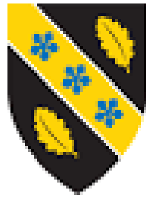


University of Wales
Trinity Saint David

The corporate governance and its application`s compliance level implication on the financial performance of listed firms in the Amman Stock Exchange

A thesis submitted for the degree of
Doctor of Business Administration (DBA)

At

Faculty of Business

The University of Wales Trinity Saint David

By

Jafar Jamal Irshoud

2022

Declaration

Submitted to the University of Wales Trinity Saint David in fulfillment of the requirements of Doctor of Business Administration degree

Supervised by:

Lead supervisor: Dr Diane Keeble-Ramsay

Second supervisor: Dr Mizan Rahman

I declare this thesis has been composed solely by myself. It is not submitted, in whole or in part, in any previous application for a degree, except where states otherwise by reference or acknowledgement, this work presented is entirely my own.

Signature: JAFA JAMAL IRSHOUD

Date: 08/05/2021

Statement (1):

This thesis is the result of my own investigations, except where otherwise stated. Where correction services have been used the extent and nature of the correction is clearly marked in a footnote(s). Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended.

Signature: JAFA JAMAL IRSHOUD

Date: 08/05/2021

Statement (2):

I hereby give consent for my thesis, if accepted, to be available for deposit in the University's digital repository.

Signature: JAFA JAMAL IRSHOUD

Date: 08/05/2021

Dedication

To **my father, Eng. Jamal Irshoud and my mother** who I owe them what I have achieved and push me with real wishes to chase a doctorate.

// Acknowledgement

Above all, I thank the almighty **Allah (God)** for the many blessings, protection, and love given to me. Your Grace has seen me through this journey, and He gives me more than I deserve. The pray and peace be upon his **prophet Mohammad** and all other messengers.

This research work involved extensive reading, consultation, and ongoing dialogue with many key persons I thank for valuable time, guidance, and professional input.

I am very much grateful for the cooperation and interest of my lead supervisor **Dr. Diane Ramsay** for her invaluable support and insightful guidance, constructive feedback, continuous tutelage, and helpful advice during the successive stages of this Thesis. Many thanks to her for that tireless and fruitful efforts. Her immense knowledge and great experience have incredibly improved the outcome of this Thesis. I could not have imagined having a better advisor and mentor through my long journey of the Thesis. Besides my lead supervisor, I would also thank the second supervisor**, Dr. Mizan Rahaman,** for his supports and guidance during this journey.

I cannot forget to thank **the University of Wales Trinity Saint David** and **London School of Commerce** staff. They contributed in one way or another, and gave me all the necessary information on how to progress in the project.

My sincere thanks also go to **the Amman Stock exchange** (Archive Department), represented by **Haneen Mubarak**, who gave me all the required information to conduct this research. Without her continuous response and cooperation, it would harder to complete this research.

For the main person who stood beside me taking such a hard decision, my father **Eng. Jamal Irshoud.** During these very hard years, he has shown unfailing support, and encouragement whether financially or morally. He stands around me step by step to accomplish this journey. Therefore, I must express my very profound gratitude to him for giving me the opportunity and strength to reach for the stars and chase my dreams. Without your help and wise guidance, for sure this project would not has been done. For the person who is the only prays for me while others sleep, who makes me more enthusiastic for a better future, **my mother**, your constant valuable supports are matter. It a reality with no exaggeration. I owe to them a lot, the words cannot describe my feeling towards them, words are useless to thank both of you, and I must appreciate them by more and more success. I hope that I will be the good son and keep surrounding you with love and sacrificing. My heartfelt regard always goes to both of you as you are truly the reason of my passion to any success and achievement. I ask the almighty Allah (God) to protect them at all time and give them infinite happiness.

To **my wife,** words cannot describe how lucky I am to have her in my life. She has selflessly given more to me than I ever could have asked for. During this long and hard journey, she has proved to me that she is trustworthy to be my partner in our lifelong journey. She has stood by me through all my travails, my absences, my fits of pique and impatience. For the ongoing love regardless of stressful life by sleepless nights, tough

time, and family responsibilities. Without her tremendous understanding and inspiration during the past few years, it would be impossible to make this research done. She shared with me good and difficult times, she makes good days more beautiful and makes uneasy periods less difficult. Thank you for being a crucial part to make this research to be done and made it extremely easier. I am sure, my future will be great by having a person such you. I asked almighty Allah (God) to protect our daughters (**Joury and Lara),** their smiles mean a lot and make our life gorgeous.

From the bottom of my heart, I would like to say a big thank you to my dear and beloved **brothers (Tariq and Khaled), sisters, and brothers-in-law,** for all unconditional support in these very intense years, you push me to achieve my goal. All of you have been amazing, without such brothers and sisters behind me, I doubt that I would be in this place today. Stressful moments were easier by their constant help and support.

For who makes my life more beautiful and greater **my nephews and my nieces,** you make my life more enjoyable.

Author: JAFAR IRSHOUD

Abstract:

The financial performance of firms is a widespread topic worldwide, and continued interest is given to the elements that affect a firm's financial performance. Financial performance is recognized to be impacted by several features; liquidity management and corporate governance are a part of these factors. Consequently, this thesis examines the impact of corporate governance and liquidity management on the financial performance of the listed financial firms in the Jordanian stock market, specifically, the Amman Stock Exchange (ASE) between 2010 and 2019. In terms of corporate governance, research findings show board activity and board size have no significant influence on firm financial performance (ROA and ROE), but it is positive. In contrast, CEO duality shows a significant adverse effect on both measures. Board composition, and the board's sub-committees independence, including audit and remuneration committees, positively and significantly affect.

This thesis contribution can be outlined according to four main elements. Firstly, the topic itself, which considers financial performance with corporate governance, the topic reflects a considerable lack of current studies in the ASE; this thesis extends the current knowledge of the long corporate governance`s debate. Secondly, it connects the investigation with the agency theory. Thirdly, it is an update of the current knowledge about the ASE in terms of time frame. Fourthly, this thesis outcome would be beneficial for economic growth through several parties including, ASE's decision and policymakers, international investors, local investors, managers, consultants, decision-makers, listed firms, unlisted firms, and practical and academic researchers.

This thesis formulated its theoretical and conceptual frameworks to a ground for the analyses; it considers six corporate governance mechanisms, and practical framework is suggested.

Key words: financial performance, corporate governance, Jordan, Amman Stock Exchange, financial firms, corporate governance mechanisms, emerging markets.

Table of Contents

Acknowledgement ... iv

Abstract ... vi

List of Tables: ... x

List of figures: ... x

Abbreviation: ... xi

Chapter one: Background to the research: ... 1

1.1. Introduction: ... 1

1.2. Why implement "good" practices of corporate governance? ... 4

1.3. The issues of corporate governance in developed markets and developing markets: ... 5

1.4. Problem statement: ... 7

1.5. The main thesis purpose: ... 11

1.6. Research questions and Objectives: ... 11

1.7. Significance of the research: ... 12

1.8. The structure of the thesis: ... 16

Chapter Two: Literature Review: ... 17

2.0. Introduction: ... 17

2.1. Financial market structure and its importance and role in the financial system as a whole: ... 17

2.1.1. Financial market classification: ... 19

2.2. Capital market in Jordan: ... 24

2.3. A brief discussion of financial performance concept: ... 26

2.4. Determinants of financial performance: ... 28

2.5. Introduction to corporate governance definition: ... 31

2.6. Corporate governance challenges and opportunities: ... 33

2.7. Overview of the Jordanian Corporate Governance: ... 36

2.8. Corporate governance and firm`s financial performance: ... 42

2.9. Critical appraisal of the previous literature of corporate governance impact on firm performance: ... 45

2.10. The theoretical perspective of corporate governance with firm`s financial performance: ... 47

2.10.1. Corporate governance theory: ... 48

2.11. The Research Theoretical Framework: ... 52

2.12. The research conceptual framework development: ... 53

2.13. The Research Hypotheses Development: ... 57

2.13.1. Corporate governance mechanisms and firm performance: ... 57

2.13.2. Hypotheses summarization: ... 67

2.14. Summary: ... 69

Chapter Three: Research design & Methodology: ... 70

3.0. Introduction: ... 70

3.1. Research objectives: ... 70
3.2. Research paradigm adoption: ... 71
3.3. Population and sampling design: ... 73
3.4. Data Collection: ... 74
3.5. Variables measurements: ... 75
3.6. Data Analysis processing: ... 78
3.6.1. Descriptive analysis: ... 79
3.6.2. Correlation analysis: ... 79
3.6.3. Multiple Regression Analysis (MR): ... 80
3.7. Ethical and Legal Considerations: ... 87
Chapter Four: Analysis Findings: ... 89
4.1. Introduction: ... 89
4.2. Data analysis for the first model, corporate governance and financial performance: ... 89
4.2.1. Descriptive statistics for (dependent variables): ... 89
4.2.2. Descriptive statistics (independent variables): ... 89
4.2.3. Correlation analysis: ... 91
4.2.4. Regression analysis result: ... 92
4.2.5. Specification tests result: ... 95
4.2.6. Control variables result: ... 96
4.3. Data analysis for corporate governance compliance level and financial performance: ... 96
4.3.1. Descriptive statistics for dependent variables: ... 97
4.3.2. Descriptive statistics for independent variables: ... 97
4.3.3. Correlation analysis result: ... 100
4.3.4. Regression analysis result: ... 101
4.4. Summary: ... 102
Chapter Five: Discussion: ... 104
5.1. Introduction: ... 104
5.2. Corporate governance mechanisms and firm`s financial performance: ... 104
5.2.1. Board activity: ... 104
5.2.2. CEO Duality: ... 106
5.2.3. Board of directors' composition: ... 108
5.2.4. Board sub-committee independence: ... 109
5.2.5. Board size: ... 110
5.2.6. Firm’s size and age (control variables): ... 112
5.2.7. Compliance level of corporate governance mechanisms application and financial performance: ... 113
5.3. Summary: ... 115
Chapter Six: Conclusion: ... 117

.6.0 Introduction 117
6.1. Main Findings Summary: 117
6.1.1. Findings of the corporate governance impact on financial performance: 118
6.2. The recommended framework for the ASE`S listed financial firms: 123
6.3. The thesis`s contribution: 126
6.4. The Limitations of the Study: 129
6.5. Further researches and recommendation: 132
6.6. Reflection: 133
Reference: 136
Appendices: 157
Appendix (1): 157
Appendix (2): 158
Appendix (3): 163
Appendix (4): 169

List of Tables:

Table 1: financial market classification, Rezat (2008). 20

Table 2: OECD`s corporate governance principles, Al-Msiedeen (2019). 34

Table 3: OECD`s elements, Maher and Andersson (1999). 35

Table 4: what to consider in the preparation of governance report, ASE (2020). 41

Table 5: research`s theories argument with adopted elements, author. 56

Table 6: Corporate governance mechanisms regulations, The ASE. 83

Table 7: firms` commitment with CG`s principles. 84

Table 8: Firms compliance level categorization. 84

Table 9: ROA, and roe Descriptive statistics, first model, author 89

Table 10: independent variables` Descriptive statistics, main model, author 91

Table 11: Pearson's correlation analysis, author. 92

Table 12: regression analysis of the main model, researcher, 2022. 93

Table 13: VIF test, author. 95

Table 14: descriptive statistics for ROA and ROE considering the compliance level, author. 97

Table 15: descriptive statistics for C.G MECHANISMS CONSIDERING the compliance level, author. 98

Table 16: Correlation analysis between corporate governance and ROA considering compliance level, Author. 101

Table 17: model fit test for ROA and ROE considering the compliance level, author 102

Table 18: Hypotheses' outcomes, made by author, 2020. 122

List of figures:

Figure (1): corporate governance assessment in Jordan, McGee, (2009). 37

Figure 2: conceptual research framework, author. 52

Figure 3: the research`s conceptual framework, Author, 2020. 54

Figure 4: the simple research conceptual framework, Author. 56

Figure 5: The recommended framework for the ASE`S listed financial firms, author 125

List of Appendices:

Appendix (1): Error! Bookmark not defined.

Appendix (2): Error! Bookmark not defined.

Appendix (3): Error! Bookmark not defined.

Appendix (4): Error! Bookmark not defined.

Abbreviation:

List of abbreviation	
FM	Financial Market
CM	Capital Market
CG	Corporate Governance
EAFMS	East Asian Financial Markets Scandal
MENA	Middle East and North Africa
FS	Financial System
CM	Capital Market
OTC	The Over-The-Counter
AFM	Amman Financial Market
JSC	Jordan Securities Commission
SDC	Securities Depository Center
IASC	International Accounting Standards
JOD	Jordanian Dinar
EBRD	The European Bank for Reconstruction and Development
OECD	Organisation for Economic Co-operation and Development
CBJ	Central Bank of Jordan
IC	Insurance Commission
CCD	Companies Control Department
CFO	Chief Financial Officer
UK	United Kingdom
US	United States
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Investment
CEO	Chief Executive Officer
MRA	Multiple Regression Analysis
VIF	Variance Inflation Factor
BP	Breusch–Pagan

Chapter one: Background to the research:

1.0. Introduction:

Due to the implications of globalisation, the world becomes more and more connected; this left the world as a whole to be linked, including educations, cultures, services, and trade. Financial Market (FM) is an integrated part of our connected world. Consequently, FM is affected and changed in response to globalisation and the revolution of technology (Filatotchev et al., 2016). Financial Market is defined as the place that controls, eases, and manages trading instruments, including long- and short-term tools (Diehl, 2016). The financial market is part and parcel of the economy and plays an essential role in economic growth (Khetsi and Mongale, 2015). In Darskuviene (2010) word, the capital market and money market are the two primary components of financial markets, yet, stock market and bond market represent the capital market.

The money market is targeted mainly by lenders and borrowers who intend to be involved in low-risk position and prefer short-term instruments; it is majorly dominated by banks, government organizations, individuals, and financial institutions. It aims to perform several functions for short-term funds, including cash management, allocation, information access, fundraising, and risk management. The capital market is defined as a regulated and organized place that allows investors to meet each other according to their needs. These needs can be summarized by borrowing, lending, and investing (Becker, 2005). Investors who prefer long-term assets such as bonds and stocks with higher risk go to trade within the capital market. The capital market has two major markets, the stock market and the bond market. Very briefly, the stock market is the place where listed companies raise their shares to be traded after an initial public offering. Simultaneously, the bond market offers capital by debt instruments, mostly known as bonds commodities market where natural resources and commodities are traded (Tomasic and Akinbami, 2013).

According to Matolcsy and Wright (2011), several theoretical and empirical research and scientific studies have considered financial performance issues, specifically in financial institutions. All profit companies seek to generate profits, profits are the core of all businesses' existence, and this can also be true for none-profit firms as these firms also seek to make a profit to develop these firms. According to Dufera (2010), financial performance can be defined simply as an indication of how well a firm can generate profits. As suggested by Mirza (2013),

Noor (2019), Naz and Ijaz (2016), and Batchimeg (2017) that financial performance can be affected due to exterior aspects such as national and international economic and political conditions. There are many determinants of the financial performance of firms (internally), including ownership structure, risk management, corporate governance regulations, internal policies and characteristics, liquidity management, and operation management. Financial performance is a continuous challenge for all firms around the globe. In turn, this topic has been discussed widely in the literature from several aspects. Its relation with various perspectives attracts researchers` interest in practice or theory (Demirgunes, 2016).

