons of sectors with Mann-Whitney show the differences between sector pairings that are statistically significant. Two key sectors emerge. There are differences in the implementation of corporate governance in the energy sector compared with consumer staples, medical and telecommunication. There are also differences in the implementation of corporate governance in the in the telecommunication sector compared with energy, medical and construction. Finally, there are differences between the consumer staples and construction sectors that are statistically significant.

Table 5.18: Kruskal-Wallis Pairwise Comparison of Sectors

	Sector Sample Pairing	**Test Statistic**	**Significance**
1	Consumer Staples/Energy	37.813	0.008
2	Medical/Energy	37.813	0.024
3	Telecoms/Energy	-51.562	0.008
4	Telecoms/Medical	51.563	0.015
5	Consumer staples/Construction	23.063	0.009
6	Telecoms/Construction	-36.812	0.019

To identify the differing sector pairings, the Mann–Whitney test compared 28 pairs (n= 8) of the eight sectors (1&2, 1&3, 1&4, 1&5, 1&6, 1&7, 1&8, 2&3, 2&4, 2&5, 2&6, 2&7, 2&8, 3&4, 3&5, 3&6, 3&7, 3&8; 4&5, 4&6, 4&7, 4&8, 5&6, 5&7, 5&8, 6&7, 6&8, 7&8). The following sector comparisons prove to be statistically significant (** see Table 5.19). The Table shows that Telecommunications differed from all other sectors. Consumer staples differed from Transport & Logistics, Services differed from Construction and the Medical sector differed from services and telecommunication.

Table 5.19: Mann-Whitney Comparisons Between Two Sectors

	Tobin's Q	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
	Mann-Whitney U	Consumer Staples	Energy	Transport & Logistics	Real Estate	Construction	Services	Telecom	Medical
1	Consumer Staples								
2	Energy								
3	Transport & Logistics	**							
	Mann-Whitney U	Consumer Staples	Energy	Transport & Logistics	Real Estate	Construction	Services	Telecom	Medical
4	Real Estate								
5	Construction	**		**	**				
6	Services					**			
7	Telecommunication	**		**	**	**	**		**
8	Medical						**	**	

**The result is significant at level 0.05.

5.7 Multicollinearity in Model 2 and the Dummy Variable Trap

In Model 2, dummy variables were used for presence or absence of an internal control function (1;0) and presence or absence of auditor rotation (1;0). Replacing categorical independent variables by their dummy variable does not create multicollinearity. As shown in Table 5.20, based on the results there are no serious multicollinearity issues in Model 2.

Table 5.20: Multicollinearity of Model 2

Variable	**Collinearity Statistics**	
(Constant)	Tolerance	VIF
Insider Trading	0.956	1.047
Gender	0.907	1.102
Auditor Rotation	0.904	1.106
Internal Control	0.910	1.099
Board Experience	0.856	1.182
LogAssets	0.928	1.078
Leverage	0.921	1.086
Sector	0.856	1.169
Time Window	0.917	1.090

5.8 Linear Mixed-Effects Model Analysis: Model 2

The results of the Shapiro-Wilkes test of the regression residuals found that the errors of Model 2 are not normally distributed for ROE, ROA, or Tobin's Q. Box-Cox transformations were carried out in Minitab. As discussed at the beginning of this chapter, when data is not normally distributed (e.g., skewed, zero-inflated, binomial, or count data), transformation of data before analysis is often advisable and visual inspection for outliers and heteroscedasticity is important for the assessment.

Model 2 contains two control variables (leverage and size) as well as repeated values of board member experience, gender, insider trading, and auditor rotation that are measured four times from 2017 to 2020. Both control variables and coefficients are divided into intra-group sectors, representing the eight sectors of listed companies in the UAE to analyse the effect of the independent variables in different sectors on corporate performance. Overall, the data is balanced and any companies with missing data were removed by the researcher ahead of the analysis.

5.8.1 Results of Modelling Tobin's Q

As shown in Table 5.21, type III tests of fixed effects model produced the following statistically significant results:

Table 5.21: Type III Tests of Fixed Effects with Dependent Variable Tobin's Q

Variable	**F-Test**	**Significance**
Intercept	1.534	0.220
AudRot	1.950	0.167
IntCont	1.295	0.258
Time	3.058	0.037
Sector	2.496	0.032
InsTrad	4.502	0.036
Gender	3.415	0.068
BoardExp	2.653	0.108
LogAssets	0.371	0.545
LeverageDebtAssest_log	5.683	0.019
AudRot * InsTrad	4.513	0.036
Sector * LogAssets	2.446	0.033
Sector * LeverageDebtAsset_log	2.288	0.036
Intercept	1.534	0.220

a. Dependent Variable: (TOBQ + 1) ** (-1).

As shown in Table 5.22, using Tobin's Q as dependent variable and selected corporate governance mechanisms as independent variables, produced relevant statistically significant results. Time, sector, Insider trading, interaction of auditor rotation and insider trading, sector, interaction of sector and logassets and interaction of sector and indebtedness were statistically significant with P-values below 0.05.

Table 5.22: Test of Significance of Repeated Measures Covariance Matrix: Tobin’s Q

Covariances of Repeated Measures	**Estimate of Covariance**	**Std. Error**	**P-value**	**Lower Bound**	**Upper Bound**
UN (1, 1)	0.0183	0.0043	<0.001	0.0115	0.0291
UN (2, 1)	0.0100	0.0032	0.002	0.0036	0.0164
UN (2, 2)	0.0125	0.0033	<0.001	0.0075	0.0210
UN (3, 1)	0.0112	0.0038	0.003	0.0036	0.0187
UN (3, 2)	0.0131	0.0037	<0.001	0.0057	0.0205
UN (3, 3)	0.0200	0.0048	<0.001	0.0124	0.0322
UN (4, 1)	0.0129	0.0044	0.003	0.0043	0.0216
UN (4, 2)	0.0143	0.0042	<0.001	0.0060	0.0225
UN (4, 3)	0.0209	0.0052	<0.001	0.0105	0.0312
UN (4, 4)	0.0257	0.0062	<0.001	0.0160	0.0413

a. Dependent Variable: 1/(TOBQ + 1).

Table 5.22 shows that the repeated measures are significantly correlated which validates the use of the mixed effects model in this regression analysis. UN(i, j), represent the covariance between time periods i and j where i, j =1,4 and 1=2017, 2=2018, 3=2019, 4=2020. For example, UN(2, 1) shows the covariance between the 2017 and 2018 measures of the dependent variable across the listed companies. Overall, it can be inferred that there is an impact of corporate governance on performance and there are differences between the impact of corporate governance on performance for all time periods observed against the dependent variable Tobin's Q. The lower bounds and upper bounds (limits of accuracy) are small which means we likely have a high degree of accuracy with this model.

Tables 5.23 to 5.27 below show the coefficients of the regression of TOB's Q versus the independent variables from SPSS output. Regression coefficients are computed based on the interactions between the presence or absence of auditor rotation and internal controls.

Table 5.23: Regression Equations of Tobin’s Q Versus Various Predictors

Absence of Auditor Rotation; Absence of Internal Control	**Parameter**	**Consumer & Staples**	**Energy**	**Transport & Logistics**	**Real Estate**	**Construction**	**Services**	**Telecoms**	**Medical**
		Regression Coefficients							
	Intercept	-1.16	-0.32	1.03	3.77	0.20	0.72	-0.59	3.30
	2017	-0.03							
	2018	0.02							
	2019	0.02							
	2020	0.00							
	InsTrad	-0.02							
	Gender	-0.22							
	BoardExp	-0.15							
	LogAssets	0.09	0.00	-0.04	-0.14	0.02	0.00	0.04	-0.15
	LeverageDebtAssest_log	-0.03	0.28	0.15	0.03	0.02	0.01	0.02	0.18

Table 5.23 shows the coefficients of the regression of Tobin’s Q versus the continuous independent variables for companies of specific sectors for which AudRot = 0 (absence of auditor rotation) and IntCont = 0 (absence of internal control). Table 5.24 shows the effects of the same

independent variables on Tobin's Q in the case of companies implementing internal controls in the absence of auditor rotation, i.e., AudRot = 0 and IntCont = 1. Because Box-Cox transformations raised Tobin's Q by the power of -1, we need to reverse interpret the regression coefficients in tables 5.23 – 5.26 when assessing the effects of the independent variables on Tobin's Q. Therefore, implementing internal controls has a positive effect on corporate performance with the value of the intercept slightly increasing across all sectors.

Table 5.24: Regression Equations of Tobin's Q Versus Various Predictors

Absence of Auditor Rotation; Presence of Internal Control	**Parameter**	**Consumer & Staples**	**Energy**	**Transport & Logistics**	**Real Estate**	**Construction**	**Services**	**Telecoms**	**Medical**
		Regression Coefficients							
	Intercept	-1.19	-0.35	1.01	3.74	0.17	0.70	-0.62	3.28
	2017	-0.03							
	2018	0.02							
	2019	0.02							
	2020	0.00							
	InsTrad	-0.02							
	Gender	-0.22							
	BoardEx	-0.15							
	LogAssets	0.09	0.00	-0.04	-0.14	0.02	0.00	0.04	-0.15
	LeverageDebtAssest_log	-0.03	0.28	0.15	0.03	0.02	0.01	0.02	0.18

Table 5.25: Regression Equations of Tobin's Q Versus Various Predictors

Presence of Auditor Rotation; Absence of Internal Control	**Parameter**	**Consumer & Staples**	**Energy**	**Transport & Logistics**	**Real Estate**	**Construction**	**Services**	**Telecoms**	**Medical**
		Regression Coefficients							
	Intercept	-1.15	-0.31	1.05	3.78	0.22	0.74	-0.58	3.32
	2017	-0.03							
	2018	0.02							
	2019	0.02							
	2020	0.00							
	InsTrad	-0.20							
	Gender	-0.22							
	BoardExp	-0.15							
	LogAssets	0.09	0.00	-0.04	-0.14	0.02	0.00	0.04	-0.15
	LeverageDebtAssest_log	-0.03	0.28	0.15	0.03	0.02	0.01	0.02	0.18

Table 5.25 shows the impact of an auditor rotation when no internal control system was in place on the relationship between the corporate governance mechanisms and corporate performance. In this case, Tobin's Q slightly increases across all sectors. The effect of legal insider trading on

Tobin’s Q is higher in the presence of auditor rotation. The regression coefficient of legal insider trading in the presence of auditor rotation is 10 times its coefficient in the absence of auditor rotation, i.e., 0.2 versus 0.02. It is worth noting that the fitted relationship between Tobin’s Q and the independent variables in Tables 5.23 to 5.26 is not linear because the dependent variable is the inverse of Tobin’s Q, i.e., 1/(TOBQ + 1), and as such the changes in the values of the regression coefficients represent increments in the value of inverse Tobin’s Q rather than Tobin’s Q.

Table 5.26: Regression Equations of Tobin's Q Versus Various Predictors

Presence of Auditor Rotation; Presence of Internal Control	Parameter	Consumer & Staples	Energy	Transport & Logistics	Real Estate	Construction	Services	Telecoms	Medical
		Regression Coefficients							
	Intercept	-1.17	-0.33	1.02	3.76	0.19	0.71	-0.60	3.29
	2017	-0.03							
	2018	0.02							
	2019	0.02							
	2020	0.00							
	InsTrad	-0.20							
	Gender	-0.22							
	BoardExp	-0.15							
	LogAssets	0.09	0.00	-0.04	-0.14	0.02	0.00	0.04	-0.15
	LeverageDebtAssest_log	-0.03	0.28	0.15	0.03	0.02	0.01	0.02	0.18

For companies that implemented both auditor rotation and established an internal control mechanism, performance slightly increased for consumer staples and energy. It decreased for transport, real estate, construction, services, telecommunication and medical. The results for tables 5.23 to 5.26 need to be reverse interpreted as Tobin's Q was raised by -1 during the Box-Cox transformations.

According to the values of regression coefficients, in the presence of auditor rotation, a 1 insider trading disclosure has a positive impact on Tobin's Q. Specifically, a one unit increase in insider trading results in 0.2 decrease in the response variable 1/(TOBQ +1). For companies that rotated the auditor and implemented internal control mechanisms, we also observe a similar positive impact on insider trading disclosure.

5.8.2 Results of Modelling RoA

Type III tests of fixed effects model produced the following statistically significant results:

Table 5.27: Type III Tests of Fixed Effects with Dependent Variable ROA

Variable	**F-Test**	**Significance**
Intercept	32.025	<0.001
AudRot	1.768	0.188
IntCont	0.451	0.504
Time	3.306	0.027
Sector	3.094	0.011
InsTrad	0.077	0.782
Gender	5.032	0.027
BoardExp	4.775	0.034
LogAssets	7.007	0.011
LeverageDebtAssest_log	0.006	0.937
AudRot * InsTrad	11.347	0.001
Sector * InsTrad	2.819	0.011

a. Dependent Variable: (ROA + 35)^2.

A linear mixed effects model was used on a Box-Cox transformation of ROA, that is, $(ROA + 35)^2$. This transformation was derived using Minitab. Since the minimum value of unadjusted ROA is –32.28, the value 35 was added to ROA to make its values positive as this is a requirement of the Box-Cox transformation.

Predictors: Auditor Rotation; Internal Control; Time; Sector; Insider Trading; Gender; Board Experience; Natural logarithm of assets; natural logarithm of indebtedness; auditor rotation in combination with insider trading; sector in combination with insider trading.

Time, sector, gender, board experience, logassets, auditor rotation * insider trading, sector * insider trading were statistically significant with P-values below 0.05. Auditor rotation, internal control and insider trading were not statistically significant. Table 5.28 shows that certain repeated measures are significantly correlated which validates the use of the mixed effects model in this regression analysis.

Table 5.28: Test of Significance of Repeated Measures Covariance Matrix: ROA

Covariance of Repeated Measures	**Estimates of Covariances**	**Std. Error**	**P-value**	**Lower Bound**	**Upper Bound**
				95% confidence interval	
UN (1, 1)	274579.653	0.0043	<0.001	168358.925	447816.981
UN (2, 1)	107522.026	0.0032	0.009	26619.878	188424.175
UN (2, 2)	174367.189	0.0033	<0.001	105668.440	287729.395
UN (3, 1)	61070.719	0.0038	0.157	-23428.085	145569.525
UN (3, 2)	124734.774	0.0037	0.006	35052.342	214417.207
UN (3, 3)	236998.540	0.0048	<0.001	146788.463	382647.974
UN (4, 1)	64069.752	0.0044	0.261	-47646.632	175786.136
UN (4, 2)	120038.239	0.0042	0.018	20307.023	219769.455
UN (4, 3)	214373.925	0.0052	0.001	83499.025	345248.824
UN (4, 4)	451654.102	0.0062	<0.001	292667.626	697007.148

a. Dependent Variable: (ROA + 35)^2.

UN(i, j), represent the covariance between time periods i and j where i, j =1,4 and 1=2017, 2=2018, 3=2019, 4=2020. For example, UN(2, 1) shows the covariance between the 2017 and 2018, (UN 4/2) 2020/18 and (UN4/3) 2020/19 respectively and are statistically significant. The distance between the lower bounds and upper bounds is large which means there is considerable variation between the subjects. Table 5.29 shows the coefficients of the regression (ROA + 35)2 versus corporate governance mechanisms for companies of specific sectors, without auditor rotation or internal control.

Table 5.29: Regression Equations of ROA Versus Various Predictors

Absence of Auditor Rotation; Absence of Internal Control	Parameter	Consumer & Staples	Energy	Transport & Logistics	Real Estate	Construction	Services	Telecoms	Medical
		Regression Coefficients							
	Intercept	1498.44	2434.55	1942.80	1968.35	1621.04	1863.38	2434.01	1101.54
	2017	300.30							
	2018	100.70							
	2019	79.28							
	2020	0.00							
	InsTrad	-603.64	-3113.11	314.60	-3366.99	200.56	1016.21	-1784.31	1317.18
	Gender	1495.73							
	BoardExp	741.16							
	LogAssets	-37.00							
	LeverageDebtAssest_log	3.89							

We observe in Table 5.30 that in companies which implemented an internal control system, but did not rotate the auditor, the mean performance increases across all sectors slightly as compared to companies without an internal control system.

Table 5.30: Regression Equations of ROA Versus Various Predictors

Absence of Auditor Rotation; Presence of Internal Control	Parameter	Consumer & Staples	Energy	Transport & Logistics	Real Estate	Construction	Services	Telecoms	Medical
	Intercept	1568.21	2504.32	2012.56	2038.11	1690.80	1933.14	2503.77	1171.30
	2017	300.30							
	2018	100.70							
	2019	79.28							
	2020	0.00							
	InsTrad	-603.64	-3113.11	314.60	-3366.99	200.56	1016.21	-1784.31	1317.18
	Gender	1495.73							
	BoardExp	741.16							
	LogAssets	-37.00							
	LeverageDebtAssest_log	3.89							

In Table 5.31, we observe that companies which adhered by the law and rotated the auditor, this impacted legal insider trading and ROA decreased for all sectors.

Table 5.31: Regression Equations of ROA Versus Various Predictors

Presence of Auditor Rotation; Absence of Internal Control	**Parameter**	**Consumer & Staples**	**Energy**	**Transport & Logistics**	**Real Estate**	**Construction**	**Services**	**Telecoms**	**Medical**
	Intercept	1410.02	2346.13	1854.37	1879.93	1532.62	1774.95	2345.58	1013.12
	2017	300.30							
	2018	100.70							
	2019	79.28							
	2020	0.00							
	InsTrad	1215.92	-1293.55	2134.16	-1547.43	2020.12	2835.77	35.25	3136.74
	Gender	1495.73							
	BoardExp	741.16							
	LogAssets	-37.00							
	LeverageDebtAssest_log	3.89							

In companies that implemented both auditor rotation and established an internal control mechanism as shown in Table 5.32, performance slightly decreased across all sectors. Insider trading disclosures increase when companies rotate the auditor or implement internal controls.

Table 5.32: Regression Equations of ROA Versus Various Predictors

Presence of Auditor Rotation; Presence of Internal Control	Parameter	Consumer & Staples	Energy	Transport & Logistics	Real Estate	Construction	Services	Telecoms	Medical
	Intercept	1479.78	2415.89	1924.14	1949.69	1602.38	1844.72	2415.35	1082.88
	2017	300.30							
	2018	100.70							
	2019	79.28							
	2020	0.00							
	InsTrad	1215.92	-1293.55	2134.16	-1547.43	2020.12	2835.77	35.25	3136.74
	Gender	1495.73							
	BoardExp	741.16							
	LogAssets	-37.00							
	LeverageDebtAssest_log	3.89							

According to the values of regression coefficients, in the presence of auditor rotation, insider trading disclosure has a positive impact on ROA. Moreover, this positive impact is not uniform across the companies' sectors. The results in the tables show that the coefficients of Insider Trading do not change when Internal Control changes while holding Auditor Rotation fixed, i.e., Internal Control does not alter the impact of Insider Trading on ROA as opposed to Auditor Rotation.

5.8.3 Results of Modelling RoE

As shown in Table 5.33, type III tests of fixed effects model produced the following statistically significant results:

Table 5.33: Type III Tests of Fixed Effects with Dependent Variable ROE

Variable	**F-Test**	**Significance**
Intercept	15.764	<0.001
AudRot	1.880	0.175
IntCont	5.582	0.021
Time	2.131	0.108
Sector	2.444	0.039
InsTrad	7.488	0.007
Gender	5.032	0.027
BoardExp	4.775	0.034
LogAssets	7.993	0.005
LeverageDebtAssest_log	1.541	0.218
AudRot * InsTrad	8.489	0.006
IntCont * Gender	1.176	0.284
Sector * BoardExp	8.886	0.004

a. Dependent Variable: (ROE + 70)^1.5.

A linear mixed effects model on the Box-Cox transformed dependent variable $(\text{ROE} + 70)^{1.5} = \sqrt{(ROE + 70)^3}$ was used to investigate the relationship between ROE and the corporate governance mechanisms while accounting for the repeated measures in the data.

70 was added to ROE in computing the square root to make the value inside the square root positive. The minimum value of ROE is -68.83 after excluding the case with ROE = -655.2. The case with ROE = -655.2 presented an outlier when one of the listed energy companies booked a significant impairment on its oil and gas assets during that year.

Predictors: Auditor Rotation; Internal Control; Time; Sector; Insider Trading; Gender; Board Experience; natural logarithm of assets, natural logarithm of leverage; Auditor rotation in combination with insider trading; Internal Control in combination with Gender; Sector in combination with Board Experience

Sector, board experience, insider trading, internal control, gender, internal control×gender, sector×board experience and auditor rotation × insider trading were statistically significant with P-values below .05. Auditor rotation, and LeverageDebtAssest_log were not statistically significant.

Table 5.34 shows that certain repeated measures are significantly correlated which validates the use of the mixed effects model in this regression analysis as demonstrated above.