As consequences of the well-known collapse of 2003 of big companies due to unethical practices of managers, including WorldCom and Enrol, and the crisis of 2008, together have brought noticeable attention to the corporate governance area, where on the word of price (2018) that “the topic of corporate governance is a vast subject that enjoys a long and rich history. It’s a topic that incorporates managerial accountability, board structure, and shareholder rights. The issue of governance began with the beginning of corporations, dating back to the East India Company, the Hudson’s Bay Company, the Levant Company, and other major chartered companies during the 16th and 17th centuries, while the concept of corporate governance has existed for centuries, the name didn’t come into vogue until the 1970s”. Even though corporate governance is not a modern topic, yet, on the word of Armstrong (2005) that it “as a discipline in its own right is relatively new”. The emphasis on corporate governance has been growing significantly whether, in practice or academic studies, this is due to the recognized importance of corporate governance, where it aims mainly to control the relationship between managers and owners as well as eliminating unethical behaviour that can disturb this relation (Paul, 2017). As said by Mulili and Wong (2011) that there is no possibility to formulate an agreed definition of corporate governance, where a key influence on corporate governance is created because of dissimilarity from country to country in terms of legal systems, regulations, appropriate law application, etc. Consequently, along with Solomon (2010) that based on the views of theorists, practitioners, and policymakers, corporate governance as a concept can be seen from various perspectives, at the minimum it can be seen from two perspectives, the broad and the narrow perspectives. The limited perspective objects ultimately to increase and save the shareholders` wealth, whereas the broad perspective does not limit the responsibility on the shareholders, but rather it goes wider to include various stakeholders such as employees, suppliers, and creditors. However, Corporate Governance (CG) can be defined as a combination of rules (principles) that aim to eliminate unethical

behaviour through the corporation to ensure a high level of transparency and security for both the owners and employees of organizations. It is well known that corporate governance was introduced and improved due to serious financial scandals; this was due to insufficient regulations against fraud and all unethical behaviours with no care to shareholders` interest. Hence, corporate governance has been penetrated in almost all regulatory structures (Solomon, 2011).

Referring to a previous literature, many theories have considered corporate governance and firm performance and explain the relationship between both concepts, including agency theory (Anglin and Gao, 2011), (Yegon et al, 2014), (Panda and Leepsa, 2017), and Madhani (2017), stakeholder theory (Jaimes-Valdez et al., 2015) (Moore and Petrin, 2017), stewardship theory (Madison, 2014), (Mills et al., 2019), stakeholder theory (Solomon, 2010), and resource dependency theory (Pugliese et al., 2014), (Awwad and Akroush,2016), (Findiki, 2019), and (Zehir, 2019). These theories explain and provide a justification of corporate governance practices as well as the consequences of these practices on firm performance (Kalsi and Shrivastav, 2016). As indicated by Moscu (2015), these theories have made a succession in some elements, while there are associated shortcomings. For instance, but not limited to, respectable explanation for some conditions were given, but these theories reflect complications to deal with some institutions. The reason behind this is that these institutions have complicated objective functions for management and a wide range of stakeholders. Nonetheless, corporate governance theories, as indicated by Blair (2012) add a great value of discussing the board of directors monitoring, where, as said by him that "directors are required to oversee a firm's activities as a part of their "duty of care" towards the company and all key stakeholders." As will be discussed that agency theory is employed for the corporate governance part, where, according to Pugliese (2014) that board monitoring activities are well-rooted into agency theory. Adhikary et al. (2014) indicate that firms guided by stakeholder disharmony might work less efficiently than those firms guided by shareholders. In a nutshell, firstly, Agency theory discusses the conflict of interests between owners and managers and how to align both interests to make managers working on behalf of owners properly. This theory deals with owners or shareholders as "principals" and the managers as "agents" (Tricker, 2015). Contrariwise to the agency theory, the Stewardship theory has an entirely dissimilar argument. The core assumption of stewardship theory is that managers are seen as a "steward" of shareholders` funds; therefore, managers should be given a high level of trust to behave independently, dutifully, and honestly, hence improving the wealth of shareholders (Madison,

2014). Thirdly, stakeholder theory, unlike agency and stewardship theory, stakeholder theory considers a wider perspective of accountability than a narrow perspective of agency and stewardship theories. This assumption is based on the view that a company`s goal achievement is connected with a network of associations working together in a circle for that end (Solomon, 2010). Resource dependence theory is based on the belief that a company`s performance is significantly affected when a board of directors has key links to fundamental resources and constituencies (Awwad and Akroush, 2016).

1.1. Why implement "good" practices of corporate governance?

Good governance, according to Nakpodia et al. (2018) comprises clear ownership, ownership equality, board independence, and audit independence and monitoring. Good corporate governance standards are most advantageous to shareholders in which the transparency and legal structure safeguarding shareholders. In addition, large shareholders have likely to pay a premium of more than 20% for shares in firms around the world with solid governance standards, and this value is greater where shareholders' legal protections are weak. Newell and Wilson (2002) suggested also that good governance includes transparent ownership, ownership neutrality, independent directors and independent audits and oversight. Cornelius (2005, p. 19) stated that good practices of corporate governance "are most valuable to investors where the disclosure and legal framework protecting shareholders is weakest". Chen et al. (2009) reported institutional investors have tended to pay a premium of more than 20 per cent for shares, in corporations around the world with good governance practices, and this premium is higher in countries with poor legal protection for shareholders. As indicated by Oktar et al. (2020) that corporate governance as a general view is for making sure that the management is accountable to shareholders by frameworks of monitoring and supervision. In addition, the organizations mostly have several parties who are interested in these organizations, one of these participants are potential shareholders, where these prospective shareholders look at to what extent that the structure of corporate governance is effective and strong. And they also added that implementing an exemplary corporate governance mechanisms involve directly in supporting the overall performance of a company.

As previously said, many well-publicized corporate failures occurred in the late 1980s and early 1990s. As a result, the enhancement of corporate governance procedures has become a global concern. According to the OECD (2018), good corporate governance includes the some elements as demonstrated below:

- A good corporate governance structure helps to ensure that corporations use their assets efficiently,
- Such a structure aims to guarantee that boards are responsible to both corporations and their shareholders,
- It encourages firms to act in the best interests of the entire society,
- And it increases the trust of domestic and foreign investors.

Good governance and corporate management are two sides of a single coin. Good governance is critical for improving a company's performance by loyally directing and controlling the business, which in turn raises the company's worth. In addition, it is seen as a key player in reducing the risk of financial crime. Moreover, excellent governance is a way to promote long-term development. As a result, good corporate governance can dynamically safeguard the interests of shareholders by establishing appropriate channels for the firm's administration. (Bourrel et al., 2018).

1.2. The issues of corporate governance in developed markets and developing markets:

- **The issues of corporate governance in developed markets**

Many corporations collapsed in the late 1980s and early 1990s as a result of senior executives abusing their power and control to grow their fortune and engage in illegal accounting practices. In addition, more scandals emerged in the late twentieth century, with the failure of corporations such as Cinar in Canada, some banks in Germany, Maxwell in the United Kingdom, WorldCom in the United States, and Gazprom in Russia. The owners of these enterprises suffered heavy losses of billions dollars and countless employees all across the world. As a result, a fierce debate erupted concerning corporate governance in industrialized countries, including codes of governance and international corporate governance frameworks (Nadaf and Navi, 2017).

- **The issues of corporate governance in developing markets:**

In general, developing economies` corporate governance practices are, on the whole, quite poor (Nahuelhual et al. 2018, Nakpodia and Adegbite 2018, and Ciftci et al. 2019). These studies highlight the key characteristics of corporate governance in developing countries, such as unequal law enforcement, pyramidal company groups, excessive ownership concentration, multiple class shares, and a generally poor institutional setting. Unfortunately, these

circumstances triggered a new financial crisis on 2 July 1997, this time in the East Asian financial system

East Asian economies, according to the IMF, have questionable practices. The main reason was that East Asian economies were prone to economic instability due to their financial dealings that were impacted by insider trading, pervasive corruption, and poor corporate governance procedures, which led to banking sector instability. The stock and currency markets sank, prompting central banks to protect their currencies by hiking interest rates, purchasing forward, or doing both. The most significant consequence of the crisis was the shattered confidence of domestic and international investors (Papadopoulos, 2019).

Indeed, consideration about corporate governance application was sparked in developing economies following the East Asian financial markets scandal in 1997, which included the promotion of financial system oversight and disclosure measures, as well as the adoption of particular mechanisms, especially those related to the model of Anglo-American (Shen et al. 2018).

Further crises resulted from the lack of corporate governance, such as minority shareholders' expropriation of cash in Chinese businesses and the Satyam crisis (the well-known fraud scandal in India). Shareholders lost tens of billions, governments lost enormous amounts of tax income, and employees lost their jobs as a result of these financial meltdowns. As a result, as Oehmichen (2018) argues, strong control measures are required. During the financial crisis in Asia, in particular the East of Asia, organizations in specific regions e.g. Indonesia and Malaysia, which have a well ownership structure and higher transparency provided better safety for minor shareholders.

According to Yu and Wang (2018), low corporate governance quality in the impacted countries led to lower economic forecasts, which resulted in increased expropriation by managers, resulting in a significant drop in asset prices. The financial crises in emerging markets were driven by a number of corporate governance difficulties, according to Oehmichen (2018): weak formal establishments, concentration of ownership, and features of board (i.e. CEO and chairperson duality, and board independence). According to Yoshikawa (2018), the performance of Asian enterprises began to deteriorate prior to the well-known financial crisis in the Asia, with the primary cause of being the companies' having high debt-to-equity ratios and resulting reliance on exterior funding.

Corporate governance, in the end, attempts to protect the long-term profile of an organization and sustainable economic growth for both the interest of stakeholders of the company. Asset allocation decisions can have an impact on financial performance, and these decisions can be influenced by governance concerns, for example related party transactions, shareholders protection procedures, and a lack of monitoring. Although not a developing market, Japan is an excellent example of how capital efficiency and governance are inextricably connected. While critique of allocating capital frequently links poor performance with deeply embedded boards controlled by insiders – the same forms of condemnations that developing markets organizations face – the recent version of updates to the Corporate Governance mechanisms in Japan presented capital efficiency as a crucial element to be considered by managers. Developing markets are more vulnerable to risks in general than developed markets due to poorer structures, fewer laws, and less levels of developmental indicators and initiatives. Several key issues and risks face corporations which operate in developing economies include safety and security, social justice, environmental issues, waste and pollution. The availability of supervision systems for such risks is especially important for companies to disclose (Papadopoulos, 2019).

1.3. Problem statement:

Even though emerging economies mostly have a well-built physical, financial structure, such as central banks, commercial banks, and stock exchanges, but in most of these emerging economies reflect less well-developed mechanisms and accounting structures, governance structures, legislation, and technology of financial, less competitive markets, and less liquidity than the world's most advanced regimes. As indicated by Shodhganga (2017) that the financial performance is an essential element for all companies as companies are profit-seeking. He added that even non-profit firms seek for improving their financial performance to improve their operations. Financial performance is developed through many ways, as indicated by some studies such as Matar and Eneizan (2018); this includes but not limited to liquidity, revenues, leverage, firm size, corporate governance, risk management, economic condition, ownership structure, growth, tax, non-debt tax shield, and firm age. Financial performance is the core of this thesis`s purpose, and the researcher mainly targets financial performance as it matters for all firms` existence and continuity.

The undesirable consequences of collapses and crises can be enormous, to mention some but not limited to, billions of dollars can be lost by shareholders, big government's tax losses, and high employees number can be fired (Oehmichen, 2018). The East Asian financial markets

scandal in 1997, the collapse in 2003, and the crisis of 2008 bring light to corporate governance and liquidity management. As said by Shen et al. (2018) and Yu and Wang (2018) that corporate governance application shortcomings and weaknesses are the reason for further crisis. Simply, the failure of 2003 was attributed to the lack of ethical values of managers who were working against shareholders' interests, and the only dominant goal was self-interest. Since then, corporate governance have been improved for better performance of the listed firms and avoiding such crises in the future (Mansur and Tangl, 2018, and Shen et al., 2018). Thus, these crises brought more attention to corporate governance (Lamport et al., 2011). As mentioned by Nadaf and Nazi (2017) that" In recent years the corporate scandals, some of which are still unfolding, involve high incidence of unacceptable activities of managers expropriating the resources of a firm at the ultimate cost of stakeholders." They also added that the system can be manipulated by financial regulators, corporate leaders, and auditors, which in turn bad consequences are not limited on the hurting firm itself and stakeholders` wealth, but rather it destroys nation`s reputation and the whole economy. For these reasons, the problem to be addressed through this thesis is how corporate governance affects the financial listed firms` financial performance in the ASE.

As mentioned by Elgar (2012), corporate governance is considered under the elements of corporate finance, and it is a current topic among other topics of corporate finance. The focus on CG has started after the 2008 crisis despite the attention given after some financial scandals in 2003. He also added that after the financial crisis of 2008 around the world, the CG had been given further attention due to the role that can CG plays against unethical behaviours and ensures parties` interest alignment, revealing its relations with various perspectives, and help concerned parties in improving CG. Despite this fact, Thanh. Ha and Vinh (2017) Batchimeg et al. (2017) mentioned that emerging stock markets are less attractive to researchers. Emerging markets are different from developed markets in terms of structure, regulations, and data availability. Thus, some emerging markets face scarcity in applied researches. The Jordanian stock market is one of the emerging markets that has not been fully explored in terms of liquidity and corporate governance (Alkahtani et al., 2016, and (Matar and Eneizan, 2018).

The UK and US stock markets are developed markets; after applying corporate governance codes, these markets show an improvement in their firm`s performance. Further, firms` profitability was raised by the new regulation, which forced firms to have better liquidity management. The impact of liquidity and corporate governance on profitability is not fully studied, as stated by Thanh and Vinh (2017) that on account of the importance of corporate

governance in emerging markets, there is a considerable piece of studies, but these studies' concentrations were significantly limited on developed stock markets rather than emerging markets (Al-naif, 2014). As stated by Hassan (2011), Hasan, Kobeissi, and Song (2011), and Piesse, Strange, and Toonsi (2012) that the MENA region, particularly Jordan, witnesses a scarcity of comprehensive academic researches which considers financial performance and how it is impacted by corporate governance. What is more, Alkahtani et al. (2016) suggest that Arabic stock markets have not been given enough attention in terms of liquidity association with firm performance. Further, Rehman et al. (2015) mentioned that liquidity and profitability are core issues in the field of corporate finance.

Corporate governance has been developed in order to improve the business control practices taking into consideration several parties such as, environment, society, suppliers, owners, managers, etc. Corporate governance includes what is called "mechanisms", mechanisms can be internal external, one of internal mechanisms concerns is board monitoring, it aims to control the relation between owners and managers, to insure all parties` interests are aligned and no misbehavior against this alignment is existed Buchdadi and Chou (2017). Even though these mechanisms are for enhancing firm, yet, many firms do not consider such mechanisms whether in fully either partially, mechanisms application results in agency costs that could be high sometimes, but the resulted costs are seen to be lower from costs which can be resulted from misbehavior. Additionally, the application of such mechanisms requires additional efforts which leads some firms to avoid it (Panda and Leepsa, 2017). The application of corporate governance has been seen as a controversial perspective, many theories were formulated as stated by Eluyela et al. (2018), these theories have opposite claims, and thus the elements of corporate governance are attractive to be analyzed.

Jordan is part and parcel of this connected world; thus, Jordanian economy and capital markets were impacted negatively as most countries during the crisis. Since then, corporate governance principles have improved and have been applied to all listed firms; the application varies from industry to industry. Additionally, listed firms were required to maintain enough liquidity as a part of these firms' liquidity management; for example, firms are obligatory to hold a further level of cash and current assets based on these firm's nature, while banks have different requirements (Jordan Strategy Forum, 2017). Most importantly, this report indicates that developing the Jordanian stock market is one of the main Jordanian government objectives for improving the overall economy. During the last few years, the Jordanian economy shows alarming indications regardless of the governmental attempts and efforts to strengthen the

Jordanian economy. Accordingly, while stock markets are connected to countries` economies and contribute significantly to improving these economies, having a stock market with good performance can directly improve the economy itself, as mentioned by Almustafa (2017). Jordanian stock market (Amman Stock Exchange (ASE)) is the targeted market for this study, and this might be helpful for several parties, whether researchers or the responsible entities in Jordan.