Table 5.34: Test of Significance of Repeated Measures Covariance Matrix: ROE

Covariance of Repeated Measures	**Estimate of Covariances**	**Std. Error**	**P-value**	**Lower Bound**	**Upper Bound**
				95% confidence interval	
UN (1, 1)	31605.401	8532.653	<0.001	18619.094	53649.299
UN (2, 1)	137.868	6223.505	0.982	-12059.977	12335.715
UN (2, 2)	46075.706	10951.784	<0.001	28916.717	73416.725
UN (3, 1)	1559.419	5857.085	0.790	-9920.256	13039.095
UN (3, 2)	23697.595	9046.314	0.009	5967.144	41428.046
UN (3, 3)	36868.764	9857.932	<0.001	21830.574	62266.146
UN (4, 1)	-7391.892	6235.425	0.236	-19613.101	4829.316
UN (4, 2)	21234.679	9156.971	0.020	3287.344	39182.013
UN (4, 3)	32923.076	9751.627	<0.001	13810.238	52035.915
UN (4, 4)	49094.094	11797.895	<0.001	30653.168	78629.068

a. Dependent Variable: (ROE + 70)^1.5.

Table 5.35 shows the impact of absence of auditor rotation and absence of internal control on the mean performance of selected sectors.

Table 5.35: Regression Equations of ROE Versus Various Predictors

Absence of Auditor Rotation; Absence of Internal Control	Parameter	Consumer & Staples	Energy	Transport & Logistics	Real Estate	Construction	Services	Telecoms	Medical
		Regression Coefficients							
	Intercept	94.18	482.44	593.98	760.41	817.99	526.74	993.27	783.14
	2017	110.02							
	2018	51.38							
	2019	37.21							
	2020	0.00							
	InsTrad	25.34							
	Gender	1233.58							
	BoardExp	1219.02	1013.81	918.12	177.97	-121.86	884.90	-6.05	-6.05
	LogAssets	-15.15							
	LeverageDebtAssest_log	18.60							

We observe in Table 5.36, that companies which implemented an internal control system but did not rotate the auditor, the mean performance increases across all sectors slightly when comparing Tables 5.35 and 5.36. In Table 5.37, we observe that companies which adhered by the law and rotated the auditor, this impacted legal insider trading and ROE increased for all sectors. The coefficient of Insider Trading is 25.34 when Internal Control= 0 and 552.94 when Internal Control =1. Auditor Rotation does not impact the effect of Insider Trading on ROE.

Table 5.36: Regression Equations of ROE Versus Various Predictors

Absence of Auditor Rotation; Presence of Internal Control	**Parameter**	**Consumer & Staples**	**Energy**	**Transport & Logistics**	**Real Estate**	**Construction**	**Services**	**Telecoms**	**Medical**
		Regression Coefficients							
	Intercept	180.41	568.67	680.21	846.64	904.22	612.97	1079.50	869.36
	2017	110.02							
	2018	51.38							
	2019	37.21							
	2020	0.00							
	InsTrad	25.34							
	Gender	177.37							
	BoardExp	1219.02	1013.81	918.12	177.97	-121.86	884.90	-6.05	-6.05
	LogAssets	-15.15							
	LeverageDebtAssest_log	18.60							

Table 5.37: Regression Equations of ROE Versus Various Predictors

Presence of Auditor Rotation; Absence of Internal Control	**Parameter**	**Consumer & Staples**	**Energy**	**Transport & Logistics**	**Real Estate**	**Construction**	**Services**	**Telecoms**	**Medical**
		Regression Coefficients							
	Intercept	60.26	448.51	560.06	726.49	784.07	492.81	959.35	749.21
	2017	110.02							
	2018	51.38							
	2019	37.21							
	2020	0.00							
	InsTrad	552.94							
	Gender	1233.58							
	BoardExp	1219.02	1013.81	918.12	177.97	-121.86	884.90	-6.05	-6.05
	LogAssets	-15.15							
	LeverageDebtAssest_log	18.60							

Companies that implemented both auditor rotation and established an internal control mechanism as shown in Table 5.38, performance slightly increased across all sectors when compared to not rotating the auditor and no internal controls.

Table 5.38: Regression Equations of ROE Versus Various Predictors

Presence of Auditor Rotation; Presence of Internal Control	Parameter	Consumer & Staples	Energy	Transport & Logistics	Real Estate	Construction	Services	Telecoms	Medical
		Regression Coefficients							
	Intercept	146.48	534.74	646.29	812.72	870.30	579.04	1045.57	835.44
	2017	110.02							
	2018	51.38							
	2019	37.21							
	2020	0.00							
	InsTrad	552.94							
	Gender	177.37							
	BoardExp	1219.02	1013.81	918.12	177.97	-121.86	884.90	-6.05	-6.05
	LogAssets	-15.15							
	LeverageDebtAssest_log	18.60							

We also observe an impact of board experience and gender. When internal control is implemented, the coefficient for gender decreases from 1233.58 to 177.37. when auditor rotation is implemented, it has no effect on gender.

The regression coefficients are computed based on the interactions of the variables shown in the table above. According to the values of regression coefficients, auditor rotation has a positive impact on insider trading disclosure.

5.9 Interviews

For this dissertation, 54 senior executives of the UAE listed companies were approached for interviews based on a number of considerations. All senior executives who agreed to participate in the interviews had previously completed the questionnaire. In total, 22 senior executives participated in interviews. The interview transcripts were then coded using NVIVO12. The results as set out in Table 5.39 show how corporate governance is understood by the leaders of UAE companies.

Table 5.39: Auto Coded Themes NVIVO12

Theme	Interview File Frequency	Total References
Market	6	66
Stakeholder	16	63
Governance	14	54
Control	13	51
Performance	13	45
Management	16	44
Returns	6	42
Shareholders	8	52
Measures	10	27
Risk	14	32
Internal Control	9	29
Protection	13	24
Results	15	23

The interviews confirm that respondents are aligned with the stakeholder theory of corporate governance. According to the stakeholder theory, companies should design their corporate strategies considering the interests of their stakeholders, those groups and individuals who can affect or are affected by the organization's purpose (Freeman, 1984). The meta-analysis in NVIVO12 also shows that there is enhanced focus on the stock markets, performance and the stakeholders. The data collected from the interviews does not support H1 (Occupational Experience) or H2 (Gender). H6 (Board responsibilities) is validated. It needs to be pointed out that quantitative and qualitative findings were integrated in the final data analysis and testing of the hypotheses. For instance, the variables used in the survey assisted in drafting interview questions, identify new themes, and to label findings. Figure 3 was produced with the interview results in NVIVO12. According to the interviews, corporate governance is a broad concept encompassing both financial performance and control.

It is also worth noting that according to the interviewees understanding of the stakeholder theory, shareholders are legitimate stakeholders. The findings also confirm that respondents are looking for government regulation or control as part of corporate governance. Although interviewees acknowledge that control by the government is relatively weak because organizations and their shareholders tend to benefit from internal control mechanisms and management's prudent analysis, evaluation, and balancing, there is a strong desire for regulatory controls for the listed companies in the UAE. Therefore, these actions are most likely achieved by strong internal and external controls as shown in the top left-hand corner of the figure. Interviewees are also very concerned with creating value and achieving high performance. Shareholders need to be able to benefit from their investments. In contrast, 'socially responsible' controls were not deemed appropriate. Several interviewees mentioned that for the variables gender and board members' experience, cultural aspects of the UAE had a role to play. Culture is still considered a pervasive factor hindering females in ascending on the corporate ladder (responsibilities at home and bias by male colleagues). Culture or wasta were also perceived in the board member appointments/nominations. For example, a candidate's reputation or social connections may be an important factor in his or her nomination for a board seat. Overall, there is a big move by the UAE legislature to move towards a more secular model and discourage cultural involvement in the legislature. This is exemplified by the most recent developments in the UAE penal code of 2022, the updated Personal Status Law of 2021 and the 2020 corporate governance rules amongst others.

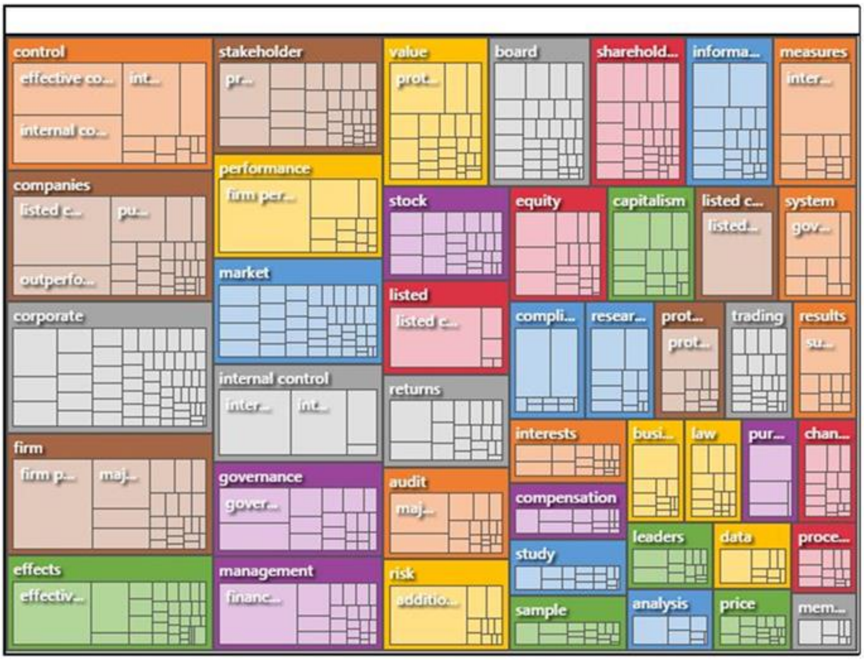

Figure 3: Hierarchy Chart of Nodes

5.10 Results of Hypotheses

The objective of this dissertation is to evaluate the impact of corporate governance on corporate performance. Two conceptual models were developed, and regressions and linear mixed effects models were utilized. Table 5.40 is the summarizes the results of the hypotheses testing.

Based on the data analysis of the second model, only certain of the corporate governance mechanisms selected were found to be statistically significant. Auditor rotation* insider trading was consistently statistically significant in all three linear mixed effects models using Tobin's Q, RoA and RoE as dependent variable. Auditor rotation is the legal requirement to change the external auditor every three years which was introduced by the Companies Law. Insider Trading in this research is the legal insider trading measured by the number of trades executed by executive management and the board of directors and their connected persons and disclosed in the yearly corporate governance reports. Based on the scientific literature from other jurisdictions, there is evidence that insider trading can have a positive or negative effect on corporate performance. On the one hand, trading by executive management and board members can be interpreted as a sign of confidence in the listed company's performance. On the other hand, legal insider trading can also have a negative effect on performance and the reasons for that are not entirely clear. Insider trading as an independent variable and not in combination with auditor rotation proved to be statistically significant in regressions using Tobin's Q and RoE as the dependent variable and demonstrated to have a positive effect on corporate performance. The existing literature on auditor rotation is inconclusive as to whether changing the auditor in line with the statutory requirement has a positive effect on corporate performance. It is interesting to note that in the UAE and based on the research sample there was a positive and statistically significant effect on corporate performance (ROA and ROE) for those companies that rotated auditor every three years and reported consistent legal insider trading. In the linear mixed effects model using Tobin's Q, the effect was slightly negative. These results are comparable to those of Haniffa and Hudaib (2006) who researched leadership structure and found that leadership structure was significantly and positively related ROA and ROE but not to Tobin's Q which is a market-based measure of corporate performance.

Table 5.40: Summary of Results of Hypotheses

Hypotheses Number	Hypotheses and Relationship with Performance	Model	Expected Relationship	Actual Results	Outcome	Sig. Level
H1	Occupational Experience	2	Positive		Rejected	Not Significant
H2	Gender	2	Positive		Rejected	Not Significant
H3	Legal Insider Trading	2	Positive		Rejected	Not Significant
H4 H5	Auditor Rotation Internal Controls	2	Positive	Auditor rotation and internal control in combination were statistically significant when assessed against Tobin's Q, ROA and ROE	Accepted	Significant
H6-1	Rights of Shareholders	1	Positive		Rejected	Not significant
H6-2	Equitable Treatment of Shareholders	1	Positive		Rejected	Not significant
H6-3	Role of Stakeholders	1	Positive		Rejected	Not significant
H6-4	Disclosure and Transparency	1	Positive		Accepted	Significant
H6-5	Board Responsibilities	1	Positive	Negatively relates to Tobin's Q	Accepted	Significant
H7	Differences in compliance between sectors	2	Positive	Differences exist between sectors – Kruskal-Wallis; Mann Whitney U	Accepted	Significant

5.11 Conclusion

This chapter contains the results of analyzing the 54 selected listed companies quantitatively and qualitatively. In Model 1, Board responsibilities (4.07) followed by Shareholder rights (4.05) have the highest means. In the regression analysis, the indices Disclosure & Transparency and Responsibilities of the Board of Directors were statistically significant, and Model 1 has an R square of 0.435. In Model 2, Insider trading in combination with auditor rotation was statistically significant in the mixed linear effects model. The interviews and descriptive analysis of the questionnaire confirmed that the applicable theory for corporate governance in the UAE is the stakeholder theory. The meaning of the statistical results, and the insights provided by the qualitative research will be further elucidated in the next chapter.

Chapter 6: Discussion

6.1 Introduction

This chapter interprets the quantitative and qualitative results and discusses their implications. The results were interpreted based on statistically significant results and qualitative results from the interviews conducted. A set of seven testable hypotheses was developed to answer the research questions. This research was carried out to respond the research questions:

- Research Question #1: How is corporate governance understood by stakeholders in the UAE?
- Research Question #2: Do corporate governance reports of the UAE listed firms comply with the 2016 corporate governance code stipulated by the UAE statutory requirements?
- Research Question #3: What is the impact of the 2016 corporate governance code on the performance of the UAE listed firms?
- Research Question #4: Do sector-specific variations in the level of compliance exist in the corporate governance reports of these UAE firms and why?

The following hypotheses have been developed to test the relationships between corporate governance practice and corporate performance.

- H1: There is a positive relationship between the percentage of board members who have relevant occupational experience and corporate performance.
- H2: There is a positive relationship between gender representation of board members and corporate performance.

- H3: There is a positive relationship between insider trading and corporate performance
- H4: Changing the auditor periodically has a positive impact on corporate performance.
- H5: Solid internal controls through detailed regulations and procedures for internal control have a positive impact on corporate performance.
- H6: Compliance has a positive impact on corporate performance.
- H7: There are differences in compliance with the 2016 corporate governance rules between sectors.

Section 6.2 explains how corporate governance is understood by the stakeholders in the UAE. Section 6.3 contains the analysis of the corporate governance principles and to what extent they impact corporate performance. Sections 6.4 and 6.5 explain the potential obstacles to and enablers of corporate governance in the UAE. Section 6.6 discusses the corporate governance mechanisms selected for this research. Section 6.7 discusses the relationship between board members' occupational experience and corporate performance. Section 6.8 discusses the link between gender and corporate performance. Section 6.9 discusses the link between insider trading and corporate performance. Section 6.10 analyzes the relationship between auditor rotation and corporate performance. Section 6.11 presents the relationship between internal control and corporate performance. Section 6.12 presents a summary of the results of compliance on corporate performance. Section 6.13 explores differences in compliance with the 2016 corporate governance rules between sectors in the UAE listed companies. Section 6.14 analyzes the role of the UAE exchanges in implementing corporate governance and Section 6.15 presents the conclusion of the chapter.

6.2 The Concepts of Corporate Governance

The questionnaire proposed three concepts of corporate governance which represent different applicable theories. The first statement is underpinned by the agency theory: “Corporate governance refers to an organisation’s relationship with its shareholders to ensure that it acts in accordance with the interests of those shareholders”. The second statement is underpinned by the stakeholder theory: “Corporate governance refers to an organisation’s relationship with all stakeholders who are affected by or affect the organisation’s operations and decisions”. The third statement is underpinned by the extended stakeholder theory: “Corporate governance refers to an organisation’s relationship with all members of society, irrespective of whether they affect or are affected by the organisation’s operations and decisions”. The descriptive results show that the second statement representing the stakeholder theory has the highest mean (4.19), followed by the first statement representing the agency theory (4.00). The third statement representing the extended stakeholder theory has the lowest mean (3.63). This implies that according to the respondents, the stakeholder model is the most appropriate for the UAE. This finding is in line with previous research on this topic in the UAE (Otman, 2014) and current theoretical research conducted in the United States (Bebchuk & Tallarita, 2020). The stakeholder theory of corporate governance focuses on the effect of corporate activity on all identifiable stakeholders of the corporation. This theory posits that corporate managers should take into consideration the interests of each stakeholder in its governance process. The extended stakeholder theory incorporates a moral and social responsibility in the stakeholder theory regardless of the stakeholders’ connection with the firm (Boda & Zsolnai, 2016). Stakeholderism should not be expected to produce material benefits to stakeholders. From a theoretical perspective, even if stakeholderism cannot be expected to benefit stakeholders materially, it is expected to move corporate responsibility in the right direction ethically. However, as noted by interviewees in this research, the acceptance of the stakeholder theory can insulate corporate leaders from shareholders and make corporate leaders less accountable. Interviewee #6 noted that “when a listed entity published false financial statements, the regulator did not take action. Some of the companies are mismanaged and nothing is done. There is a lack of authority and no punishment”. Although firmly established in the UAE on the basis of existing research, the stakeholder theory bears risks as pointed out by the interviewees. The stakeholder theory urges institutional investors to become more deferential to corporate leaders and more accepting of arrangements that may take place between listed companies and the regulator and insulate management from market pressure as there are only limited reported fines and no legal case reporting. Such insulation may increase slack and underperformance which may take the pressure off managers and the board but would hurt both shareholders and stakeholders long term. The semi-structured interviews revealed that respondents had a thorough understanding of the corporate governance rules and the requirements by the listed companies. The main priorities for the interviewees were market transparency and corporate performance. Respondents were aware of the regulatory framework in the UAE as well as how a solid corporate governance framework within the organization can impact how the organization operates. Whilst overall there is trust in the corporate governance reforms, respondents also identified areas of concern such as insufficient market control by the government. The following quotations have been reproduced verbatim from the interview transcripts: “The problem is that government is trusting the listed companies too much. This has an impact on the market because there is a lot of faith here in the UAE in the big companies. Small and mid-size companies in the UAE are more scrutinized than the big ones when it should be the other way around”

(Interviewee #1). Respondents also clearly look to the regulator to be vigilant and follow international best practices when scrutinizing filings: "SCA needs to check all the submissions properly. A lot of the companies cook the books. Some audit reports are not correct". (Interviewee #1) Respondents noted a lack in market transparency and highlighted it as an area in need of further reforms. Based on the interviews, there are gaps with the stakeholder theory in the UAE and it would be desirable if managers and the Board became more shareholder responsive. Shareholder-friendly reforms or measures that further empower shareholders should be considered.

6.3 Analysis of the Corporate Governance Principles

This section discusses the corporate governance principles. The descriptive statistics results demonstrate that the corporate governance principles are overall well implemented in the listed companies with statistical means equal to or exceeding 3.89. Responsibility of the board of directors has the highest mean (4.07). The corporate governance framework should ensure the strategic guidance of the company, the effective monitoring of management by the board and the board's accountability to the company and its shareholders (OECD, 2015). Rights of shareholders has the second highest mean (4.05). The assessment of the quality of shareholders' rights and the extent to which shareholders' rights were being protected was based on the principle of the rights of shareholders (OECD, 2015). The role of stakeholders in corporate governance has the third highest mean (4.01). Disclosure and Transparency has a mean of 3.98. The principle with the lowest mean is equitable treatment of shareholders (3.89). All shareholders should have the opportunity to obtain effective redress for any violation of their rights (OECD, 2015). A mean of 3.89 is a neutral rating on the Likert scale where respondents have a tendency to almost agree with the statement. Overall, the rating is slightly improved compared to Otman (2014) where this principle achieved an overall mean of 3.57. The present findings support previous research about corporate governance in the UAE (Otman, 2014; Hussainey & Aljifri, 2012). The board members are knowledgeable about the corporate governance principles. The results of this research show that there is overall an improved adaptation of the principles of corporate governance when comparing the results of the descriptive statistics with Otman (2014) who used a similar questionnaire. This can be attributed to the regulator's significant effort to improve corporate governance practice as achieved by implementation of the corporate governance rules 2016.

6.4 Potential Obstacles to Adopting Corporate Governance

This section presents the feedback of respondents concerning potential obstacles to adopting corporate governance, such as lack of board members with the right skills, lack of female board members, lack of transparency in relation to insider trading and weak internal controls. Descriptive results reveal that most participants agreed that this list of potential obstacles might affect the implementation of corporate governance.

The results demonstrate that a weak internal control system (mean of 4.09) is perceived as the largest possible obstacle to adopting corporate governance, followed by a lack of board members with the right skills (3.96) and lack of transparency in relation to insider trading (3.85) and poor financial and non-financial disclosure (3.85). The least important obstacle was the state of the UAE economy (2.89). The present study has identified that weak internal control systems, lack of board member expertise, and lack of transparency in relation to insider trading are key obstacles to implementing good corporate governance. Therefore, these variables have been operationalized in separate research hypotheses which are discussed and analyzed in this chapter. The literature supports that these mechanisms are barriers to implementing efficient corporate governance in research conducted in the United States (Masson and Madhavan, 1991, Pettit, 1995, Ashbaugh-Skaife et al., 2009).