Prior to the adoption of the corporate governance concept in Jordan, there was a major financial incident, the liquidation of Petra Bank. Following the incident, the Jordanian currency`s (Dinar) exchange rate dropped from USD 3.35 to USD 1.41 in 1989. Jordan has also had financial crises in the corporate industry (e.g., the Magnesia Firm and the Phosphate Organization) as a consequence of losing millions of Jordanian dinars. Furthermore, banking abusive behaviors were disclosed, such as offering facilitations (Jordanian dinars millions) to persons without on appropriate approvals. As a result, in the 1990s, establishing several reforms of corporate governance became a more important agenda file in Jordan, as a predetermined goal of long-term and sustained economic growth. For instance, the Jordan Securities Commission (JSC), the Securities Depositary Centre (SDC), and the Amman Stock Exchange (ASE), are three new entities that have helped in improving the regulatory structure (Shbeilat & Abdel-Qader 2018).

Corruption is another issue in Jordan's corporate industry, which is a major impediment for current firms or prospective firms intend to invest in Jordan. Corruption is defined as all circumstance where a governmental role is exploited in unethical way for personal advantage. A middleman system, for illustration, is widely popular throughout Jordan, and even the area, and is seen as an essential part of operating business. Jordan's largest corruption case occurred in 2018, involving the unlawful production and smuggling of counterfeit tobacco exceeded generating millions of dinars illegally (Marashdeh, 2014).

As stated by the European Bank for Reconstructions and Development (2017) that "institutional environment promoting corporate governance in Jordan seems to be fairly developed, but key reforms would benefits the advancement of current efforts. The extent to which the codes are implemented does not seem to be monitored. Case law and Securities Commission`s rulings are hardly accessible. Some key corporate governance issues are not regulated and international organizations indicators show a framework where investor protections still perceived as a critical problem." However, the Amman Stock Exchange is one

of the developing markets that not to be explored in full. No recent study has considered the corporate governance with financial performance for financial listed firms; the majority are limited on non-financial firms (Alelfartas, 2019). To be noted, this research goes more in-depth regarding the corporate governance implication on ASE`s profitability, where it analyzes this implication by taking into consideration the level of corporate governance compliance, how this can impact ASE`s listed firms' profitability.

Hence, Jordan's governance practices are neither sufficient nor inclusive. The institutional and policy environment's deficiencies have a role in persuading corporate managers to engage in misconduct. It may be inferred that effective corporate governance standards are a significant component in Jordanian enterprises' financial health. Consequently, in overall, importance of analyzing corporate governance application cannot be neglected, weak structures of corporate governance result great failure of the overall structure, in turn, this has highlighted the necessity for study that objects ultimately to involve in the development and reform of corporate governance whether locally or internationally. In addition, there is no consensus about what is best corporate governance system to be adopted, where it varies from country to country .e.g. cultures. Therefore, investigation is must and accordingly providing contribution to the long corporate governance`s debate.

1.4. The main thesis purpose:

The main purpose of this research is to investigate the impact of corporate governance on the financial performance of the ASE- listed financial firms.

1.5. Research questions and Objectives:

The main research question is "is there a significant positive impact of corporate governance mechanisms on the financial performance of listed firms in the Amman Stock Exchange?" According to this central question, the main questions are introduced, as shown in the following.

The Board of directors is one of the most crucial parts of corporate governance mechanisms. The Board of directors' ultimate objective is to align shareholders and managers' interests, where managers and shareholders aim to maximize their benefits. Thus, an independent and effective board is vital for making sure that the top management works on behalf of shareholders, which accordingly minimizing the conflicts between these two parties (Blair, 2012). Further, the existence of such a board can eliminate or at least mitigate unethical behaviours by managers, which therefore can only serve these managers` interests with no

consideration for shareholders` interests. The interests` alignment reduces conflict, reflecting benefits for all parties, including better financial performance (Liu and Fong, 2010). Consequently, the influence of corporate governance mechanisms, particularly the Board of directors on the listed firms` financial performance, is vital for achieving better performance. This leads to the first sub-question of this research that is:

- **The first sub-question: is there a significant positive impact of corporate governance mechanisms (in particular, board activity, board size, board of director composition, remuneration committee independence, audit committee independence, and CEO duality) on the financial performance of listed firms in the Amman Stock Exchange?**

- **The second sub-question: is there a significant positive impact of corporate governance mechanisms considering the compliance level of these mechanisms` application (in particular, board activity, board size, board of director composition, remuneration committee independence, audit committee independence, and CEO duality) on the financial performance of listed firms in the Amman Stock Exchange?**

For achieving the main purpose, the main question above was formulated. In order to answer this question, this research generates two main objectives as demonstrated below:

1- **To investigate, the impact of corporate governance on financial performance of financial listed companies in the Amman Stock Exchange.**
2- **To examine the effect of corporate governance`s compliance level on financial performance of financial listed companies in the Amman Stock Exchange.**

1.6. Significance of the research:

Even though this research covers a widespread topic area, the features of emerging markets (such as Jordan) are dissimilar compared to other markets. For illustration, in fact, some of the most dominant characteristics in Jordan are nepotism and favouritism that may play a prominent role in restraining the efficiency of initiating the regulations that are relative to social and economic perspectives, since such markets are positioned under the tribes’ umbrella (Rwashdeh, 2016). Besides, previous studies on the stock market of Jordan concerning corporate governance, there is a noticeable shortage in the current studies; therefore, there is a real need for this research to update and extend the existing knowledge (Al-Rdaydeh et al., 2017).

The performance is always at the attention of all or at least most firms, improving the performance in any way possible in order to maintain and develop the business. Winning cards are for companies that seek for innovation, obtaining, and sustaining performance. Accordingly, it is vital to monitor and comprehend performance, where environment changes continuously. This emphasizes on that management teams and researchers have real interests to assess companies` performance perpetually. Furthermore, as the economic environment in today`s world reflects unexpected fluctuations, which in turn, monitoring performance is necessary, and this creates crucial issues for practical managers and academics scholars. Consequently, the efforts are extended in order discussing and enhancing the performance`s concept, thus, there is incomplete literature and continuous debate in regard to company`s performance.

Financial performance is an essential factor that financial institution management should regard as one of their most important responsibilities. Factors that influence financial performance is crucial for processes of decision making. Many people in the business, including administrators, customers, and financial analysts, use it as a reference for dividend payments, management performance method calculation, etc. (Matar and Eneizan, 2018). The performance is always at the attention of all or at least most firms, improving the performance in any way possible in order to maintain and develop the business. Winning cards are for companies that seek for innovation, obtaining, and sustaining performance. Accordingly, it is vital to monitor and comprehend performance, where environment changes continuously. This emphasizes on that management teams and researchers have real interests to assess companies` performance perpetually. Furthermore, as the economic environment in today`s world reflects unexpected fluctuations, which in turn, monitoring performance is necessary, and this creates crucial issues for practical managers and academics scholars. Consequently, the efforts are extended in order discussing and enhancing the performance`s concept, thus, there is incomplete literature and continuous debate in regard to company`s performance.

The vital ultimate goal of corporate governance is to ensure the alignment of benefits between owners and managers, in turn, avoiding any misbehavior that managers can do for their interests, which accordingly be harmful to shareholders` wealth. Therefore, when the best alignment was achieved, a firm can work smoothly with no issues resulting from the inexistence of effective corporate governance regulations; consequently, enhancing firms` overall performance (Mansur and Tangl, 2018). Furtherly, the conflict of interests decrement

leads to lowering inefficiencies and dissatisfactions and thus minimizing agency costs, which in turn, financial performance is improved (Alabdullah, 2016).

The corporate governance has yet to be analyzed in the Middle East and North Africa (MENA) region; therefore, this research makes a crucial contribution in corporate governance index. This study develops practical corporate governance index that is appropriate for the countries of the MENA region, specifically in Jordan. As a consequence of this development, valuable models are introduced to be exploited for corporate governance discussion facilitation in Jordan and other emerging markets. Besides, findings give an unmistakable comprehension of issues with the current state of corporate governance practices in the Amman Stock Exchange for several parties, decision-makers, regulators, researchers, policymakers, investors, listed firms. The ASE will benefit from this by improving the applied corporate governance mechanisms, also listed firms benefit from this research to improve their financial performance by adjusting their practices of corporate governance mechanisms. For instance, the CEO's duality proved to impact a firm`s financial performance significantly negatively. Accordingly, this suggests that firms with a duality of chairman and CEO positions should separate these two positions. Further, this research might develop the adopted strategies of trading by investors, increasing their return and minimising the incurred cost and risk. This study's results would be useful to other Middle Eastern countries, as these countries may have familiar social, political, and economic environments.

As previously stated, the majority of early researches on the relation between corporate governance and financial efficiency reflect mixed and inconclusive findings. Various researches support the idea that corporate governance procedures improve business performance and lower agency costs, while others argue that there is no such link. Variations in theoretical perspectives, research methodology, and performance metrics are the key causes for the diversity of outcomes. There is a scarcity of scientific evidence in Jordan when it comes to corporate governance profile. To this purpose, further study is needed to strengthen the corporate governance profile in Jordan by defining the notion of effective corporate governance, reviewing the current corporate governance system, and eventually assisting the growth of the overall Jordanian economy. Furthermore, this thesis seeks to determine if corporate governance practices in Jordan are effective in increasing the effectiveness and financial performance of Jordanian businesses, keeping in mind that these practices are recognized internationally as efficient. Consequently, the present study aims to fill a deficit in

the governance literature by investigating the elements that influence enhancement of company performance and lower organization agency costs (Qadura and Hanim, 2018).

In the context of Jordan, certain studies have been undertaken, to mention some, (Abbadi et al. 2016, Al-Daoud et al. 2016, Alzoubi 2016; Ibrahim & Hanefah 2016, Alkurdi et al. 2017, Makhlouf et al. 2017, Alqatamin 2018, Bataineh et al. 2018, and Mohammad et al. 2018. According to Al-Msiedeen (2019), previous research on the relationships between corporate governance, business efficiency, and performance of the company was inconclusive. As a result, the current research aims to give fresh empirical evidence for explaining corporate governance concerns at the firm level. Additionally, the findings of this research may help to reconcile some of the disparate findings of prior studies conducted in comparable circumstances.

The stock exchange of Jordan is interesting for several reasons. The first reason is that this research might help extend Jordanian firms' comprehension concerning liquidity management and corporate governance practices. The Jordanian stock market is one of the emerging markets that can be improved and solve issues faced by the stock market. The second reason is that the total listed firms' number in the ASE was 161 in 2000. This number has achieved 302 listed firms in the year (2018), as reflected in the ASE`s official websites. In turn, the number of targeted firms` number which can benefit from this research is broader. Thirdly, after the crisis of 2008, the financial sector in Jordan witnessed significant adjustments on regulations in order to strengthen this sector and the progressive liberalization among the MENA region since the mid of 1990s. By this, it shows that the ASE`s management has a genuine desire for improvement. The fourth reason is that the ASE is an emerging market that can benefit other emerging markets with the same situation regarding politics, culture, environment, and economic conditions.

Overall, the literature review of corporate governance, and financial performance will be enriched and updated in the Jordanian context. Further, a validated and updated framework that is suitable for the current situation of financial firms will be presented. The framework will reflect the most fitted corporate governance practices, which can result in enhancing the firm`s financial performance. Moreover, it takes into account the corporate governance mechanisms that should be focused on for improving financial performance. The outcomes would be expectedly crucial for enhancing the Jordanian stock exchange and, accordingly, the economy. The consequences might be beneficial for various parties such as listed and unlisted firms,

academic and practical researchers, decision-makers, investors, local or international consultants, managers, and policymakers. This research might be beneficial to be considered for regulations improvement and formulation. Hence, all of these considerations are regarded as primary motives for completing this research.

1.7. The structure of the thesis:

The rest of the thesis is structured as follow: chapter two (Literature Review) summarizes a piece work of previous literature, this includes the structure of the financial market and its role in the financial system, the different kinds of financial market, Jordanian capital market, financial performance definition and discussion, discussion of corporate governance definition, Jordanian corporate governance background, corporate governance relation with financial performance, mechanisms of corporate governance discussion and association with financial performance, this research theoretical framework, this research conceptual framework, and the hypotheses development. Chapter three reflects the research methodology and design, including research paradigm, sampling and population, collection of data, variables of study, the employed processes for data analysis, and lastly, ethical and legal consideration. Chapter four will show outcomes of analysis through three sections; corporate governance mechanisms impact financial performance findings, corporate governance mechanisms application on financial performance results, and liquidity position effect on financial performance outcomes. Chapter five demonstrates the analyses` findings and results` discussion concerning previous studies and the formulated framework based on the thesis` outcomes. And lastly, chapter six illustrates the conclusion, including the summary of the main findings, research`s limitation, contribution, and further research and recommendation.

Chapter Two: Literature Review:

2.0. Introduction:

This study targets the listed financial firms in Amman Stock Exchange, including banks, insurance, and financial services sectors. The eventual objective is to investigate the effect of liquidity management and corporate governance on these firms' financial performance. This chapter is chapter two, the literature review, and it discusses the current knowledge and previous relative studies which inform this research; it includes five main themes. Firstly, financial market definition, structure, role in the financial system, classification, and capital market in Jordan. Secondly, financial performance as a concept, importance of financial performance, and elements that impact financial performance. Thirdly, corporate governance definition, its theories, its mechanisms, its implication on financial performance, and corporate governance in Jordan. Fourthly, the theoretical perspective, this thesis`s theoretical framework, this thesis`s conceptual framework, and hypotheses development are also presented.

2.1. Financial market structure and its importance and role in the financial system as a whole:

The economic growth is motivated by the economic key role which is played by the Financial System (FS) at large. The FS has infrastructures that operate sequentially and connectively to allocate and deliver funds from an entity that has a surplus fund to another that has a better ability to invest and employ these funds effectively. Accordingly, FS identify entities with surplus funds, allocate other entities who can invest in more productive ways, and monitor and manage those funds and entities. The FS contains three major components, namely, financial market, financial intermediaries, and financial regulators; each component plays a specific role. In a nutshell, the functional approach of financial markets assists funds to flow for financing investments of individuals, institutions, and government. In regard to financial intermediaries, they are a pivotal player to implement the intermediation function, which accordingly determines the fund's flow. Finally, financial regulators have the purposes of monitoring, organizing, and regulating the financial system`s participants (Saunders and Cornett, 2012, and Chmbers and Dimson, 2017).

The financial market is defined as the place where investors meet each other to exchange and trade financial instruments. Briefly, financial instruments are intangible financial assets that generate future value and benefits (Darskuviene, 2010). According to Barucci and Fontana (2017), the financial market is economically described as the place that provides and facilitates

the trade of long-term and short-term instruments. Additionally, the financial definition of FM is the market that performs functions such as eases the raise of capital, facilitates the risks transfer from one part to another, international trade easing and being a broker between lenders and borrowers. As suggested by Gehrig and Haas (2016) that FM is a broad term, which indicates to a place where buyers and sellers interact for investment and trading purposes. In line with Dobbin and Jung (2010), the financial market performs as a platform that assists and organizes the financial instruments trades.

The financial market's three main economic functions include price discovery, liquidity, and transactions costs reduction. The price discovery function allows determining the price of an asset to be traded through the transactions among buyers and sellers. Similarly, participants in the financial market determine the adequate level of return required from investing funds. Accordingly, the required return of investors plays a significant role in the motivating party who seeks funds. The role of FM is raised here, as it aims to signal and allocate the available funds with those who desire to exploit these funds by issuing financial instruments. At the same time, the liquidity function of the stock market offers a chance to sell financial instruments by investors at any time with low/or no cost at its fair value with no implication on market stability. The absence of a given liquidity function will force investors to hold financial instruments until the issuer is obligated to pay them off. It is worthy of being noted that debt instrument liquidation is at its maturity date, whereas equity instrument is liquidated until the company to be forced to do so or even voluntarily. The reduction of transaction costs function exists when investors bear trading costs of financial instrument or even being charged. This suggests that instruments that have the lowest transaction costs is more accepted and extensively traded. Transaction costs can be classified by the cost of searching and getting adequate information, monitoring and contracting costs, and the costs of compromising issues between sellers and buyers. In addition, transaction costs are determined by several features such as uncertainty, specify of assets, and the frequency of occurrence (Fabozzi and Drake, 2010, and Mishkin, 2018).