6.5 Potential Enablers to Adopting Corporate Governance

Possible enablers to adopt corporate governance are gender diversity at board level, disclosing insider shareholding in accordance with the rules, and a mature compliance function that improves performance. Setting the tone at the top to embed corporate governance in long-term value creation, changing the external auditor every three years; an effective internal control function over financial reporting and its disclosure controls and procedures have a positive effect on corporate performance; an effective compliance program including policies and procedures for handling concerns related to potential violations of law has a positive effect on corporate performance, senior management and board development and succession planning need to be engrained in the company's culture and establishing a robust evaluation process of the board of directors, senior management and committee members. The descriptive results demonstrate that the respondents overall agreed with the list of possible enablers. 'Establishing a robust evaluation process of the board of directors, senior management and committee members' was ranked as the first enabler, with a mean score of 4.46. The second-ranked enabler was 'An effective compliance program including policies and procedures for handling concerns related to potential violations of law has a positive effect on corporate performance', with a mean score of 4.39. The third-ranked enabler was 'Senior management and board development and succession planning need to be engrained in the company's culture' and the fourth-ranked enabler was 'An effective internal control function over financial reporting and its disclosure controls and procedures has a positive effect on corporate performance'. The least ranked enabler was 'ensuring gender diversity at board level' with a mean of 3.83. These results are very important and provide useful insights into the possible enablers of the implementation of good corporate governance. The four highest ranking enablers and the least ranking enabler (gender) have been operationalized in research hypotheses which are discussed in this chapter. The respondents' perspectives are consistent with previous research, which finds that these enablers could be effective in improving corporate governance practices (Lehmann & Weigand, 2000; Mahadeo et al., 2012; Iren, 2016).

6.6 Corporate Governance Mechanisms

The corporate governance mechanisms include occupational experience, gender representation, insider trading, auditor rotation, sector and internal control. The descriptive results show that implementing occupational experience, insider trading rules and policies, auditor rotation and internal control have an impact on corporate performance. The corporate governance mechanisms have been selected based on the literature and based on the applicable UAE laws and regulations. The 2016 corporate governance rules stipulate the applicable requirements for four of the selected corporate governance mechanisms: occupational experience, gender representation, insider trading, and internal control. The requirement for auditor rotation was introduced by the 2015 Companies Law. Therefore, the selected mechanisms are of current importance in the UAE and also globally. There are of course many other corporate governance mechanisms such as chairman/CEO duality; mechanisms relating to the board of directors, the audit committee or other board committees and which are all measurable and viable research topics. For this research, the selected corporate governance mechanisms have been chosen as they are well defined by the law and of contemporary importance. Precisely because they are novel, they have not been explored in depth by academic research in the UAE and make promising research topics for this and future research.

6.7 Board Members’ Occupational Experience

Relevant occupational experience was evaluated on the basis of the board members’ curriculum vitae as included in the corporate governance reports and expressed as a percentage for statistical analysis. For example, if five out of seven board members had compliant experience, the value for that company would be 5/7 = 71.42%. The 2016 corporate governance rules require at least five years sector relevant occupational experience for listed firm board position candidates. In the statistical analysis, occupational experience was statistically significant and positive in the regression conducted using RoA as a dependent variable but was not statistically significant in regressions using Tobin’s Q or RoE. The results are consistent with the literature which suggests that occupational experience can be a relevant factor for corporate performance, but this is not necessarily the case (Van Ness et al., 2010; Brown, 2006; Kroszner & Strahan, 2001). The qualitative research provides some further evidence. Respondents were aware of the applicable corporate governance rules but highlighted that the law was not followed consistently in the board candidate nomination process. They noted that candidates were still put forward based on “wasta” or nepotism rather than merit: “It should be at least five years’ experience, but this is not always followed. There is always wasta, and sometimes decisions are not based on the qualifications of the person. This is a Middle Eastern topic. Favouritism and wasta are there.” (Interviewee #5). Another respondent noted that many listed firms were run by their shareholders rather than management and considered director experience a negligible factor (Interviewee #6). The evidence gathered shows that this is a relevant and important area of future research and indeed a likely factor that influences corporate performance in the UAE.

6.8 Gender

Article 40 of the 2016 Code requires that listed companies' candidates for Board membership shall be represented by at least 20% female board member candidates. In 2021, the UAE was the first country in the Middle East to roll out a mandatory quota for female board member representation in the UAE. In March 2021, the World Bank confirmed that the UAE has the highest level of women participating in the workforce, 57.5% in 2020 of any country in the Middle East and North Africa region. According to Bloomberg, as of 30 December 2021, women sit on the boards of 28 of the 110 listed companies in the UAE, or 26% of the total. However, they only make up around 3.5% (29 of a total of 823 board members) of board directors of these firms (Bloomberg, 2022). Of the 51 companies considered for this dissertation, sixteen had female directors, which represent 31.37% of the sample. The regulator has emphasized that having at least one woman on the board of every listed company is mandatory.

So far, it is not known if any companies have been fined for not meeting the quota. Companies without a woman on the board are required to publish a justification in the corporate governance report for the relevant year. Further, only two companies of the sample had a policies for Diversity and Opportunity that were published on the corporate website.

In the statistical analysis, gender was statistically significant and positive in regressions using RoA and RoE as the independent variable. The results of the Model 2 analysis show that the presence of one or more female directors on the board relates positively and significantly to ROE (P-value

0.05) and ROA (P-value of 0.027). The regression analysis also shows the presence of women to be a significant variable in relation to ROA and ROE but not in relation to Tobin's Q. These results are comparable to those of Haniffa and Hudaib (2006) as presented in the previous chapter. Both results suggest that on average the presence of women on the board is a significant feature of companies that perform better. However, a P-value of 0.05 is on the cusp of statistical significance, and the regression with Tobin's Q was not statistically significant. Therefore, this research cannot confirm a causality that appointing women to the board leads to improved corporate performance. This is consistent with the literature (Lückerath-Rovers, 2013; Hussein & Kiwia 2009).

There are other factors that need to be considered too. The qualitative results regarding appointing women to boards were mixed. In fact, some respondents suggested that no changes (i.e., quotas) were needed to encourage female leaders. Most interviewees emphasized that women did not get enough support internally from their organizations to reach board positions for cultural reasons. Once women reach a certain age, society wants them to take on more responsibilities at home (Interviewee #2). "There is a snowball effect. The view has been that males should lead, and women are in the supporting roles. If they are in leading roles, they are frequently belittled or not taken seriously (Interview #5).

6.9 Insider Trading

All purchase and sales transactions (insider trading data) were taken from the corporate governance reports published on the exchanges' websites. These records include the date of the transaction, the number of shares involved, the price paid, the name of the insider, and his or her relationship with the firm. For the ADX and DFM- listed firms, the researcher considered the data from 2017 to 2020 for the statistical analysis.

This dissertation is concerned with legal insider trading as disclosed in the corporate governance reports to the regulator and not with illegal insider trading which is a criminal activity under applicable law. Insider trading frequency is measured as a percentage of trades executed by the company's board members and their dependents in aggregate. For example, 5/7 = 0.714 indicates that 5 trades have been executed by seven board members in a given year. The existing literature on this topic has been published outside of the UAE and much of it suggests there is a positive correlation between corporate performance and legal insider trading.

The statistical analysis in Model 2 suggests that legal insider trading volumes of relevant securities have a positive and significant impact on corporate performance in the regressions conducted using Tobin's Q and RoE as dependent variables. Legal insider trading related positively and significantly to ROE (P-value 0.007) and Tobin's Q (P-value 0.036) but not in relation to ROA. Furthermore, the combination of insider trading * auditor rotation proved statistically significant in all regressions performed for Model 2 with the following results, ROE (P-value .004), ROA (P-value 0.001), and Tobin's Q (P-value 0.36).

The literature suggest that legal insider trading can have a positive impact on corporate performance (Masson & Madhavan, 1991). The assumption behind the hypothesis that is that employees would have a stake in corporate performance as shareholders rather than being merely salaried employees. The same logic applies to stock option awards. Employees may be incentivized to perform better which will in turn improve corporate performance. Compliance with auditor rotation in the UAE is separately discussed under Hypothesis #4 below. Causality and cross-linkage between insider trading and auditor rotation and potentially other performance-influencing factors are areas for further research and analysis.

6.10 Auditor Rotation

As discussed in the literature review, auditor rotation is not mandatory in all mature jurisdictions, for instance it is currently not mandatory for the listed companies in the UK or the USA. The 2015 Companies Law made auditor rotation after three years mandatory in the UAE. However, as a result of industry pressure in the UAE the rules were changed with effect from January 2, 2021. Pursuant to the UAE Federal Decree Law No. (26) of 2020, the auditor rotation period was increased from three to six years. One of the assumptions behind this hypothesis is that longer auditor tenure reduces earnings quality and regular rotation will lead to enhanced compliance and better corporate performance. This is consistent with the literature (Shockley, 1981). The statistical analysis in Model 2 suggests that auditor rotation as an independent variable was not statistically significant. However, it was positive and statistically significant in combination with insider trading. The combination of insider trading * auditor rotation proved statistically significant in all regressions performed for Model 2 with the following results, ROE (P-value 0.004), ROA (P-value 0.001) and Tobin's Q (P-value 0.36). The qualitative analysis also confirmed that auditor rotation was perceived as one of the key elements of compliance. "Changing auditor every three years has benefited the listed companies and made a positive impact on the UAE listed corporate performance" (Interviewees #2 and #4). "Prior to implementing auditor rotation, the auditor was a potential source of corruption (Interviewee #5).

6.11 Internal Controls

The corporate governance rules require the listed companies to establish an internal control function that reports directly to the Board. For the statistical analysis, a dummy variable was used to express the presence or absence of an internal control function in accordance with the law.

The independent variable “Internal control” proved not to be statistically significant. The qualitative analysis of the corresponding hypothesis was also not conclusive, and respondents testified that not all companies had implemented solid internal control frameworks. Internal control was perceived to have a significant effect on performance if supported by top management by interviewees who noted that internal control in the UAE was still very fragile. Compliance with this requirement was seen as a tickbox exercise. This shows that the UAE markets are still fragmented in respect of establishing a solid internal controls framework. This is an opportunity for the regulator to address the issue to detect companies that are non-compliant and ensure common principles and standards that underpin the corporate governance rules are followed. Indeed, fragmentation in implementing the law will only create arbitrage opportunities for misconduct, affecting the integrity of the markets. In Marchand v. Barnhill (2019), the Delaware Supreme Court permitted a lawsuit to proceed against directors of a firm for breach of fiduciary duties arising from a failure of oversight regarding food safety and compliance matters. The Delaware Supreme Court, in a unanimous decision, held that the complaint alleged particularized facts that supported a reasonable inference that the board failed to implement any internal control system to monitor food safety performance or compliance

Under re Caremark International Inc. Derivative Litigation (1996), directors were held to have a duty “to exercise oversight” and to monitor the corporation’s operational viability, legal compliance and financial performance. A board’s utter failure to attempt to ensure a reasonable information and reporting system exists is an act of bad faith in breach of a duty of loyalty. In light of Marchand v. Barnhill (2019) and Caremark (1996), boards of both public and private companies should consider either appointing a committee to monitor the legal compliance and safety risks facing the company or making the subject a periodic topic for board presentations and discussion. The board should also explicitly require that senior officers promptly and candidly advise the board of all information indicating material problems with the company's performance or legal compliance.

6.12 Compliance

This hypothesis was assessed using the stakeholder principles used in Model 1. A corporate governance Index was constructed containing five sub-indices and results from the questionnaire were used to evaluate the data statistically. According to the literature, compliance can have a positive impact on corporate performance (Dao & Tran, 2017). The results demonstrate that corporate governance can impact corporate performance. The average score for the implementation of the corporate governance index is 4.0. The results demonstrate that there have been further improvements in compliance thanks to the 2016 corporate governance rules.

In the regression analysis, board responsibilities and shareholders rights were both statistically significant. The secondary data analysis of the corporate governance reports from 2017 to 2020 showed over 70% compliance with the requirements as set out by SCA for the corporate governance reports. Compliance with the UAE statutory requirements was measured by the disclosures made in the corporate governance reports and completeness of such disclosures. Companies with incomplete corporate governance reports were discarded from the analysis. The qualitative analysis backed up these findings. Compliance with corporate governance rules was perceived to be 80% achieved. When asked about drivers and obstacles for compliance with corporate governance rules, respondents identified the UAE government as a key driver: "The government is the main driver for implementation of compliance in UAE" (Interviewee #5).

The government was also perceived as a key enforcer of corporate governance rules in the UAE, and Dubai was considered to be ahead of Abu Dhabi. “Dubai is more advanced in the financial field compared to Abu Dhabi. The other emirates should aim for better law enforcement. There is also a grey area between local and federal laws. Federal law (criminal law) enforcement should be stronger and there should be more awareness raised by the regulator amongst listed company directors (Interviewee #5)”. Perceived obstacles to compliance were conflicts of interests and corruption. “The main obstacle is culture. The concept of conflict of interest is very important and the corporate world in the UAE still does not understand it very well. There are conflicts of interests which should be disclosed. The law is there but implementation is still lacking (Interviewee #5). The results suggest that listed companies can further improve their corporate performance by further implementing corporate governance mechanisms and principles.

6.13 Differences in Compliance Amongst Sectors

Eight industry sectors were considered for this research: Consumer staples and F&B, Energy, Transport and Logistics, Real estate, construction, services, telecommunication and medical. To determine whether there are significant differences in compliance amongst industry sectors, the Kruskal-Wallis and Mann–Whitney U non-parametric tests were applied. Sector was also used as a variable in the regressions. In the regressions, all companies were coded in accordance with their sector. Compliance was tested both with the corporate governance index and its sub-indices as developed for Model 1 and the corporate governance mechanisms insider trading, gender and board experience from Model 2. The Kruskal-Wallis test applied to Model 1 did not produce statistically significant results. The statistical analysis in Model 2 confirmed that sector-specific differences do exist and are statistically significant. Gender diversity was most prominent in the telecommunication and consumer staples and food and beverage sectors and lowest in the energy and medical sectors. The latter is also confirmed by the corporate governance reports which state that energy firms and medical firms struggle with finding adequate female talent. Directors with the best requisite board experience (at least five years of sector experience) were found in the consumer staples and food and beverage sectors and real estate. Directors with the least requisite board experience were in telecommunications and in the medical sector. Further efforts should be made to promote internal talent in these sectors. Sector as a variable has a positive and significant impact on corporate performance in the regressions conducted using ROA (0.011), ROE (0.039) and Tobin's Q (0.032) as dependent variables. The academic literature reviewed suggests there are sector-specific variances in the level of compliance achieved by the listed companies (Goel, 2018; Alkuwaiti, 2019). This research concludes that sector-specific variations do exist. When further analyzing differences in the impact on corporate governance reforms on performance of the listed companies per sector, Energy and Telecommunications result as significant. Energy and Telecommunications are both highly regulated sectors in the UAE and all companies in these sectors are majority government owned and also represent the largest companies listed on the UAE exchanges. They are also characterized as quasi-government companies. The companies in the Energy and Telecommunications sectors in the UAE have the highest market capitalization. Market capitalization refers to the total market value of a company's outstanding shares of stock. As of July 2020, TAQA's market capitalization was AED 142.79 billion and Etisalat's was AED 146.97 billion (Valecha, 2020). The corporate governance reports also confirm that these firms are among the most compliant with no fines reported from 2017 to 2020. All firms in these sectors were compliant with auditor rotation and insider trading disclosures. In the GCC and the UAE, state owned companies are often listed to increase stock market size. The regulator also has a vested interest that these large state-owned public companies perform well and are fully compliant with the rules. The remaining sectors considered for this dissertation were consumer staples, transport & logistics, real estate, construction, services and medical which did not produce statistically significant results. The best-governed firms in the UAE are in sheltered, infrastructural and highly regulated sectors such as Telecommunications and Energy. The analysis of the 210 corporate governance reports from 2017 to 2010 (consisting of four reports for each company being considered for this research) also show that differences among sectors do exist in the implementation of corporate governance. The reports for companies in the Energy and Telecommunications sectors were the ones that appeared to comply most closely with the rules whilst reports issued by listed companies in the construction and consumer staples sectors were less compliant.

6.14 Role of UAE Stock Exchanges in Corporate Governance

Stock exchanges are assigned the role of monitoring the compliance with legislation and securities regulation. Since the promulgation of the OECD Principles of Corporate Governance, stock exchanges have often enlarged their regulatory role to embrace a wider palette of corporate governance concerns. Exchanges are the first interface point between corporate governance-related regulations and deemed compliance or non-compliance. In essence, by raising transparency and discouraging illegal or irregular practices, exchanges accumulate “reputational capital” which dictates how the exchanges are perceived by the outside world. Exchanges play a key role in the development of corporate governance recommendations and encourage their application by the listed companies.

The most prominent channel for such influence is the exchanges' traditional oversight of listing, maintenance and disclosure requirements whether in a self-regulatory capacity or acting on behalf of regulators. The most common model to measure compliance is the comply or explain model as is prevalent in the United Kingdom. The UAE approach permits a number of permutations in its approach to assess compliance. For example, a listed company may be requested to disclose whether it has adopted a specific policy regarding insider trading or whether it has female board members. In terms of the enforcement, the ability of the UAE exchanges to pursue companies which do not provide adequate levels of disclosure varies. Based on the results of this research, the ability of the UAE exchanges to take enforcement action differs based on the legal basis of the 2016 corporate governance code and the national securities regulation framework. Relying solely on statistical analysis is not sufficient to establish the impact of the 2016 corporate governance reforms on corporate performance. The questionnaire, interviews and data collection from the annual reports helped achieve a more thorough analysis. One area highlighted by the interviewees was the role of penalties by the UAE exchanges: "Definitely 2016 corporate governance rules have helped, the rules played a role in penalizing companies that were not compliant. (Interviewee #5). Another respondent noted that there is still a lack of visibility as to the fines imposed by the regulator and UAE courts: "Real fines and prison sentences should be imposed. Fines should reflect the real market losses as is the case in the US".

6.15 Conclusion

This chapter presented the research findings and associated hypotheses testing. The relationships set out in the hypotheses were discussed in alignment with the agency and stakeholder theories and the results of the qualitative research identified weaknesses with stakeholderism. In agreement with Rowley and Berman (2000), this research demonstrates that there are other external effects, such as reputation effects, market measures, or disclosures which need to be evaluated qualitatively.

Chapter 7: Conclusion

This chapter first presents a summary of the main findings and elaborates on the conceptual contributions, contributions to current knowledge as well as the limitations of the dissertation and suggests avenues for further research. This dissertation contributes to the corporate governance literature by pursuing a mixed methods approach. To the researcher's knowledge occupational experience, insider trading, auditor rotation, and internal control have not previously been measured or scientifically tested in academic research in the UAE.

7.1 Summary of Main Findings

The dissertation examined a sample of fifty-one companies listed on UAE exchanges, as well as twenty-two interviews and fifty-four completed questionnaires to obtain valuable primary data. In Model 1, this dissertation used a CGI in line with the OECD Principles. Model 2 is unique in many respects. Occupational experience, gender representation, insider trading, auditor rotation, sector and internal control were analyzed using a linear fixed effects model. Three measures of corporate performance were used: Tobin's Q, ROA, and ROE.

Legal insider trading in combination with auditor rotation and sector proved to be statistically significant in all regressions carried out for Model 2. Gender was also statistically significant in the regressions using ROE and ROA as dependent variables. Among the eight industry sectors considered for this dissertation, differences were found in compliance with the corporate governance rules, and the Energy and Telecommunications sectors were significant amongst the eight sectors considered.

The researcher critiqued the agency theory which is the predominantly used theory for corporate governance research in the Middle East, and in light of recent legal developments in 2019, tested this theory and suggested how theory could be extended or reconstructed to conform to the current socio-economic climate. Apart from the agency theory, there is an academic debate of whether stakeholderism is appropriate in developing countries. The results support stakeholderism, as confirmed by the quantitative and the qualitative research, although weaknesses with stakeholderism have been identified.

This dissertation will benefit academics, investors, practicing lawyers, regulators, shareholders, executive management of UAE listed companies and academic researchers. This dissertation focuses on listed companies on the ADX and the DFM and deliberately omits NASDAQ Dubai, the third UAE stock exchange, as NASDAQ Dubai is regulated by the Dubai Financial Services Authority and subject to the regulations of the DIFC, the Dubai International Financial Centre free zone, whereas ADX and DFM are regulated by the same regulator, SCA and subject to the same legal framework. This research will contribute to the development of theory and practice, because not only is mixed methods research scarce, but also because findings are not mature or inexistent, especially in relation to occupational experience, gender representation, insider trading and auditor rotation.

7.2 Commonalities and Uniqueness

Variables such as occupational experience, insider trading, auditor rotation, and internal control mechanisms are particularly important as to the researcher’s knowledge; they have not been researched in the context of the UAE. This dissertation contributes to the literature by providing a detailed review and testing of the new UAE's corporate governance principles and suggests avenues for future research.

This dissertation is motivated by the numerous reforms in the field of corporate governance in the UAE. In the wake of high-profile corporate failures globally, the question is whether regulatory reforms are sufficient to enhance corporate governance and corporate performance by, for example, enhancing board efficiency through occupational expertise, making gender diversity mandatory, auditor rotation, and monitoring insider trading.