Financial market instruments, as previously mentioned, are financial assets that have the probability of generating future profits. The financial market offers various financial instruments which meet and fulfil investors` need and preferences. One of the essential instruments is security; it is a certificate that holds monetary value and can be traded. It can be debt security, e.g., bond and equity security, such as stock. It is also vulnerable to market volatility and failures risk, but it gives a high return compared to other instruments. The main

participants are all institutions, whether financial or non-financial, in addition to individuals. Another vital instrument is derivative; it is an arrangement that its value dependent on the value of an associated asset such as currency or commodity (Carroll and Sparks, 2014). The derivative is considered highly risky even the same participants as security trade it. Additionally, there is a none-tradable and transferable instrument; it is usually performed by banks and reflects low risk. However, these instruments will be further explained by explaining financial markets types (Saunders, 2018).

Financial market instruments, as previously mentioned, are financial assets that have the probability of generating future profits. The financial market offers various financial instruments which meet and fulfil investors` need and preferences. One of the essential instruments is security; it is a certificate that holds monetary value and can be traded. It can be debt security, e.g., bond and equity security, such as stock. It is also vulnerable to market volatility and failures risk, but it gives a high return compared to other instruments. The main participants are all institutions, whether financial or non-financial, in addition to individuals. Another vital instrument is derivative; it is an arrangement that its value dependent on the value of an associated asset such as currency or commodity (Carroll and Sparks, 2014). The derivative is considered highly risky even the same participants as security trade it. Additionally, there are none tradable and transferable instruments, it is usually performed by banks and reflects low risk. However, these instruments will be further explained by explaining financial markets types (Saunders, 2018).

2.1.1. Financial market classification:

On the word of Reszat (2008), the financial market can be classified according to various criteria such as traded instruments, provided services features, followed trading procedures, key participants, and markets` origin. According to him, the following table (1) demonstrates the financial market classification:

Criterion	Features	examples
Products	Tradability, transferability, ownership, maturity, denomination, substance	Equity, debt, instruments, derivatives
Services	Technical, advisory, information and knowledge-based, administrative	IT support, research and analysis, custody
Way of Trading	Physical, electronic, virtual	Over the counter, exchange, internet
Participants	Professionals, non-professionals, institutions, officials.	Central banks, banks, non-bank financial companies, institutional investors, business firms, households
Origin	Domestic, Cross-border, regional, international.	National markets, regionally integrated markets, Euromarkets, domestic and foreign currency markets, offshore markets

TABLE 1: FINANCIAL MARKET CLASSIFICATION, REZAT (2008).

The financial market can also be classified according to assets` nature for the stock market, bond market, commodities market, derivatives market. Very briefly, the stock market is the place where listed companies raise their shares to be traded after Initial Public Offering, while the bond market offers capital by debt. Commodities market where natural resources and commodities are traded. Lastly, the derivatives market provides contracts whose value is determined according to an underlying asset. Simultaneously, the financial market is categorized based on the nature of claim, equity market and debt market, where equity market deals in equity instruments, e.g., stocks, while debt market offers debt instruments, e.g., bond. The classification can be represented by delivery timing for cash and futures markets; their definitions are most likely to be understood from their naming. Moreover, based on organizational structure, the financial market can be categorized for the exchange-traded market with a set of regulations and centralized authority, and for an over-the-counter market with decentralized organization and customized procedures. Finally, a financial market classification can be by the maturity of a claim for money market and capital market. The money market is mainly targeted by lenders and borrowers who have the intention to involve in a low-risk position and prefer a short-term instrument; it is majorly dominated by banks, government organizations, individuals, and financial institutions. Acceptances, deposits, collateral loans, and bills of exchange are the main instruments in the money market. The

money market aims to perform several functions for short term funds, including cash management, allocation, information access, fund raising, and risk management. Besides, the money market can be segmented for the interbank market, primary and secondary market, and derivatives market. Investors who prefer long-term assets such as bonds and stocks, which reflect higher risk, go to trade within the capital market (Darskuviene, 2010; Tomasic and Akinbami, 2013). Consistent with the targeted market of this research (capital market), it will be discussed in depth in the following.

- **Capital Market:**

Ocampo (2008) states that "Capital Market (CM) is a network of specialized financial institutions, series of mechanism, process and infrastructure that, in various ways facilitate the bringing together of suppliers and users of medium to long term capital for investment in economic development project". Besides, referring to (Becker 2005) definition, which says that the CM is a regulated and organized place that allows investors to meet each other according to their needs, these needs can be summarized by borrowing, lending, and investing. There is no dispute of the CM definition in light of the foregoing, where all descriptions lead consensually to the same meaning with no suspicions (Darskuviene, 2010).

The segments of the capital market were mentioned very briefly above without any details. Nevertheless, there are two major interdependent and inseparable segments, namely, primary market and secondary market. The former is the first destination of new securities to be introducing and selling. This market is fundamentally used for funding new projects and even for current project expansion and upgrade. The primary market has a considerable contribution to an economy, where it gathers the investors and entrepreneurs for productive purposes. In addition, it is the base for creating and offering secondary market merchandise. The issuance of securities in the primary market can take various forms, initial public offering for companies that are newly got listed, obtaining new capital for funding projects, new issuance but with priority to current shareholders, new issuance under reservation to, for example, mutual funds and banks, new public offering for existing listed companies, and new issuance as a bonus (Dastidartu, 2017).

The latter (secondary market) is the place where securities are exchanged and treaded after being offered to the public by the primary market. The secondary market consists of the debt market and equity market. The importance of the secondary market is that it enables the involved parties and participants for selling their securities for obtaining cash and meeting their

liquidity requirements. Further, it empowers the securities` holders to respond to their expectations and assess return and risk and let them decide to buy or release their securities. The Over-The-Counter (OTC) market and the exchange-traded market are two more elements of the secondary market. OTC markets are basically unregulated exchanges where transactions are made. The OTC sector handles the majority of government securities transactions. The OTC market is where all spot trades occur, where shares are exchanged for immediate delivery and payment. In a strict sense, the markets do not allow for spot trading. The cash market is the closest to the spot market, with settlement taking place after a while. After a certain amount of time, all trades that occurred within a trading cycle, i.e. a day under rolling settlement, are settled together. The secondary market is where shares are exchanged after being first sold to the public in the primary market or listed on the Stock Exchange (Fabozzi, 2015). In the following, categories of the capital market, the debt market and stock market are presented,

- **Debt market:**

Both government and firms exploit debt markets in order to raise funds for the long term. Bonds are defined as borrowing instruments for the issuer for long-term funds. The central bonds` issuers are considered risk-free governments as they are guaranteed by governments, and the fulfillment rate of borrowers (governments) is high. The government bonds are well known in the United States (US) as treasury bonds in the United Kingdom (UK) as gilts while bundling in Germany. Emphasizing their considerable differences of risks between government and corporate bonds, where governments warrantee their bonds and are almost risk-free, government bonds give a low rate of return.

On the other hand, corporate bonds are guaranteed by the assets of companies that issue these bonds, which are called “debentures”, yet, there are corporate bonds that are not guaranteed and unsecured and known as “loan stock” these loans are mostly issued by banks. In the event of the company`s default, unsecured bonds provide no compensation from the company` assets. In general, bonds have several types, including Convertible bonds, Euro bonds, Eurobonds, Callable and Putable bonds, Strips bonds, foreign bonds, Junk bonds, Index-linked bonds, and Floating rate notes. Bonds market structure is divided into two segments like the equity market, the primary market for issue new bonds and a secondary market for trading the issued bonds (Johnson, 2013).

- **Stock (Equity) market:**

At the end of Bretton-Woods monetary regime in 1973, the ongoing expansion of the financial market has started and accelerated after 1989. Since that time, the number of stock exchanges has continuously and considerably grown. Recently, in 2015, the number of listed stock exchanges within the World Federation of exchanges is 189, 13 stock exchanges in the US alone, and the other 96 stock exchanges are distributed in Middle East, Europe, and Africa. Prior to this massive expansion, a similar development in size and number of stock exchanges existed between 1871 and 1914. During the First World War, 89 stock exchanges were counted by an expert from the UK; half of the stock exchanges were in Western Europe. Together, these stock markets were responsible for combining 20 million investors with trading securities that exceeded 160 million dollars. As appraised by an authority in France, that securities volume was divided by 24% for UK`s investors, 21% for US`s investors, 18% for investors in France, while Germans held 16% (Francioni and Schwartz, 2017).

The stock market is one of the key elements of the financial market for trading long term financial securities and instruments. All listed companies within the capital market have their shares and stocks; holding stocks of a company by investors means that they are one of the organization`s owners (Fabozzi, F et al., 2019). Equity owners aim to get profit from this company and gain value by maximizing the value of these shares. The equity market is significant and essential due to its role, where it is an external fund`s source for companies and a place for investors to maximize their wealth. However, several factors impact firms to fund themselves externally through stocks, costs of other sources of funds, to what extent internal funds of a company can meet its needs, and return of equity determined by the current price of the company`s stock. In particular, high interest rates provide an incentive to avoid debt instruments and instead of using the stock market and issue new equity. In addition, the associated costs with the equity`s issuance might force firms to use alternative sources of funds even if the interest rate of other sources is high. Furthermore, the capital structure of a company plays a role in determining the way of funds; the capital structure is a mix of a company`s financial resources, whether debt or equity-based on its financial situation, where the optimal capital structure can be calculated and based on it a firm decides what the best option to go with (Tomasic and Akinbami, 2013).

2.2. Capital market in Jordan:

In the early 1930s, public shareholding institutions were formulated prior to financial market establishment. The first public shareholding organization in Jordan was the Arab Bank; in turn, the gate opened for other companies. Jordan Tobacco and Cigarette followed it later in 1930, and then Electricity Company and Jordan Cement Company in 1938 and 1951, respectively. Furthermore, in the early 1960s, loan granting was issued and existed. Consequently, due to an unorganized, unregulated, and uncontrolled market, it was a severe action by the Jordanian government to establish an official market under their power and control; the government wanted to provide a secure and safe place as interaction and investment were grown. For this to happen, the Central Bank of Jordan (the highest institution for financial monitoring and management in Jordan) began officially to get all the required approvals. All efforts were gathered from all concerned entities to that end. These efforts were not useless, and as a consequence, an agreement in 1976 was signed. In 1978, an official announcement was reported to announce that trading within the Amman Financial Market (AFM) has started (ASE`s official website, 2019).

In the aftermath of AFM establishment, a secured investment atmosphere has existed; in turn, trading volume had continuously increased; as a result; it was necessary to restructure the market to keep pace with the international financial market, besides, to enhance the market`s size and liquidity which, in turn, improve disclosers transparency and offering reliable information. As a response to these restructuring claims, the decision was taken to separate the regulatory role and the executive role in 1997, where AFM used to carry both responsibilities and functions. The separation resulted in establishing three main entities simultaneously in 1999, Jordan Securities Commission (JSC) to perform as an entity of regulation, while Amman Stock Exchange (ASE) and Securities Depository Center (SDC) are founded and entitled to perform the executive roles. The JSC monitors the issuance of securities in addition to controlling ASE and SDP activities. The ASE is the only official entity and place that responsible for trading securities. SDC has the accountability to save and register the settlement between intermediaries and transform securities` ownership (ASE`s official website, 2019).

As time passed, the secondary market trading volume is counted to be 9.7 million in 1978 and raised to 3.2 billion in 2016. The listed firms market value was 17.3 billion in 2016, to record an increment of more than 17 billion from 1978 (it was 286 million). Considering the number of listed firms, they increased by 253 firms from 66 in 1978 to 329 in 2018. Similarly, the GDP`s ratio w However, a considerable decrement was recognized in 2015 to be 70.7%.

Accordingly, for many years, the ASE was a well-organized, reliable and regulated market in the Arab world. In terms of market capitalization value, ASE is one of the biggest Arab stock markets within the MENA region. Furthermore, ASE is one of the pioneers among emerging markets (ASE website, 2019). In 2017, specifically in February, a considerable adjustment announced that ASE became a public shareholding organization that the government wholly owns. This suggests that a full-time executive director manages ASE in addition to a board of directors contains seven members, those members and director are selected and appointed by the council of ministers (ASE website, 2019).

According to Bayraktar (2014), an efficient financial market is an essential factor in developed and emerging markets for economic growth and improvement. The national economy has been enhanced by the provided contribution by the capital market in Jordan. The total market capitalization has consisted of 50% of the financial sector, 41% by industrial sector, 8$ by the services sector, and 2% by the insurance sector. In 1995, the price-earnings ratio on average reached 21.3% of all listed firms, which were 97 companies. By that, the market was able to show its strength for potential investors through its huge capital gains. The Jordanian financial market has outperformed most markets in the MENA region, where over the last eight years, the market capitalization by 158%. In addition, in the Middle Eastern markets, the Jordanian market is one of the few markets representing the International Accounting Standards (IASC) board. To be mentioned that there are two leading indices in the ASE, namely, General Index ASE100 (Primary market) and Index ASE20 (Secondary market) (ASE`s official website, 2019).

As a part of endeavoring to create unprecedented development in the region, in 2009, the ASE is the first market to announce that foreign investors are permitted to own up to 50% of public shareholding companies that are listed in ASE. Besides, it declared that the minimum investment amount to be invested is 1000 Jordanian Dinar (JOD). According to ASE`s statistic, foreign investment is approximately 30% of the total market value comparing to 18% is owned by the Jordanian government. Additionally, the ASE provides the foreign investors with a tax exception on the capital gains as Jordanian investors (ASE`s official website, 2019). For information regarding the market capitalization, volume of trading, and number of listed firms, please refer to appendix (1).

2.3. A brief discussion of financial performance concept:

As defined by Eton et al. (2019), financial performance is the consequences of firm`s strategies that are set for achieving firm`s financial objectives. The company's performance is used to measure the productivity of the company's top management team, thus representing the position of any person employed in the firm and fulfilling a specific task assigned to him. As a result, success is a measure of how well an enterprise is controlled ad how effectively and efficiently its human and other resources are being utilized. Financial and non-financial performance are the two forms of company performance. Financial or economic performance and innovative performance are two types of firm performance that are generally distinguished in the literature. Organizational performance refers to a company's ability to function and meet a specific profit goal. This metric measures a company's performance quality over a set period of time. The purpose of assessing performance is to obtain helpful information about the firm's cash and fund flow, fund allocation, effectiveness, and quality. Besides, the data will assist managers in making the best decisions possible (Matar and Eneizan, 2018). As indicated by Tailab (2014), profitability, production capability, revenue growth, and the efficient use of capital and financial resources are all indicators of financial performance. It was discovered that financial performance provides a more accurate view of a company's performance. For a profitable company, performance is the most critical metric. In general, financial metrics have been used to assess the results of an assembling framework or organization. Investors are increasingly becoming more concerned with the financial performance of manufacturing issues, particularly in the aftermath of the financial crisis (Tailab, 2014).

The firms` financial performance attracts the corporate entities` management, the general public, financial experts, researchers, and decision-makers through reflecting their attention, interests, and comments in this regard. In line with Almajali (2012), firm performance can be defined as the company`s ability to find and manage the resources in various conduct to achieve a competitive advantage development; it can be financial or none-financial. He additionally explains that financial performance is connected directly to financial activities that aim to handle an organisation's overall financial situation. More precisely, financial performance is an indicator of the extent to which a firm can generate sustainable profit to preserve the firm`s existence and make its capital position stronger (Amengor, 2010). As said by Bassey-Edem (2017), that firm ability in sustainable profits generation represents the term of “firm performance.” Hence, for a company operations` success, a balance between risks, profits, growth is essential by managers (Bassey-Edem, 2017).