The research is unique in numerous ways. To date, to the researcher's knowledge there is no academic research that analyses the impact of insider trading and auditor rotation on corporate performance in the UAE. Given the regulator's emphasis on insider trading since 2018 and the mandatory establishment of an insider trading oversight committee for all listed companies, this highlights the importance of this research topic and will in turn offer a new contribution to corporate governance literature in the Middle East.

From a practical perspective, this research will benefit organizations in developing a framework for the implementation of corporate governance strategies to ensure compliance with applicable rules and regulations.

7.3 Limitations and Directions for Future Research

After filtering out companies with incomplete data, insurance companies and banks outside the remit of this study, the sample size was relatively small consisting of fifty-one companies. As a result, a relatively small number of completed questionnaires could be collected. The questionnaire was sent to 155 executives at the fifty-one listed companies.

Overall, fifty-four completed questionnaires were collected. The response rate was 34.8%. As the focus of the dissertation was to measure the impact of the 2016 corporate governance reforms, data observations could not be increased and were limited to the period from 2017 to 2020. With a larger sample size, additional testing metrics could be developed.

The data analysis was challenging as was noted by previous research conducted in this field. Both Otman and Alkuwaiti noted that the data collected was statistically not normal which was also confirmed by this research. Alkuwaiti noted that for the corporate governance mechanics she investigated using ROA and ROE as measures of corporate performance did not produce any significant results and pointed this out as an issue that needs further investigation. As this dissertation collected data from 2017 to 2020, there is an overlap with data collected by Alkuwaiti whose sample covers data until 2018. As discussed above, ROA, ROE, and Tobin's Q produced statistically significant results across all three performance measures whilst other independent variables such as gender was statistically significant for both ROA and ROE but not for Tobin's Q. Future research may benefit from other financial measures such as Return on Sales (ROS) and Return on Invested Capital (ROIC).

For insider trading, it is so far only possible to measure this variable by relying on the corporate governance reports and handpicking the data from the reports. The regulator would benefit from publishing insider trading data online and in a searchable format and from implementing an annual Market Cleanliness Metric (MC metric). The MC metric should be based on the percentage of abnormal movements in price prior to a key event (for example, a takeover). It would then also be beneficial to publish this metric as it could act as a proxy for illegal insider trading in the market to detect the amount of illegal insider dealing that might be occurring.

The results of this study show that a better regulated market improves the quality of listed companies. Market participants have expressed that it would be desirable to have data on prosecutions by the regulator and enforcement cases to ensure that the UAE stock exchanges uphold and demonstrate the highest examples of market integrity and transparency. This involves a dynamic combination of both supervision and enforcement working together.

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Appendix A

QUESTIONNAIRE

<u>An Assessment of the Impact of Corporate Governance Mechanisms and Principles on corporate performance: The Case of UAE.</u>

Dear Survey Participant,

We would like you to participate in this study to carry out an assessment of the impact of Corporate Governance Mechanisms and Principles on corporate performance concerning the listed companies in the UAE. The main purpose of the questionnaire in this research is to investigate the perceptions of different stakeholder groups in listed companies in the UAE regarding concepts, principles and obstacles concerning corporate governance. This research is conducted as part of completing the Doctorate of Business Administration (DBA) Degree in the United Arab Emirates University (UAEU). A summary of the report will be available to all the interested participants. Please indicate your interest by providing me with your email address in the specified section.

Kindly note that participation is voluntary, and accordingly you may withdraw at any time from the study. There is minimal risk in participating in this study since all data collected will be anonymous. No personal data will be collected for this research (personal data being defined as any information that identifies an individual) apart from your email address in case your email address contains personal data.

If you have questions regarding this study, please do not hesitate to contact the researcher directly as per the contact information below.

Thank you in advance for your valuable contribution to this important study.

General instructions to complete the survey

- Please tick the following statement if you agree to participate:

I agree to voluntarily participate in the study ___ Agree

Carina Schaefer

Doctorate of Business Administration (DBA) Student

College of Business and Economics

United Arab Emirates University (UAEU)

E-Mail: 201790487@uaeu.ac.ae

Who should complete this questionnaire?
The following questions should be answered by Executives, Board members, accountants, auditors, audit committee members, lawyers, investors in UAE stock

First: Background information

<u>Please tick the appropriate box</u>

1.1.
Gender

☐ Male	☐ Female

1.2. Qualifications

☐ Secondary	☐ Diploma	☐ Bachelor	☐ Master	☐ Doctorate

1.3. Your position

☐ Executive	☐ Board member	☐ Accountant	☐ Auditor	☐ Audit committee member	☐ Lawyer	☐ Investment Officer

1.4. Years of experience in current role

☐ Less 5 yrs	☐ 5-10 yrs	☐ 11-15 yrs	☐ 16-20 yrs	☐ More than 20 yrs

Second: Concepts of Corporate Governance

The following is a list of possible definitions of corporate governance. Using the scale below, please identify the extent to which you agree or disagree about how appropriate you think each definition is in the UAE environment. Please indicate the level of agreement with each statement. Do this by circling one of the five numbers after each statement according to the following scale**:**

1	2	3	4	5
Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**

A. Statements					
1. Corporate governance refers to an organisation's relationship with its shareholders to ensure that it acts in accordance with the interests of those shareholders.	1	2	3	4	5
2. Corporate governance refers to an organisation's relationship with all stakeholders who are affected by or affect the organisation's operations and decisions.	1	2	3	4	5
3. Corporate governance refers to an organisation's relationship with all members of society, irrespective of whether they affect or are affected by the organisation's operations and decisions.	1	2	3	4	5

Third: Principles of Corporate Governance

Please indicate the level of agreement with each statement. Do this by circling one of the five numbers after each statement according to the following scale:

1	2	3	4	5
Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**

B. Shareholders have the right to:					
1. transfer ownership of their shares	1	2	3	4	5
2. participate in company profits.	1	2	3	4	5
3. obtain information related to the company regularly.	1	2	3	4	5
4. vote in general meetings.	1	2	3	4	5
5. vote in elections and remove members of the board of directors.	1	2	3	4	5
6. be adequately and timely informed about company meetings.	1	2	3	4	5
7. discuss the external auditor's report at the Annual General Meeting.	1	2	3	4	5
8. be informed about the capital structure of the firm.	1	2	3	4	5
9. be informed about decisions concerning fundamental corporate changes.	1	2	3	4	5
10. inspect corporate documents.	1	2	3	4	5
11. sue the corporation for wrongful acts.	1	2	3	4	5
C. Equitable Treatment of Shareholders					
1. All shareholders who are from the same class are treated equally.	1	2	3	4	5
2. Shareholders have the right to obtain information about voting rights before they purchase shares.	1	2	3	4	5
3. Processes and procedures for general shareholder meetings allow for equitable treatment of all shareholders.	1	2	3	4	5
4. shareholders are protected from insider trading.	1	2	3	4	5
5. There are no restrictions on cross-border voting.	1	2	3	4	5

6. Board members and key executives disclose material interests in any transaction or matter directly affecting the company.	1	2	3	4	5
D. Role of Stakeholders in Corporate Governance					
1. Stakeholder rights that are established by law are respected by the company.	1	2	3	4	5
2. Performance-enhancing mechanisms for employee participation are permitted to develop.	1	2	3	4	5
3. Stakeholders have the opportunity to obtain effective redress for violation of their rights.	1	2	3	4	5
4. Stakeholders have the right to obtain sufficient and reliable information on a timely basis.	1	2	3	4	5
5. Stakeholders have the right to freely communicate their concerns about illegal or unethical practices to the board.	1	2	3	4	5
6. Creditor rights and bankruptcy procedures are enforced.	1	2	3	4	5
7. Auditors perform their duties and exercise professional care in the conduct of audits.	1	2	3	4	5
E. Disclosure and Transparency					
1. The financial and operating results of the company are disclosed.	1	2	3	4	5
2. The objectives of the company are disclosed.	1	2	3	4	5
3. Major share ownership is disclosed.	1	2	3	4	5
4. Foreseeable risk factors are disclosed.	1	2	3	4	5
5. Remuneration of board members and key executives is disclosed.	1	2	3	4	5
6. Issues regarding employees and other stakeholders, such as programs for human resource development and training, are disclosed.	1	2	3	4	5
7. An annual audit of the company is conducted by an independent auditor.	1	2	3	4	5
8. Information is prepared and disclosed in accordance with International Accounting Standards.	1	2	3	4	5
9. Channels for the dissemination of information on a timely basis to relevant users are provided.	1	2	3	4	5
10. Shareholdings in the company by senior management or the board of directors are disclosed	1	2	3	4	5
11. The Company publishes a Corporate Governance report	1	2	3	4	5
12. Timely and accurate disclosure is made on all material matters	1	2	3	4	5
13. Related party transactions are disclosed.	1	2	3	4	5

F. Responsibility of the Board of Directors					
1. Board members act in the best interests of the company and the shareholders.	1	2	3	4	5
2. The board takes stakeholders' interests into account.	1	2	3	4	5
3. The board monitors the effectiveness of the company's governance practices.	1	2	3	4	5
4. The board of directors elects, monitors and replaces executives when necessary.	1	2	3	4	5
5. Board oversees performance of the CEO	1	2	3	4	5
6. Board sets the tone at the top that demonstrates the company's commitment to integrity and legal compliance	1	2	3	4	5
7. The board monitors and manages potential conflicts of interest of management, board members and shareholders.	1	2	3	4	5
8. The board supervises the process of disclosure and communication.	1	2	3	4	5
9. Board members are provided with accurate relevant information about the company.	1	2	3	4	5
10. Board approves strategic plans.	1	2	3	4	5
11. Board members are able to devote sufficient time to their responsibilities.	1	2	3	4	5
12. Board members have the necessary technical skills/knowledge to contribute to the financial success of the company	1	2	3	4	5
13. Board members have the necessary work experience to contribute to the financial success of the company	1	2	3	4	5
14. Board members have the necessary industry experience to assess the operational performance of the company	1	2	3	4	5
15. The board has meaningful input and decision-making authority over the company's capital allocation process	1	2	3	4	5
16. Gender diversity in the board composition strengthens company performance and promotes long-term shareholder value	1	2	3	4	5

Fourth: Obstacles and Enablers that affect Corporate Governance

Please indicate the extent of your agreement as to whether the following potential obstacles and enablers affect the practice of corporate governance in the UAE.