As stated by Naz and Ijaz (2016), the degree to which a company's financial stability over time is calculated is referred to as financial results. In other words, it's a financial strategy for increasing a company's sales, profitability, and value for its shareholders by controlling its current and non-current assets, funding, equity, revenues, and expenses. Its key goal is to provide shareholders and stakeholders with up-to-date knowledge to assist them in making decisions. It can be used to compare industries in aggregate or to analyze related companies in the same sector.

Khrawish (2011) mentioned that financial performance is the idea of maximizing a company's capacity to achieve sustainable profitability. Some metrics are employed to evaluate a company's financial results using financial measures. As a result, according to, firm financial efficiency can be measured using three different variables. The return on assets (ROA) is the most significant profitability ratio, as it demonstrates the capacity of firm assets to generate profit. The return on equity (ROE) is the second ratio, which is related to returns on shareholders' equity. The return on investment (ROI) approach, which uses invested capital to calculate firm productivity, is the next one. Etebari (2018) metrics, for example, used a combination of financial ratios analysis and benchmarking to assess efficiency against budget. Others cited net interest margins, returns on equity, committed capital, and a variety of other metrics. However, Bassey-Edem (2017) suggest that ROA is the most widely used metric for assessing a firm's financial performance in the literature.

It is worthy to be stated that the terms of financial performance and profitability are interchangeably used, most researchers consider financial performance and profitability as one term, such as Khan and Ali (2016), Malik et al. (2016), Bwacha and Xi (2018), Megaladevi (2018) and Satyakama and Bhusanothers (2019). While others such as Demirgunes (2016) and Fatihudin et al. (2018) indicate that financial performance is different from profitability, where financial performance is a broader term that includes profitability; despite this, profitability is a part of measuring financial performance. While some studies show that profitability is measured in a different way than financial performance including, Bayaraa (2017) and (Khan, Ullah, Ali, & Khan, 2018). These studies, which deal with financial performance and profitability as one term, used ROA and ROE to measure both elements. Studies that consider profitability as a part of financial performance calculated financial performance through profitability employing ROA and ROE. While financial performance is measured by ROA and ROE, and profitability through gross profit margin, Earnings per share Cost to revenue ratio,

and net profit margin in the studies, which consider financial performance and profitability different.

In the MENA countries, there is a need for additional research that focuses on developing countries, in particular, Arab countries; findings of developed economies in terms of financial performance cannot be generalized to developing economies such as Jordan (Matar and Eneizan, 2018). As reflected earlier by Almajali et al. (2012) that studies analyze how financial performance can be affected by other factors in Jordan are few. As mentioned by Thanh and Vinh (2017), on account of the importance of the financial performance of firms in emerging markets, there are a large number of studies that examined financial performance and how it is impacted during the last decades. However, they stated that these studies' concentration was significantly limited on developed stock markets rather than emerging markets. As earlier stated by Mirsa and Had (2013), "there is an incomplete piece of literature and an ongoing debate on the issue of performance of firms". There is a broader gap specifically in the case of growing economies because most of the research done is based on the data from developed economies".

2.4. Determinants of financial performance:

The financial performance is impacted whether positively or negatively by several factors. As mentioned by Thanh. Ha and Vinh (2017), on account of the importance of the financial performance of firms in emerging markets yet, there are a large number of studies that examined the financial performance and how it is impacted by some factors during the last decades.

Liquidity is a financial term indicates to the available capital amount for fulfilling a firm`s obligation and to be used in investment (Ibl, 2013). As discussed by Chmbler et al. (2018) that the main concern of liquidity is ensuring the accurate money amount for the business always. Omer-Mustafa (2019) indicates that financial performance and liquidity management are conflicting objectives that perform in contradictory directions. According to Elsharif (2016) that liquidity management is a central element in a firm`s overall management, where it is proved that liquidity is a crucial perspective for financial performance. The most recents studies that considering the impact of liquidity management on firm performance include, Assfaw (2018), Bwacha and Xi (2018) Charmler et al. (2018), Kontus (2018), Matar and Eneizan (2018), Valaskova et al. (2018), Eton et al. (2019), Kontus and Mihanovic (2019), Mishra et al. (2019), Satyakama et al. (2019), ALAli (2020), Al-Omari (2020), Pordea et al. (2020), and

Zaitoun and Alqudah (2020). These studies revelaed a mixed result of the various liquidity management indicators, indicators reflect a positive impact on financial performance, while a negative or no effect is also presented among these studies. Bace (2016) said that the value of liquidity status for investors and managers in assessing a firm`s future, forecasting investment risk and return, and stock price on the one side. The imperative needs of eliminating shortcomings and faults in conventional liquidity files in terms of liquid assets, on the other side, encourage financial academics. Liquidity is extremely important because businesses with low to no profitability can support the economy, while enterprises with no liquidity cannot service the economy well (Nassirzadeh and Rostami, 2010). Financial performance improves for companies that retain certain liquid assets; however, there comes a stage where maintaining more liquid assets reduces a firm`s profitability, everything things being equivalent (Bernanke 2008). As a result, financial performance and liquidity are significant issues that all commercial units can research and consider one of the most essential obligations.

Financial leverage, according to Perinpanathan (2014), is the extent to which a firm utilizes fixed income products including borrowing and preferred shares. Gwey and Karanja (2014) indicate that leverage can take the shape of a loans or other debt, the procedures of these are re-invested with the aim of obtaining more yield than the interest`s rate. Aloshaibat (2020), financial leverage represents the financing by borrowing, the use of financial instruments which end in a magnification of the influence of earnings and loses on the shareholders. There has been a lot of research done on leverage and its relationship to financial performance of companies. However, the findings of these investigations have been conflicting. Rehman (2013), Abubakar (2015), Aldemir's (2016), Nassar (2016), Cudiamat and Siy (2017), Swagatika and Ajaya's (2018), Fareed, Ali, Shahzad, Nazir and Ulla et al. (2016), Odusanya, Yinusa, and Ilo's (2018), Ali and Bilal's (2018), and Oleiwi (2019).

One of the motives for organizations to pursue innovations, is to improve performance. Despite the fact that innovation is mostly the result of individual company efforts, it has emerged as the primary driver of a country's social welfare and economic progress (Chen, 2017); as a result, many economies aim to gain a competitiveness in the global innovation. To boost growth and competitiveness, both developed and emerging economies are relying on innovation (Chen et al., 2018). According to the literature, the breadth of innovation research is broad, and the results concerning the association between innovation and performance are varied (González-Fernández & González-Velasco, 2018). Studies on specific countries and firm-level assessments may give light on the influence of innovation because these dimensions are wide

and data is not uniform. Recent research, including Mendes et al. (2012), Santos et al. (2014), Lewandowska et al. (2016), Silva et al. (2017) Lee and Garrett (2017), Wadho and Chaudhry (2018); Rajapathirana and Hui (2018), Zhang et al. (2018) indicate that innovation affect the financial performance in a way or another.

The company size is a major determinant of its financial performance. The basic neoclassical notion of scale economies states that larger enterprises may create things or products at considerably minimal expenses. In fields that size play a significant role, big enterprises have more competitive power than small businesses. Companies of various sizes differentiate themselves in observed and unobserved ways. Furthermore, since they have greater resources, huge enterprises are able to grab more opportunities to operate in industries that need a lot of capital, and this circumstance allows them to operate in fields that are more profitable with less competition. Company size is a topic of interest to researchers as it has historically had a lot of evidential support, and comprehending its significance might be crucial for several parties such as executives and managers in increasingly today`s competitive environments (Niresh and Velnampy, 2014).

When the studies concerning the relation between firm size and performance are reviewed, mixed results have been found. Niresh and Velnampy (2014), Dogan (2013), Saliha and Abdessatar (2011) Kioko N. P (2010), Lee (2009), Stierwald (2009), Jonsson (2007) Serrasqueiro (2008) have found a positive relation between firm size and profitability. On the contrary, Banchuenvijit (2012) has found a negative relation between firm size and profitability. Other than above studies, Whittington (1980) has found that firm size does not have any effect on companies` performance. These results cause a vague understanding of the effect of firm size on financial performance and an increase in the interest toward this subject. When looking at studies on the relationship among business size and financial performance, there are conflicting findings. Dogan (2013), Owolabi (2013), Danso (2014), Saliha and Abdessatar (2014), Gathogo and Ragui (2014), Niresh and Velnampy (2014), Njeri (2016), Hossain and Saif (2019), and Omenyo and Muturi (2019).

The financial performance is determined and influenced by several factors, in addition to the aforementioned factors the corporate governance is seen to impact the financial performance too. The corporate governance is going to be reviewed in fully and this is the main factor which is employed by this study to investigate its impact on the financial performance.

2.5. Introduction to corporate governance definition:

The term "Corporate Governance" is formed as old as the formulation of institutions, yet, according to Brancato and Plath (2004), the phrase of corporate governance was rarely used till the 1980s (regardless of the proposed definition of CG by Williamson (1985). In addition, as mentioned by Vasudev and Watson (2012) that even previous literature addressed the issues which are around CG, such as Smith (1776) and Berle and Means (1932), but CG is a relatively modern debate of academic and public. This suggests that Corporate Governance (CG) was known prior to the big collapse of famous companies during 2001 and 2002; however, the concept of CG was limited on some element and aspects. Corporate governance is defined widely by the literature as guidance of controlling and directing by ensuring that all responsibilities and rights are disseminated fairly and professionally among all stakeholders, including shareholders, directors, employees, creditors, managers, regulators, and auditors (Samaduzzaman, 2015). Nevertheless, at that time, the applied CG was seen to be capable enough against any conflict that may result (Hasan et al., 2015). In effect, regardless of the momentum complaints, e.g., executive directors` overpayments prior to 2001, this statement of CG`s competency was to be true for many years until the year 2001, which is recalled as corporate scandals year, to be more specific, the most of these enormous failures were in the United States, for instances and not limited to, Adelphia, WorldCom, Tyco, and Enron. Yet, Europe major collapses cannot be denied and forgotten, to name a few, ABB and a Swiss-Swedish multinational firm, Parmalat in Italy, and Vivendi in France. The common aspects of misconduct that led to the collapses mentioned above were financial statement infractions either by understating cost or overstating revenue and misallocation of companies` funds by transferring the enormous amount to managers` pocket. For better comprehension, Enron and WorldCom fraud amount was measured to $11 billion; this suggests that this might be the largest fraud ever in history (Ficici and Aybar, 2012). Furthermore, as added by Du Plessis (2011) in the wake of the 2001 collapse crisis, as most of the downfalls were titled "accounting fraud", the modern corporate governance practices have been altered, especially in terms of accountability in order to bring the public confidence back.

The concept of CG has not been reached to an agreed definition that reflects an accurate description; in turn, CG can be considered as a contentious concept. As a consequence, no consensus is reached, and confusion occurs as one explanation differs from another for several reasons, such as its nature varies from region to region due to various financial, cultural, and

academic backgrounds. As reported by Du Plessis (2011) that "Early attempts to define the concept of corporate governance appear in the United Kingdom Cadbury Report (1992) and the South African King Report (1994), defining corporate governance as the system by which companies are directed and controlled". Even of this respectable attempt, but the definition is not seen to be fully clarified. After that, there have been additional efforts to clarify CG, which accordingly has brought further dimensions for the CG (Sufian and Zahan, 2013).

The modern definition of CG is a way that allows internal investors (managers) to be monitored by external investors (shareholders) and a way of relation protection (Silames and Shliefer, 2000 and 2002). In 2001, Oman showed that CG is the direct management of corporate managers` relationship with stakeholders consists of regulations and practices` controls. In line with Kim et al. (2005), and Hassan (2008), they define CG as various mechanisms that ultimately aim to full fairness of all parties as stated by Claessens and Yurtoglu (2012) that "Corporate governance is the complex set of constraints that determine the quasi-rents (profits) generated by the firm in the course of relationships with stakeholders and shape the post bargaining over them" (Gontarek and Belghitar, 2018). They furthermore added that CG concerns with ensuring that institution management is on the right path with the fair alignment of interests by specified goals, controlled risk, organized corporate activities, well-running of day-to-day activities, and balancing between stakeholders and fund`s provider.

On the word of Hassan and Halbouni (2013) as stated by Pintea and Fulop (2015) that CG has "are two major sides of corporate governance: conformance and performance. The first one consists of monitoring, supervising and being accountable to different stakeholders, while performance measures the contributions of managers (those who govern the company) in obtaining performance". In accordance with Clarke and Roma in 2008, they explore the CG as a structure aiming for achieving a high level of participants` coordination, organizing and setting firm`s objectives, defining accountabilities and rights, company`s wealth protection and enhancement, and finally providing facilities for the surrounded wider community (Sonmez and Yildirım, 2015). As said by Solomon (2010) that corporate governance can be defined as "the systems of checks and balances, both internal and external to companies, which ensures that companies discharge their accountability to all its stakeholders and act in a socially responsible way in all areas of their business activity". This definition integrates the owner-manager relationship and brings all the other stakeholders into the definition of corporate governance.

2.6. Corporate governance challenges and opportunities:

According to Nenova (2009), the key obstacles for developing nations in terms of corporate governance are: (1) wealth shift (from minor shareholders or stakeholders to large owners); (2) inadequate disclosure procedures; (3) a poor regulatory framework; and (4) auditing issues. Practitioners and academics have agreed that the optimum form of governance is distinctive to the company; as a result, even among companies that have competition within the same market sector, the framework for the functioning of a given organization determines the ideal governance structure. Several features of developing markets have indeed been demonstrated to play a significant role in determining decisions made about a company's governance, including model of ownership, financial market evolution, and the public governance efficiency. The extent to which the law acts enforcement is determined by the characteristics of public governance, and if public governance is poor, many kinds of corruption can flourish. These elements have an impact on the effectiveness of corporate disclosure and corporate governance, and a weak legal environment for operation and business can often stifle the growth of the financial market. As a result, free capital is frequently invested in new enterprises that are maintained by shareholders, which, clearly, can result in wealth confiscation by such shareholders as well as detrimental effects on the company's financial performance and health. The issues that companies encounter are largely defined by the economic politician overall level of improvement in addition to the current companies` ownership frameworks (Claessens and Yurtoglu, 2013).

One point of contention is whether or not the accounting firm serves as either an independent auditor or/and a consultation of management to the company it is auditing. If this situation is true, interests` conflict may arise, putting the credibility of the financial reporting in question owing to customer pressure to placate managerial consultancy services and, more importantly, to pick and discard companies that is accountant in nature, which contradicts the notions of auditing independence. The demise of Enron is a very good illustration of deceptive financial declaration and reporting. Enron hid massive losses by giving the false impression that a third party was always obligated to fulfill the full amount of whatever losses. The third party, on the other hand, was a linked firm wherein Enron had a significant economic interest in. In addition, the excellent financial reporting is inadequate for making sure corporate governance efficiencies if users do not really apply it or if the data user has inability to perform an oversight function caused by excessive expenses (Al-Msiedeen, 2019).

While some countries and their companies emphasize on wealth creation for shareholders, a number of other countries other countries are increasingly adopting a "stakeholder" strategy, in which businesses are viewed as social organizations with duties and obligations not only to shareholders, and even also to staff and a community from a general view. Though techniques vary, the Organization for Economic Co-operation and Development's (OECD) receives a global appreciation, where it generates basic corporate governance principles of commitment, integrity, openness, and fairness, which are widely recognized, these principles are summarized as table (2) illustrates:

OECD`s corporate governance principles	Description:
- Responsibility	Responsibility of the directors who approve the strategic direction of the organization within a framework of prudent controls and who employ, monitor and reward management.
- Accountability	Accountability of the board to shareholders who have the right to receive information on the financial stewardship of their investment and exercise power to remove the directors entrusted to run the company.
- Transparency	Transparency of clear information with which meaningful analysis of a company and its actions can be made. The disclosure of financial and operational information and internal processes of management oversight and control enable outsiders to understand organization
- Fairness	Fairness that all shareholders are treated equally and have the opportunity for redress for violation of their rights.

TABLE 2: OECD`S CORPORATE GOVERNANCE PRINCIPLES, AL-MSIEDEEN (2019).

In addition, according to the OECD report, corporate governance is a critical component in boosting confidence of investor, increasing competitiveness, and boosting economic development. In addition, firm`s corporate governance is much more crucial for global economic growth than a country`s government. The way a society views corporate governance, as well as its effect on governance practices, management supervision, and responsibility, is

influenced by standards of economy, politician, and culture. The issue for legislators is to strike the right mix of legal and administrative reform while taking into account worldwide guidelines in order to foster enterprise, improve competitiveness, and boost investment. High-profile corporate scandals, globalization, and growing investor activity have all contributed to a renewed focus on corporate governance, these elements are described as table (3) reflects in the following:

Elements that renewed focus on corporate governance:	Description:
- Corporate scandals:	High profile corporate collapses due to a number of circumstances including financial reporting irregularities leading to a lack of investor confidence and public trust.
- Corporate scandals:	Improved technology and private sector development increasing capital flows to large developing economies such as China. Developing economies need to demonstrate good corporate governance to instill investor confidence thereby encouraging access to the global capital necessary for job creation and economic growth.
- Globalization:	Institutional investors pursue good corporate governance when managing long-term investments and often take an active role in bringing underperforming companies to task.

TABLE 3: OECD`S ELEMENTS, MAHER AND ANDERSSON (1999).

New statutory and inner corporate governance instructions have aided in the restoration of worldwide market confidence. This includes increased management fairness and supervision, increased composition of board of directors, independence of board of directors, efficient utilization audit functions whether internally or externally, better reporting and disclosure, and growing investor involvement (Fan et al., 2011).

The audit committee is appointed by the Board of Directors to assist the board in fulfilling its oversight functions. Nigerian government through its legislative powers has promulgated laws that require companies to establish audit committees. The key government statutes on this requirement include: Companies and Allied Matters Act of 1990, as modified, and Banks and Other Financial Institutions Act of 1991, as amended. The charter of audit committee is similar to an employment job description in that it lists the employee's accountabilities, as well as the

company's anticipations for the worker, the rest of the board, and it specifies what the shareholders can reasonably estimate the members of the committee to perform.

The audit committee, in particular, sets the tone for a company's control environment. The entire board often looks to the audit committee to spot and investigate any strange business operations, assertive accounting approaches, or infractions of the company's "code of business conduct". However, audit committee members in many organizations may lack the experience in internal control that Chartered Accountants have, and some audit committee members have no background at all in regard to accounting or finance. As a result, members of the audit committee require a guideline to their tasks. An audit committee charter serves this purpose (Claessens and Yurtoglu, 2013).

2.7. Overview of the Jordanian Corporate Governance:

The constitution in Jordan is a mix of several laws: Islamic law, British common law, French law, and Ottoman common law. Regarding the applied corporate governance principles, it is improved based on an insider-oriented system of corporate governance. The organizations in Jordan were basically organized and monitored by the law of 1997 and 2002 under direct control by the government in Jordan. Consequently, all adjustments have been made since new corporate governance rules are embedded in these two laws.

- **Overview of the Jordanian Corporate Governance:**

During the last decade, globalization has forced the world to be adjusted tremendously. As a response to that, the realization of requirements to follow the new adjustments` trends was recognized in Jordan; ASE was one of the few markets to consider that properly. In addition, the economic freedom index in Jordan was 69.3% according to the report of Heritage Foundation of economic freedom. Remarkably, the world`s average is lower than this percentage, in turn, this put the Jordanian economy to be ranked 38th in terms of freedom in the world, this is an acceptable ranking for Jordan comparing to its abilities. As referred by the same report, Jordanian economy was ranked the 5th between the Middle East countries. This economic restructure and enhancement have been reached by several entities, where to that end entities at large work together based on their responsibilities and objectives. For instances but not limited to, the authority of corporate compliance enforced and enforces many required legislations of corporate governance to be considered in the law of companies. One more important entity is the Jordanian Central Bank as in 2004, it issued Corporate Governance Handbook, its efforts did not stop there, yet, and the role of central bank to achieve international

best practices and compliance of corporate governance is never an ending objective through adding and updating codes and principles of corporate governance (Al-Amarneh, 2014).

The rights of the shareholder are the core of corporate governance reforms initiations. ASE reflects significant rights for shareholders through several ways such as, provide access to a property registering secure methods, restrict the application of legislation and legal rights, allow obtaining credit from the local financial institutions and banks, permit shares` selling and transferring efficiently, reflect the required information at an appropriate time, proper regulations for companies` activities such as, voting and board elections (World Bank, 2014). According to the corporate governance assessment, which McGee applied in 2009, he considered the corporate governance principles of the Organisation for Economic Co-operation and Development (OECD). His research analyses the Jordanian corporate governance compliance with the OECD` regulations. He reveals that the compliance scores in Jordan is 3.91 out of 5. The following figure (1) summarizes these findings:

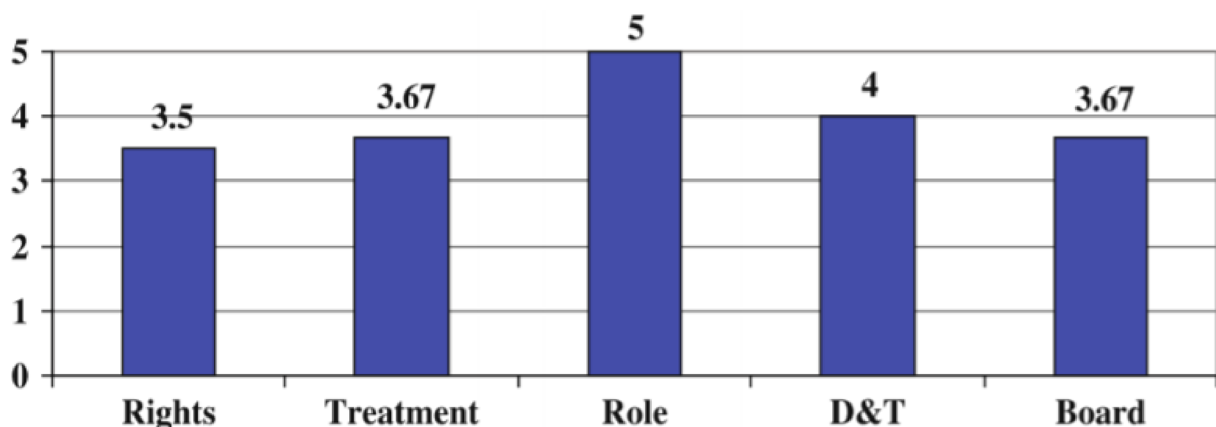


FIGURE (1): CORPORATE GOVERNANCE ASSESSMENT IN JORDAN, MCGEE, (2009).

Subcategories of his research consist of shareholders` rights, equal shareholder treatment, identified stakeholders' roles as reflected by corporate governance principles, existence of transparency and disclosure, and board's responsibility. As table (2) demonstrates, the lowest score is 3.5/5 for the rights category whereas the highest is in the role category and 5/5.

Comparing to the other MENA region`s countries, Jordan has achieved an invaluable level of financial development. As concluded by Creane et al. (2007) in their study, the banking sector in Jordan, compared to many region`s countries, has many positive features, as named by him, the banking sector is effective, profitable, and reflects constant development and low restrictions by government on rights of property. For many years, the government has endeavored to strengthen and improve banking sectors in terms of supervision and regulations.

In 2007, the banking sector's corporate governance was first applied as an element of constant improvements for banking sector enhancement purposes. As time passes, corporate governance codes are updated from time to time as a response to continuously generated circumstances; as consequences, in 2014, the central bank of Jordan fundamentally displaced the corporate governance practices to bring more sophisticated and well-developed corporate governance practices.

Corporate governance is not limited to the banking sector, but it is also implemented on all other listed firms in Amman Stock Exchange. As a response to the financial crisis, the corporate governance practices law of ASE was initially issued in 2008. This law has a major perspective in terms of its aims and objectives, where the core of this law is to enhance the economic attraction in Jordan through ensuring the business` rights and benefits. The fundamental CG`s practices give recommendations for listed organizations that focus on leadership structure and board composition and size, guaranteeing the board of directors` efficiency. Further, the corporate governance code was introduced on 29 July 2008 follows the form of "comply or explain". All listed shareholding companies were requested to be complied voluntarily, except banks, from January 2009. Since then, some adjustments have been considered to enhance and update the code, e.g. instructions of corporate governance for banks in 2014, major changes to corporate governance regulations in 2016 (ASE official websites, 2019).

The efforts of corporate governance application aim to include the majority of ASE` participants. The ministry of trade and industry has a specific department for companies monitoring and control, through this entity with coordination of several parties such as the central bank of Jordan ASE. New corporate governance codes were introduced in 2012, taking into consideration to cover most involved parties in ASE. It focuses on responsibilities and rights distribution between most firms' parties such as boards of directors, stakeholders, shareholders, and companies` management. Moreover, it considers the decision-making procedures and process in addition to delegation`s limits (Nour, 2016). More in-depth, the implementation of corporate governance in Jordan are the responsibility of several regulatory bodies of the capital market in Jordan, including Jordan Securities Commission (JSC), Amman Stock Exchange (ASE), Securities Depository Centre (SDC), Central Bank of Jordan (CBJ), Insurance Commission (IC), and Companies Control Department (CCD). Consequently, this shows that there is entanglement and intersection in their roles and functions; the absence of appropriate functions` separation, collaboration, and communication has hindered the ASE from performing its roles in the capital market and corporate governance. Moreover, trading

activities, investor confidence, and trading operations are negatively influenced due to intensive restrictions of JSC on duties of supervision of ASE alongside the securities` law which generates a direct conflict of supervisory power between JSC and ASE. Furthermore, as listed firms are required to provide periodic and constant disclosure by several regulatory entities, this confuses as each entity has different time frames and deadlines (Al-Tal, 2014).

Even though the regulatory entities adopt the International Financial Reporting Standards in Jordan for financial statements preparation, most of these entities such as CBJ, IC, and JSC require particular accounting standards to be applied prior to IFRs. Additionally, the financial statements of listed firms are published before some regulatory bodies` revision, such as JSC and CCD, and even the companies are allowed to revise the reports by themselves. Further, most regulatory entities have not adopted electronic disclosure system excluding ASE and JSC, which in turn, these entities have humble roles in broadcasting updated information of listed companies. On this basis, there is an absence of effective firms` monitoring as well as low disclosure quality, which consequently leads to unfortunate impact on investors` confidence and market`s efficiency (Al-Tal, 2014).

The form of "comply or otherwise explain" is adopted by JSC and CBJ in order to enforce the implementation of corporate governance. The JSC asks all listed firms to clearly indicate their compliance with the code of corporate governance of 2008 and 2017. Whereas the CBJ requires the banks to publish on their websites and annual reports to what extent they comply with their own corporate governance codes. To the end of enhancing a full compliance level gradually, a form of "comply or explain" is adopted, where firms can freely determine their needs and match them with governance policy based on their business activities and give flexible way for adapting companies with these codes. Nevertheless, there are no procedures for enforcing firms to follow the form of "comply or explain", JSC do not reward those who comply or penalize those who are not. On the other hand, the CBJ has no specific actions against banks with no own CG codes, and even CBJ does not penalize those banks who do not disclose their codes on websites and in annual reports.

A review of governance instructions for publicly listed firms in general, as well as these guidelines for insurance companies and banks will be reflected in the following. The Board of the Securities Commission released new instructions referring to Securities exchange act for 2017 (number 18), to enhance corporate governance practices and control Jordanian organizations: Guidelines for 2017 of Corporate Governance for the firms which are listed

within the ASE, which went into application on May, 2017. A board member is mentioned at several places in these guidelines. For instance, an independent board member is one who is not related to the company, not a family of board of directors or its senior executives upper management, is an not relative to the company`s external auditing or any of its sister companies, nor has not connections with the company other than those related to his or her stock ownership. Furthermore, according to the latest guidelines, which state that the listed firms` in Jordan board of directors in Jordan of such should be composed of at minimum five and do not exceed thirteen members, who will be elected by the general assembly of the firm's shareholders using the cumulative voting method and by secret vote. In addition, to ensure board`s independence, independent members should rate one-third of the overall number of board members. These guidelines tackle the issue of CEO duality, stating that the chairman of the board of directors' role and any other executive role inside the company cannot be merged. The board members' tasks and obligations are also outlined in the new guidelines. They also stated that the board should establish four committees: the governance committee, nomination and remuneration committee, risk management committee, and audit committee as permanent committees. All these committees except the risk management committee should be at minimum consisted from three non-executive members from board of director, as well as two of these three members should be independent.

The governance committee's primary duties usually involve making preparations of a governance summary and review, sending this to the board of directors, working to evolve written guidelines and procedures the regulations of these guidelines, their applicability should be reviewed and assessed on an annual basis, making and analyzing notes on the implementation of corporate governance inside the company and reporting back on what has been done, and ultimately, ensuring that the company show a good compliance with the governance documents. According to the new regulation, the board of directors should meet at least once every two months, for a total of six sessions during the fiscal year. The general assembly should be made up of all voting shareholders of the organization (who got voting right), and voting should take place at least once a year at an ordinary meeting. Transactions of relative party, the external auditing duties and nomination, reporting, accountability, transparency, and the fundamental shareholders` rights are all addressed in the new code. The corporation is required by this code to prepare a comprehensive report of governance to be reflected clearly through annual report, showing that the board of directors` chairperson assigns it and confirmed by him/her, and as the following table

demonstrates, these points are essentially required to be reflected through the governance report as table (4) shows below:

Points to consider in governance report preparation:
1- Data on how this code's principles and corporate governance standards are being implemented in the organization.
2- Throughout the year, identifying the names of board members who had resigned and who still working, as well as indicates clearly whether a member of board is executive or non-executive and the independence status.
3- Identifying the legal representations of board members, as well as presenting their independence status, and whether they are executive or non-executive.
4- Determining positions which are executive in the company and deciding on the names of the people who will fill them.
5- The members of a board of directors' memberships on other corporate boards, if any, are listed.
6- Identifying the governance liaison officer's name, as well as the identity of members of the board's newly constituted committees.
7- Presenting the names of the chairman and people who are in audit committee in addition to their names, as well as a comprehensive information of their accounting and financial experience and qualifications.
8- The name of committees` members including, governance committee, audit committee, nomination and remuneration committee and risk management committee have to be presented, and the chairman` name too.
9- All meetings of each committee have to be recorded and presented separately within the report.
10- The audit committee meetings through the year with the external auditor have to be provided.

TABLE 4: WHAT TO CONSIDER IN THE PREPARATION OF GOVERNANCE REPORT, ASE (2020).

The financial system in Jordan is governed by the Amman Stock Exchange and the Central Bank of Jordan in terms of corporate governance rules for banks. The Central Bank of Jordan is regarded an autonomous institution that has played a major role in supporting practices of corporate governance in banking sector of Jordan by issuing corporate governance practices guidelines. To be mentioned, this includes, in the year of 2004 "The Bank Director's Handbook of Corporate Governance", in the year of 2007 "the Corporate Governance Code for Banks, and the Updated Regulations of Banks` Corporate Governance for 2016. Whereas, guidelines of corporate governance for the diversified financial firms in particular, insurance firms, the Insurance Commission of board of directors released the "2006 Corporate Governance Guidelines", this was by referring to the based Regulatory Law of Insurance companies of 1999 in addition to what amendments have been done since then to 2006, and this what is applicable to Jordanian insurance firms in addition to the last amendments in 2017. Many elements of corporate governance were addressed in this code, including board independence, board responsibilities, board of directors' members' education, expertise, credentials, and abilities, and the firm's internal monitoring and management system. Considering these guidelines, the responsibility of the board of directors is to formulate and determine plans for applying the corporate governance principles outlined in these guidelines, along with revising and evaluating the scope of these guidelines application on an annual basis.