1	2	3	4	5
Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**

G. Obstacles					
1. Weak legal controls and law enforcement	1	2	3	4	5
2. Culture of the UAE community	1	2	3	4	5
3. Weak accounting and auditing profession	1	2	3	4	5
4. Retaining the same external auditor for a period exceeding three years	1	2	3	4	5
5. Poor-quality accounting and finance education	1	2	3	4	5
6. Weak infrastructure of financial institutions	1	2	3	4	5
7. Lack of legal and regulatory systems that govern companies' activities	1	2	3	4	5
8. Government interference in business activities	1	2	3	4	5
9. The state of the UAE economy	1	2	3	4	5
10. The costs of practicing good corporate governance outweigh the benefits	1	2	3	4	5
11. Poor financial and non-financial disclosure	1	2	3	4	5
12. Lack of Board members with the right skills	1	2	3	4	5
13. Lack of female board members	1	2	3	4	5
14. Lack of transparency in relation to insider trading	1	2	3	4	5
15. Weak internal control system	1	2	3	4	5
H. Enablers					
1. Ensuring wide adoption of international accounting and auditing standards	1	2	3	4	5
2. Ensuring gender diversity at board level	1	2	3	4	5
3. Disclosing insider shareholding in accordance with the rules	1	2	3	4	5
4. A mature compliance function improves performance	1	2	3	4	5
5. Using training and other means of support	1	2	3	4	5

6. Developing incentive programs for compliance with principles of corporate governance	1	2	3	4	5
7. Establishing corporate governance education programs at universities	1	2	3	4	5
8. Establishing an institute of directors for training, raising awareness and education for CEOs, directors, and board members	1	2	3	4	5
9. Enhancing professional accounting and auditing bodies	1	2	3	4	5
10. Participating in international events, conferences, meetings, and committees dealing with corporate governance	1	2	3	4	5
11. Encouraging research into corporate governance in the UAE	1	2	3	4	5
12. Learning from the experiences of other countries concerning corporate governance practice	1	2	3	4	5
13. Setting the tone at the top to embed corporate governance in long-term value creation	1	2	3	4	5
14. Initiating regional corporate governance partnership programs with international organizations such as the OECD	1	2	3	4	5
15. Changing the outside auditor every three years has a positive effect on corporate performance	1	2	3	4	5
16. An effective internal control function over financial reporting and its disclosure controls and procedures has a positive effect on corporate performance	1	2	3	4	5
17. An effective compliance program including policies and procedures for handling concerns related to potential violations of law has a positive effect on corporate performance	1	2	3	4	5
18. Senior management and board development and succession planning need to be engrained in the company's culture	1	2	3	4	5
19. Establishing a robust evaluation process of the board of directors, senior management, and committee members	1	2	3	4	5

Any additional comments:

……………………………………………………………………………
……………..…………………………………

……………………………………………………………………………
……………………………………………………………………………
……………………………………………………………………………
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Thank you for your cooperation

If you would like a copy of the study results report, please complete the following details:

E-mail:
………………………………………………………………………………
…………………………

Appendix B

SEMI-SCRIPTED INTERVIEW QUESTIONS

Carina Schaefer
Doctor of Business Administration (DBA) Student
College of Business and Economics
United Arab Emirates University (UAEU)
E-Mail: 201790487@uaeu.ac.ae
Tel: 0566855978

An Assessment of the Impact of Corporate Governance Mechanisms and Principles on corporate performance: The Case of UAE.

Re: Invitation to Participate in Academic Research Interview

Dear Madam/Sir,

I would like you to participate in an interview to examine the impact of various Corporate Governance mechanisms and principles. The main purpose of the interview is to gather in depth information of the research topic. Each interview will be recorded. Recording/s will only be used by the researcher for research purposes and will not be shared with third parties.

Kindly note that participation is voluntary, and accordingly you may withdraw at any time from the interview. There is minimal risk in participating in an interview since all data collected will be anonymous. No personal data will be collected for this research (personal data being defined as any information that identifies an individual). Neither your name, nor your job title, nor your organization will be identified or identifiable. The demographic data will only be collected to ensure the selection of appropriate interviewees. Interviews may be conducted in person or over the telephone.

If you have questions regarding this study, please do not hesitate to contact the researcher directly as per the contact information below.

Thank you in advance for your valuable contribution to this important study.

Please tick the following statement if you agree to participate:

I agree to voluntarily participate in the interview ___ I agree

First: Background information

1.1.
Gender

☐ Male	☐ Female

1.2. Qualifications

☐ Secondary	☐ Diploma	☐ Bachelor	☐ Master	☐ Doctorate

1.3. Your position

☐ Executive	☐ Board member	☐ Accountant	☐ Auditor	☐ Audit committee member	☐ Lawyer	☐ Investment Officer

1.4. Years of experience in current role

☐ Less 5 yrs	☐ 5-10 yrs	☐ 11-15 yrs	☐ 16-20 yrs	☐ More than 20 yrs

Semi-structured Interview questions

"7RM" means The Chairman of Authority's Board of Directors' Resolution No. (7 R.M) of 2016 Concerning the Standards of Institutional Discipline and Governance of Public Shareholding Companies

Gender representation

In 2012, the UAE Cabinet made it compulsory for corporations and government agencies to include women on their boards of directors. The 2012 announcement was made by Sheikh Mohammed bin Rashid, Vice President of the UAE, and Ruler of Dubai, in December 2012. However, since then no fixed quotas for gender representation on UAE listed companies Board of Directors have been introduced in the UAE. Pursuant to 7RM there is no firm obligation for a Board of Directors to have female members – it merely requires nominating female candidates for election. When compared to a few decades ago, today women are more educated, highly qualified, and ready to assume responsibilities for high-level, highly impactful positions in the corporate world. However, progress in that direction at the UAE-listed companies seems to be slow -

1. Do you believe 7RM is an efficient rule to get women in the board room?
2. What changes would you like to see in legislation to achieve a more equal gender balance?
3.

Board members occupational experience

Resolution 7RM, Article 41(a), requires that "the candidate shall have at least five years' experience in the field of the Company which he/she is nominated for its Board membership"

4. Are you satisfied that companies listed on the ADX or the DFM comply with this criterion?

Rotation of auditor

The overarching responsibility for monitoring management's actions with respect to financial reporting, is with the audit committee and, ultimately, the board. The UAE Companies Law requires that external auditors are rotated every three years.

5. Do you think this is an appropriate requirement for listed companies in the UAE? Explain your answer and provide examples

Compliance

Corporate governance refers to a framework of procedures, policies, and rule that is used to determine the overall performance and direction of the company. Compliance is a term used to describe the process through which a business demonstrates that it has implemented requirements in contracts, regulations, policies, and laws. Corporate governance and compliance are linked. In fact, they fall under the umbrella term of governance, risk management, and compliance (GRC).

Thinking about compliance:

6. How has the compliance function evolved for listed companies in the UAE since 2014?
7. Pursuant to 7RM (Article 43), it is the duty of the BoD "to ensure compliance with applicable laws, regulations, and resolutions, as well as the requirements of the supervisory authorities". To what extent, do you believe have listed companies in the UAE achieved this?

8. A major auditing firm in the UAE conducted a study in the US in 2016 and found that based on survey results over the long term, companies that maintain a “best-in –class” compliance program financially outperform companies that do not, do you agree or disagree? Explain why
9. What are the main drivers of compliance in the UAE?
10. Do you believe 7RM has contributed to better compliance?

Internal Control

Establishing an internal control department is mandatory under 7RM. Internal control is a crucial aspect of an organization’s governance system and ability to manage risk and is fundamental to supporting the achievement of an organization’s objectives and creating, enhancing, and protecting stakeholder value. It is widely acknowledged that effective internal control also creates a competitive advantage, as an organization with effective controls can take on additional risk whereas the absence of adequate internal control measures exposes the financial management of an organization to certain threats (incorrect financial statements, incorrect valuation of assets etc.)

11. To what extent do you believe, is an efficient internal control department a driver of corporate performance?
12. What internal control measures do you consider the most important?
13. Do you believe efficient internal control has significant effect on business performance?

Generic questions

14. According to your experience, what are the main obstacles in implementing effective corporate governance in the UAE?

15. What are the main improvements you would like to see in CG in the next 5 years in the UAE?
16. What improvements would you like to see from SCA specifically?
17. Comply or explain has been part of the UK corporate governance framework since it was introduced in 1992. Do you think comply or explain is the right approach in the UAE or should it be comply or fine? Explain

Appendix C

DEMOGRAPHICAL CHARACTERISTICS – INTERVIEW PARTICIPANTS

	Gender		Qualification	Position	Yrs of experience in current	Date of interview	Duration	Mode
	Male	Female						
#R1	✓		MA	CEO	16-20	19/06/2020	1h20	MS Teams
#R2		✓	MA	Investment Officer	16-20	20/06/2020	45min	MS Teams
#R3	✓		PhD	CEO	16-20	21/06/2020	60min	MS Teams
#R4	✓		MA	CEO	16-20	22/06/2020	50min	Telephone
#R5	✓		MA	CEO	16-20	23/06/2020	55min	MS Teams
#R6	✓		MA	Lawyer	16-20	25/06/2020	45min	MS Teams
#R7	✓		MA	Investment Officer	16-20	26/06/2020	45min	Telephone
#R8	✓		MA	Board member	16-20	27/06/2020	45min	Telephone
#R9	✓		BA	Lawyer	11-15	05/07/2020	45min	MS Teams
#R10	✓		BA	Lawyer	11-15	26/07/2020	45min	MS Teams
#R11		✓	BA	CEO	16-20	04/09/2020	1h20min	MS Teams
#R12	✓		MA	CEO	16-20	10/09/2020	60min	MS Teams
#R13		✓	MA	CEO	16-20	01/10/2020	45min	Telephone
#R14	✓		MA	Lawyer	11-15	14/10/2020	45min	Telephone
#R15	✓		BA	Lawyer	11-15	28/10/2020	45min	MS Teams
#R16	✓		BA	Executive	20+	02/11/2020	40min	Skype
#R17	✓		BA	Executive	5-10	10/11/2020	60min	MS Teams
#R18	✓		PhD	Investment Officer	5-10	11/11/2020	45min	MS Teams
#R19	✓		BA	CEO	16-20	02/12/2020	45min	Skype
#R20	✓		BA	CEO	5-10	02/03/2021	45min	MS Teams
#R21	✓		BA	Lawyer	5-10	10/03/2021	60min	MS Teams
#R22	✓		BA	Investment Officer	5-10	15/03/2021	60min	MS Teams

UAEU جامعة الإمارات العربية المتحدة United Arab Emirates University

UAE UNIVERSITY DOCTORATE DISSERTATION NO. 2022:15

A research of the impact of corporate governance mechanisms and principles on corporate performance of the listed companies in the UAE.

Carina Schafer received her doctorate degree from the Department of Accounting and Finance, College of Business Economics at UAE University, UAE. She received her MBA from London Business School and her Bachelor of Laws from the University of Cambridge.

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