The European Bank for Reconstruction and Development (EBRD) in 2017, assessed the status of corporate governance in Jordan, corporate governance several elements are evaluated throughout this report, as quoted from this report, "These assessments provide an analysis of the progress of reform and identify gaps and future reform needs, as well as strengths and opportunities". However, appendix (2) show the full evaluation (strengths and weaknesses) and rate (weak, fair, or strong).

2.8. Corporate governance and firm`s financial performance:

As earlier stated by Mirsa and Haved (2013), "there is an incomplete piece of literature and an ongoing debate on the issue of performance of firms". There is a broader gap specifically in the case of growing economies because most of the research done is based on the data from developed economies". To be noted, they considered corporate governance as the main factor which affects financial performance. Alnaif (2014) emphasizes that the researches on corporate governance impact on financial performance are very few. What is more, Alkahtani et al.

(2016) suggest that Arabic stock markets have not been given enough attention in terms of performance associated with corporate governance. Zedan and Abu Nassar (2014) note that there are considerable researches that investigate the impact of corporate governance on financial performance; these researches are majorly considering developed markets. They added that "Studies in emerging markets, in general, and those related to Jordan, in particular, are relatively few and have mixed results and further investigation is needed to determine the relationship between the corporate governance and firm performance ". The authors also added that most of the prior studies of corporate governance in Jordan were limited on adopting content analysis and questionnaires; very few studies have employed archival data to investigate the impact of corporate governance on a firm`s financial performance. As recommended by Qadora and Hanim (2018) that more studies are necessary for Jordanian listed firms in terms of financial performance as this study area is lacking.

Empirical researches have mainly concentrated on particular aspects of corporate governance; many studies considered the impact of corporate governance on the financial performance of firms. A positive influence on financial performance by corporate governance is revealed by Heenetigala and Armstrong (2011). Further, Mauritian firms were investigated by Lamport et al. (2011), the connection between corporate governance efficiency and firm performance. The findings indicate that there is no overall significant difference in output between companies with bad and excellent governance quality. Corporate governance has a positive and significant impact on firm results in the United Kingdom, according to Al-Najjar (2017). Although, the result of Al-Najjar (2017) is in contrast to those of Akbar et al. (2016), who found that corporate governance has little influence on financial performance. Akdogan (2014) conducted research on Turkish firms and found that corporate governance has a positive and substantial effect on firm performance, including ROA and ROE. Tanko and Oladele (2015) discovered similar outcomes in Nigerian businesses. Emile et al. (2014) found that the effect of corporate governance on financial performance does not occur in Egypt using two corporate governance mechanisms. A mixed result is found by Satirenjit et al. (2015) regarding corporate governance and firm performance. According to Roy (2016), corporate governance has a significant positive impact on firm performance (represented by ROE and market to book value ratio). In their report, Yameen et al. (2019) found that corporate governance mechanisms reflect different implication on financial performance. They looked at ten mechanisms and found that some have a positive and significant impact, while others reflect a negative impact.

Most recent studies that investigate the impact of corporate governance on financial performance of a firm revealed mixed results. The studies find that some mechnisms have a positive, negative, or even no impact on the firm perofrmnace. These studies including, Aryani et al. (2017), Badu and Apiah (2017), Isik (2017), Paul (2017), Tang (2017), Abdul Gafoor et al. (2018), Eluyela et al. (2018), Gambo et al. (2018), Hanh e al. (2018), Petchsakulwong and Jansakul (2018), Saha etal. (2018), Singh et al. (2018), Ahmed et al (2019), Al-Msiedeen (2019), Alqudah et al. (2019), Ben-Rejeb and Missaoui (2019), Ebun Emmanuel (2019), Kiradoo (2019), Nwokwu et al. (2019), Yameen et al. (2019), and Wondem and Batra (2020).

Considering the outcomes of a number of applied researches on the ASE, Toumar (2008) reveals a positive influence on banks` performance resulted by board composition and ownership structure, while board size has no influence. Al Manaseer et al. (2012) indicated that board independence and foreign ownership have a positive relationship with firm performance, but board size and CEO duality show a negative relationship. The CEO duality and foreign ownership are seen to have a positive impact on firm performance, board size has no impact, and none executive directors have a negative impact, as found by Marashdeh (2014). Al-Daoud et al. (2016) target industry and services sectors; their outcomes show that board activity impacts financial performance positively and significantly. Almustafa (2017) findings suggest that board of directors' independence, CEO duality, and board size have no significant impact on financial performance, whereas a significant positive effect by ownership structure. Qadora and Hanim (2018) show that listed industrial firms` financial performance is influenced positively and significantly by board size, but CEO duality has a negative and significant impact. According to Mansur and Tangl (2018)'s study, the ownership structure has a statistically positive impact on the financial performance of listed financial firms. Abu Zraiq and Fadzil (2018) found that the remuneration committee and nomination committee has a statistically positive impact on none financial firms` financial performance measured by ROA. Audit committee characteristics influence on non-financial firms' performance is investigated by Mohammed (2018), a positive impact is found. The research of Al-Msiedeen (2019) reveals that ROA is impacted positively by the board of directors' independence and CEO duality, and board gender found to not impacting ROA. A study by Alqudah et al. (2019) concluded that board meetings, foreign directors, busy directors, and board independence has no significant impact on ROA, while board size has a statistically positive effect, and political connection has a significant adverse effect.

2.9. Critical appraisal of the previous literature of corporate governance impact on firm performance:

Regarding the studies that have been applied around the world about the corporate governance and financial performance, there is no consensus on the outcomes; each research has its own result even if these researches are done on identical population. This is due to several reasons, these studies employ dissimilar measures, classifications, periods, criteria, analyses method, etc. As a result, there are continues needs for new studies to enhance and improve the overall comprehension in regard to corporate governance impact on financial performance. In addition, each country has specific conditions in terms of, for example, economy, markets size, structure, and regulations. Consequently, the outcomes of specific market cannot be generalized to other markets. Therefore, in the following the revision of previous literature that have been applied on the ASE, which in regard to impact of corporate governance in financial performance.

The previously applied researches on the Jordanian stock market, which consider corporate governance and financial performance, can be summarized and reviewed from different elements. For instance, Toumar (2008) investigated the corporate governance impact on the financial performance of Jordanian banks; this study is almost an aged study, where this study applied in the same year of the application of corporate governance regulations on Jordanian listed firms. The study of Alqudah et al. (2019) investigates corporate governance impact on the financial performance of listed firms in Jordan. Even this research is recent, but it was limited on banks rather than other financial firms, financial performance is only measured by ROA, and the study sample period considers a political aspect taking into account the Arab Spring, the adopted period is from 2013 to 2017, but actually Arab Springs starts at the end of 2010. The research of Al-Msiedeen (2019) is also a recent study; nonetheless, this research considers non-financial firms. In 2014, Albeshtawi et al. analyzed the impact of corporate governance on the firm performance of the listed firm in the ASE; their study only considers non-financial performance. Another study was done earlier in 2012, by Al-Manaseer et al., similarly, it is limited to Jordanian listed banks and considers a study period of three years from 2007 to 2009.

Moreover, financial firms were employed by Hamdan et al. (2103) to examine audit committee independence; their study was limited to 2008 and 2009, thus does not consider the new regulations of the Jordanian corporate governance. Almostafa mentioned in his study in 2017, that it is the first to analyze the impact of corporate governance on financial performance, but

his study considers all listed firms except the financial firms. In addition, his study sample period was limited on three years, from 2011 to 2013. The study of Marashdeh (2014) includes various corporate governance mechanisms and exploits two measures of financial performance, however, it is limited on industrial and services firms. Moreover, Al-Daoud et al. (2016) study the impact of corporate governance mechanism on firm performance, but their study sample was limited on none financial firms, and they only consider one mechanism, which is board activity. Mansur and Tangl (2018) research targets the ASE-financial firms, but his study is a revision of previous researches, it might be a selective and not comprehensive. Qadora and Hanim (2018) investigated the impact of corporate governance on financial performance, yet, the study was limited on board size and CEO duality; their study targets the industrial listed firms, the study period is only one year, which is 2013, this year might have abnormal observations, hence, this cannot be generalized. Mohammed (2018) study was limited to audit committee characteristics effect of non-financial firms` performance. Moreover, most of these studies consider only the ROA to measure performance of firms. Lastly, the connection between corporate governance theories and financial performance has not been considered by previous studies in Jordan, except the studies of Almustafa (2017) and Al-Msiedeen (2019), but both studies for none financial companies, this study will connect the agency theory with the financial performance.

Overall, significance of analyzing corporate governance application cannot be neglected, weak structures of corporate governance result great failure of the overall structure, in turn, this has highlighted the necessity for study that objects ultimately to involve in the development and reform of corporate governance whether locally or internationally. In addition, there is no consensus about what is best corporate governance system to be adopted, where it varies from country to country .e.g. cultures. Furthermore, the world witnesses continuous changes and fluctuations, as such, the area of corporate governance and financial performance have to be updated from time to time, where sometimes rules and regulations that are effective for today might no longer applicable in the future. An efficient application of corporate governance would significantly limit the possibility of occurring collapses and crises, which in turn, avoiding fluctuations in countries, markets, and firms, and being more stable, ultimately having better financial performance. Therefore, investigation is must and accordingly providing contribution to the long corporate governance`s debate. Regarding the Jordanian corporate governance structure, it has been adjusted three times since the crisis of 2008, the last changes were applied in 2017, which indicates to the importance of corporate governance and the

constant alterations over the time. Hence, the corporate governance structure is updated from time to time to be consistent and effective, thus, further researches on corporate governance with other perspectives are necessity. As argued through the introduction of this thesis, Oehmichen (2018) discussed that the developing countries reflect a very weak corporate governance practices, and this weakness might be a main reason behind occurring crisis in the future, hence, Jordan is one of these countries and strengthen its corporate governance structure is vital for further protection and stability.

The impact of corporate governance on financial performance will be extended through the conceptual framework and hypotheses development sections of this research. Based on the purpose of this research, six corporate governance mechanisms are adopted; these mechanisms impact on firm performance and relation with the agency theory will be presented in the conceptual framework and hypotheses development sections.

2.10. The theoretical perspective of corporate governance with firm`s financial performance:

The theoretical foundation of this thesis is based on corporate governance theories and liquidity management theories to meet this primary research purpose. According to Balagobei (2018), modern companies see corporate governance as a central perspective in their operation and management. Theoretical models' appropriateness of corporate governance has a continuous debate, resulting in not adopting an appropriate theoretical model. This is also supported by Lawal (2012), where he indicated that there is no consensus on the corporate governance`s definition, which results in proposing several theoretical views by researchers from different backgrounds, such as finance and psychology, yet, all these views object to understand the complexity of corporate governance concept. According to Madhani (2017), corporate governance is underlined by various central theories, including agency theory, resource dependency theory, stewardship theory, transaction cost theory, resource-based view theory, stakeholder theory, and political theory.

Most discussions of corporate governance theories are about the nature of the relationship between owners (shareholders or principals), managers (agent), and other stakeholders, except the discussion of the agency and stewardship theories, where both limit the discussions mainly on shareholders and managers, and goes to somehow to employees, however, both theories have contradicted view. Besides, stakeholder theory does not limit its discussion on the shareholders and employees, including managers, but rather it goes further to include other

elements of entity such as creditors and suppliers, those are called "stakeholders" (Abdullah and Valentine, 2009). According to Ayuso and Argandona (2007), each theory provides dissimilar paradigms of corporate governance understanding; this study is limited on the corporate governance practice as mechanisms. Accordingly, the corporate governance mechanisms which are derived based on the concepts of agency theory are adopted for this research, where these mechanisms manage the relationship between employees in particular managers and owners; In other words, it aligns the conflict of interest between agent and principals (Moore and Petrin, 2017). The agency theory will be discussed in the next section.

2.10.1. Corporate governance theory:

The theories of corporate governance explain and provide a justification of corporate governance practices as well as the consequences of these practices on firm performance (Kalsi and Shrivastav, 2016). Sonmez and Yildirim (2015) indicate that the frequently discussed corporate governance theories are agency theory, stewardship theory, resource dependency theory, stakeholder theory, and transaction cost theory. As will be discussed, agency theory is employed to investigate the effect on financial performance resulting from corporate governance. According to Pugliese (2014), board monitoring activities are well-rooted into agency theory. As will be illustrated later in this chapter, board monitoring mechanisms are employed in this research. Since this research is in line with the agency theory, it will be discussed in the following. Other theories will not be adopted for this research, yet, these theories` explanation is presented in appendix (3).

- **Agency theory:**

This is the main theory adopted for this research` corporate governance part of analyzing the effect of corporate governance on financial performance. The agency theory is broadly acknowledged in research interested in corporate governance. The growth of corporations has led to the creation of several isolated owners (shareholders), which in turn, shareholders delegate and authorize managers to run their business. The most influential work that was elementary of agency theory development was done in 1779 by Adam Smith through his well-known book namely “The Wealth of Nations”. As quoted from his book, that "the directors of such (joint-stock) companies, however, being the managers rather of other people’s money than of their own, it cannot well be expected, that they should watch over it with the same anxious vigilance with which the partners in a private copartner frequently watch over their own. Like the stewards of a rich man, they are apt to consider attention to small matters as not

for their master's honour and very easily give themselves a dispensation from having it. Negligence and profusion, therefore, must always prevail, more or less, in the management of the affairs of such a company". After 200 years, specifically in 1976, Jensen and Meckling introduced their effective research, which developed the notion of agency theory. They indicate the essence of the agency relationship as a deal that allows engaging agents (Managers) by one or more persons (principals) to execute some roles in the best interest of principals by getting enough level of decision-making delegation (Solomon, 2010).

Agency theory exploits an identical way of naming manager as "agent" whose ultimate role is maximizing the wealth of shareholders who are called "principal". In line with Rungtusanatham et al. (2007), the relationship of the agency occurs when two parties agree to cooperate in an association, where one party plays the role of a principal who lets another party (agent) work on his behalf. From the legal point of view, the agency relationship is defined by Milgrom and Roberts (1992) as a condition that suggests that an individual behaves in the interest of another to achieve another`s objectives. This is furthermore supported by the statement of Rungtusanatham et al. (2007), which states that the inability to effectively identify what the agent is actually doing to achieve a company`s objectives. In addition, principals are not able to properly verify the qualifications which agents claim to have for performing the company`s activities. It was furthermore mentioned by Huang and Change (2010) that the probability of a project failing is maximized when agency problematic has existed.

According to Fama and Jensen work in 1983, the agency problem is underlined by crucial assumptions, such as interests` deviation between owners and managers, preferences of risk aversion are varied, and objectives contradiction. Consequently, as the separation between ownership and management occurs, conflict of interests is raised as each party`s ambition is to increase his own benefits (Abid et al., 2014). The conflicts of separation are the core concept of the agency theory, supposing that agents pursue self-interested actions such as remuneration and bonuses rather than acting in the best interests of principles. For instances, but not limited to, managerial myopia, it suggests that while the shareholder`s wealth maximization is achieved by focusing on long term economic developments and benefits, managers` objectives might vary and be limited on short-term projects, which in turn allow them to get higher bonuses from enormous short-term return (Tricker, 2015). In addition, the growth led to introducing and improving stock markets. Accordingly, several companies got listed, a large number of principles were generated, and management difficulties allow delegating to managers who have enough background and knowledge to control businesses. Though, Adam

Smith (1776) recognized this conflict with no major attention until the extension of the corporation in the early 1900s, where conflicts became recognizable due to the growth of separation at that time (Solomon, 2010).

According to Anglin and Gao (2011), this alignment of interest generates indispensable cost, which is called “agency cost”, and formulated a mathematical model based on this hypothesis. In particular, they suggested that agency cost is a sum of three major costs, costs of monitoring to restrict agents` actions on behalf of shareholders, costs of bonding to make agreements that ensure limited mobility of agents, and lastly residual costs are all costs that remain even after monitoring and bonding costs fulfilment. Along with McColgan (2001), he indicates that monitoring costs are “expenditures paid by the principal to measure, observe and control an agent’s behaviour”. This again insists on appropriate compensation scheme existence. He moreover suggests that bonding costs “are costs borne by the agent, they are likely to set up structures that will see them act in shareholder's best interests, or compensate them accordingly if they don't” such as costs of coordination, arrangement, and compensation intentions. Additionally, it is not necessary that bonding costs are financial, while it can be a cost of extra information disclosure to investors. What is more, residual costs are experienced even though of delivering monitoring and bonding costs, again due to interests’ conflict alignment.

The intention of these inevitable costs is to encourage managers to behave in the extreme way of shareholders’ maximisation by creating shared and common interests. By way of example, based bonuses, final compensation of managers` firing, and share option schemes which aim to enhance a company`s market value and accordingly maximizing managers` benefits as well. What is more, agency cost can also contain hiring a reasonable number of independent directors to monitor the manager`s behaviours. Even though that agency cost is a burden for shareholders, yet, they ultimately receive greater return and profits (Panda and Leepsa, 2017). However, regardless of shareholder`s wealth reduction by agency cost, it is vital to make sure that interests are correctly aligned to avoid any losses which can exceed the agency cost and be harmful to shareholders` wealth (Yegon et al., 2014).

As aforementioned that according to various contradictive interests, the relationship between shareholders and managers is formed through agency problem and agency cost; this relationship is called the “Principal-Agent” model by agency theorists. In a nutshell, the Principal-Agent model denotes conflict of interest due to ownership and management separation. Attributable to a prominent feature of ownership and management separation within

developed capital markets, this model is applied and existed there. As evidenced early by Lewellen (1969), just 15% of managers of none financial organizations owned these organizations at large in the US. Accordingly, it is a dominant case a long time ago and became more penetrated in the developed stock markets such as stock exchanges in the US (Wellalage and Locke, 2011).

The story is different in emerging stock markets, where a humble number of owners have the ownership majority of most companies` shares and still extensively control investing activities of institutions. As a consequence of the Principal-Agent model invalidity to some extent on these emerging markets, another agency model was formulated, which is namely the Principal-Principal model. As indicated by Su et al. (2008), the principal-principal problem obviously exists in emerging markets. Regardless of adjustments on corporate governance practices, Principal-Principal issues still existed. This model forms the relationship of agency as a threat of value expropriation by majority principal from minor shareholders, in most cases by sales and purchases of assets (Cheung, 2011). Consequently, as Laiho (2011) identified in aims of mitigating agency costs and interest conflict, agency theorists formulated another characteristic of practices that hinder exploitation of minor shareholders` wealth and ensure no expropriation existence.

It is possible to conclude that the agency theory has convincingly provided a reasonable judgment in comprehending complicated associations between agent and principal within corporations. At the same time, the ultimate objective of agency theory is a never-ending task of balancing, mitigating, and aligning the irreconcilable conflict of interests through a creative and efficient mechanism that targets existed and potential issues of principal-agent and principal-principal core conflicts. Nonetheless, the adopted mechanisms are different throughout the world. For instance, few rely on regulation protection in Japan and Europe but rather relying on block holders. Conversely, organizations in the UK and US depend highly on legal protection for mitigating existing conflicts. Please refer to appendix (24) for the other theories discussion, including stewardship theory, stakeholder theory, and resource dependency theory.

2.11. The Research Theoretical Framework:

The generated framework is demonstrated in figure (1) below; it is generated based on the theoretical perspective discussed in the previous section. Firstly, the formulated theoretical framework is based on the agency theory to reflect corporate governance impact on financial firm performance and on the tradeoff theory to show the effect of liquidity on financial firm performance. In the first hand, as said by Pugliese (2014) that board monitoring activities are well-rooted into agency theory. As suggested by Paul (2017), the agency theory objects to minimize the agency problem, which results from shareholders and managers conflict of interests. Hence, corporate governance mechanisms are formulated to align these interests and to reduce the agency problem (or it is known as the principal-agent problem) and accordingly to improve firm performance. The agency theory suggests the corporate governance mechanisms are positively reflected on the performance of firms, Figure (2) in the following illustrates this theoretical research framework:

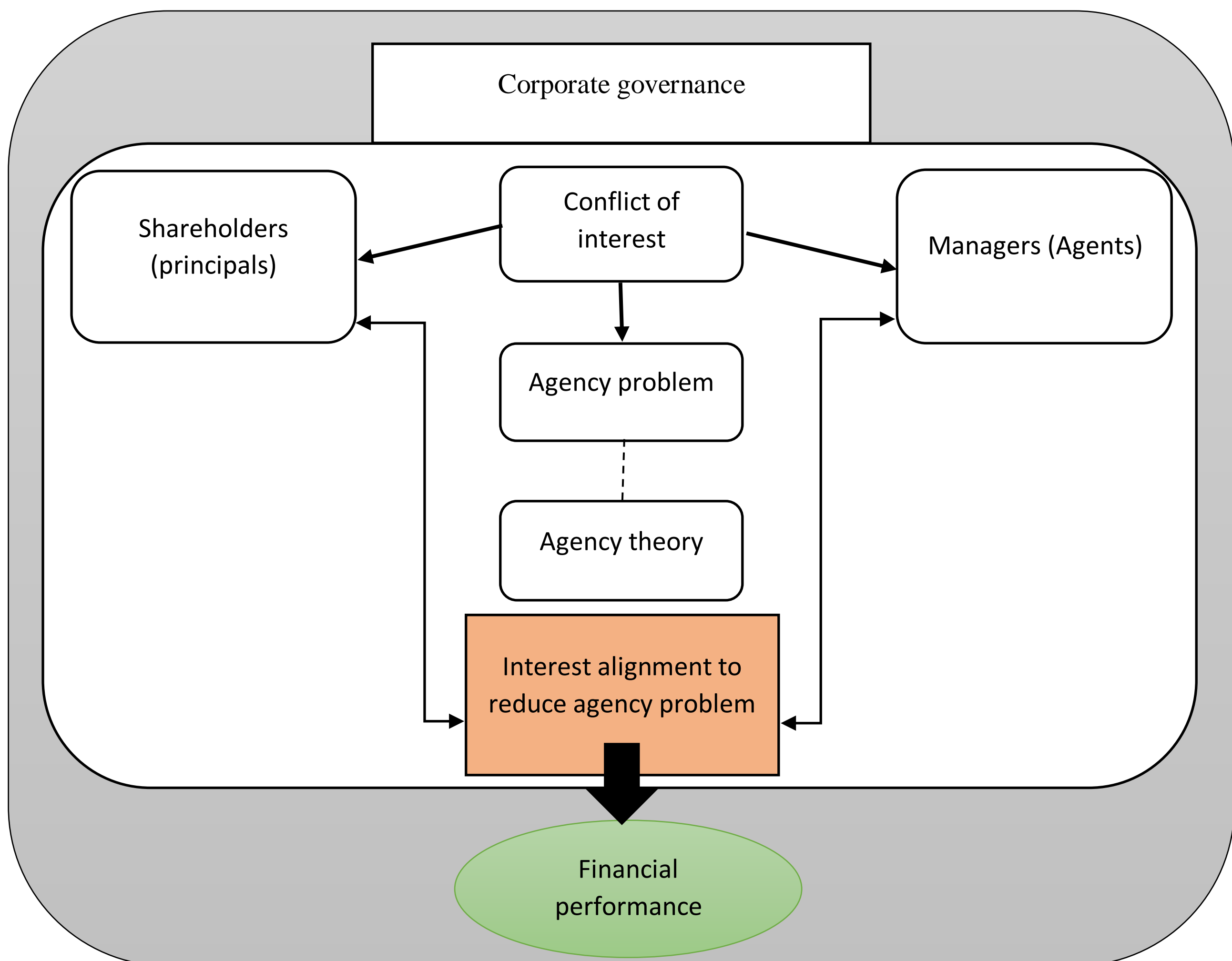


FIGURE 2: CONCEPTUAL RESEARCH FRAMEWORK, AUTHOR.

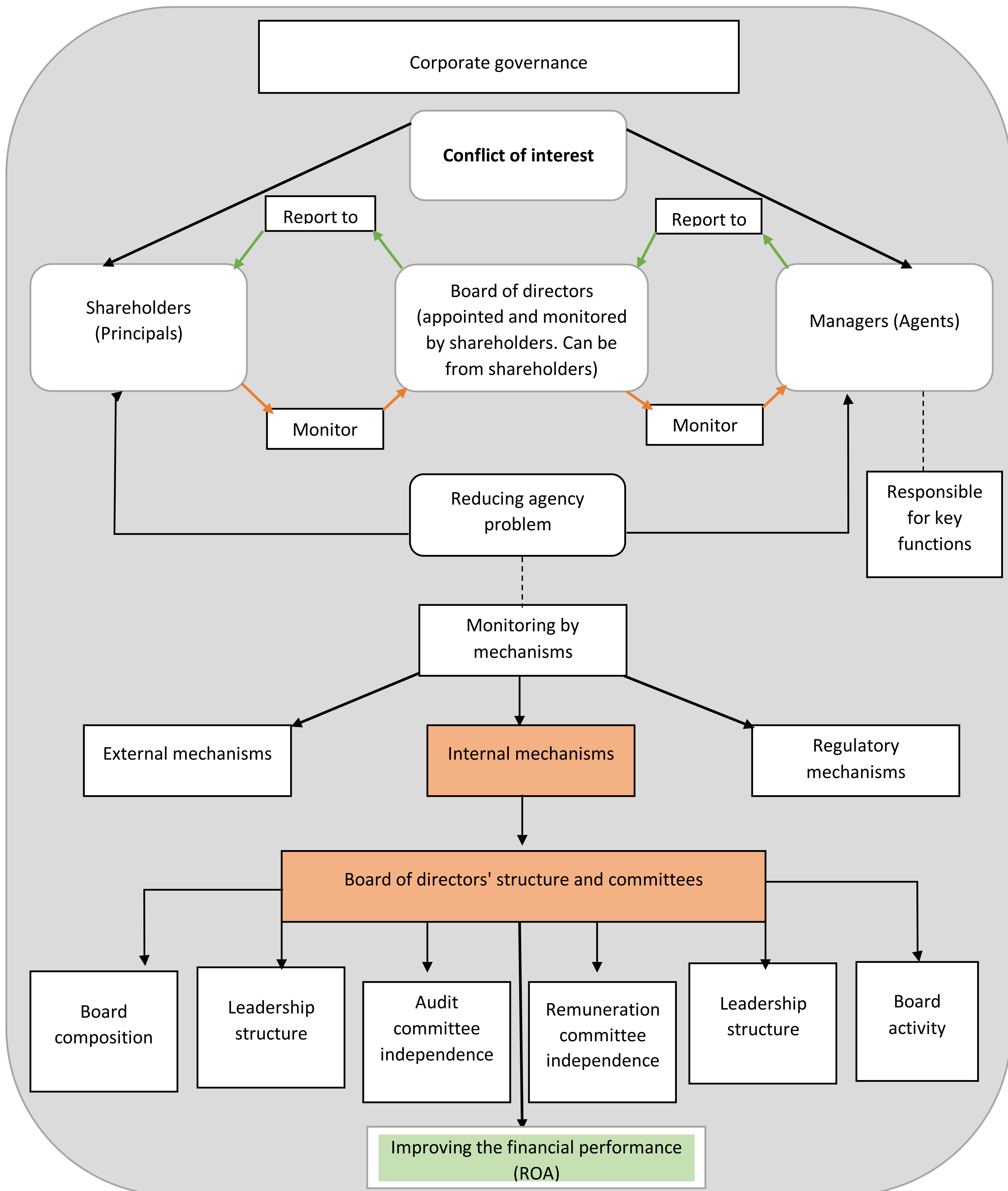
2.12. The research conceptual framework development:

The main purpose of the research is to analyze the impact of corporate governance and liquidity management on the financial performance of listed financial firms in the ASE. The application of corporate governance has mitigated the negative impact of misbehaviors, which lead in some cases to take firms for bankruptcy. Corporate governance mechanisms are employed for ensuring interests alignment between managers and shareholders. Such mechanisms can ensure to some extent that managers work on behalf of shareholders` interest, simultaneously providing an effective reward for managers' performance (Kalsi and Shrivastav, 2016). However, the application of these mechanisms requires efforts and costs. As a result, some firms do not apply these mechanisms either partially or completely. Firm financial performance is impacted accordingly due to misbehaviours that might be existed due to avoiding the implementation of some mechanisms (Otman, 2014).

As indicated above, there are three main mechanisms of corporate governance, internal, external, regulator mechanisms. This research is limited on the internal mechanisms; internal mechanisms are adopted due to the easiness of obtaining the required data. According to Eluyela et al. (2018), external mechanisms concern is about external factors, obtaining such data is difficult, these factors can be in regard to media exposure, market competition, etc. In addition, this study is built based on the agency theory, which considers mainly shareholders and manager; it does not include a further firm`s stakeholders; external factors can include external stakeholders, e.g. government; thus, external factors are excluded. However, this does not mean that the researcher is against the concept of including stakeholders into consideration of corporate governance mechanisms. The employed internal mechanisms in this research are about the board of director and its sub-committees; this includes board size, board activity, board of directors' independence, audit committee independence, remuneration committee independence, and leadership structure (CEO duality).

As discussed earlier in this chapter (section 1.3), financial performance and profitability have been used interchangeably in previous literature; this creates confusion among these concepts. This research considers profitability as a part of financial performance; hence this research adopts the financial performance to be studied in terms of profitability using the ROA. Figure (3) in the following page demonstrates this conceptual research framework.

FIGURE 3: THE RESEARCH`S CONCEPTUAL FRAMEWORK, AUTHOR, 2020.



The effect of corporate governance on firm performance can be isolated by using control variables, previous literature such as Prommin et al. (2014), Alsertawi (2015), and Hillary (2016), Alkahtani (2016) suggest that firm size and age are used as control variables due to their implications on financial performance, in turn, using these controls isolating the impact of corporate governance and liquidity on financial performance. Oyelade (2019) states that one of the main determinants of firm performance is the size of a firm. Panda and Leepsa (2017) mentioned that larger firms able to access external resources and to raise internal funds is high, and as a firm becomes larger, it has higher diversification of strategies. Nonetheless, as found by Banchuenvijit (2012) that smaller firms might outperform larger firm as these firms have better management profile. Panda and Leepsa (2017) argue that agency cost might be maximized as firm size increases, where cost is increased as more control will be required for managers' interests' alignment. At the same time, as said by Coad et al. (2018), firm age is a vital element that can influence firm performance. They discussed that as firm age increases, firm familiarity with the business environment improved, better internal and external relationship, and more opportunities. Pervan et al. (2017) said that "As firms get older, benefits of their accumulated knowledge in all crucial aspects of the business (technology, supply channels, customers relations, human capital and financing costs) become overcome with their inertia, inflexibility and osseous by accumulated rules, routines and organizational structure". Thus, this research employs two control variables, firm size and firm age.

Further, up to the author knowledge, there is no study that considers the level of corporate governance application impact on other areas. However, there is exception, Lamport et al. (2011) and Akdogan and Boyacioglu (2014), who examined the impact of corporate governance application quality on firm performance. In the beginning, they suggested the level of corporate governance application can play a role in firm performance. Therefore, the researcher will go more in-depth to study corporate governance impact considering the firm`s compliance level of the aforementioned mechanisms; this can strengthen the research`s findings in terms of corporate governance. Chapter three (section 3.6.3) will show the criteria for a firm`s classification and how this will be done. However, figure (5) below illustrates the simple conceptual framework, including control variables and corporate governance compliance level. Further, the next section will extend the discussion of all aforementioned elements in this section of corporate governance.

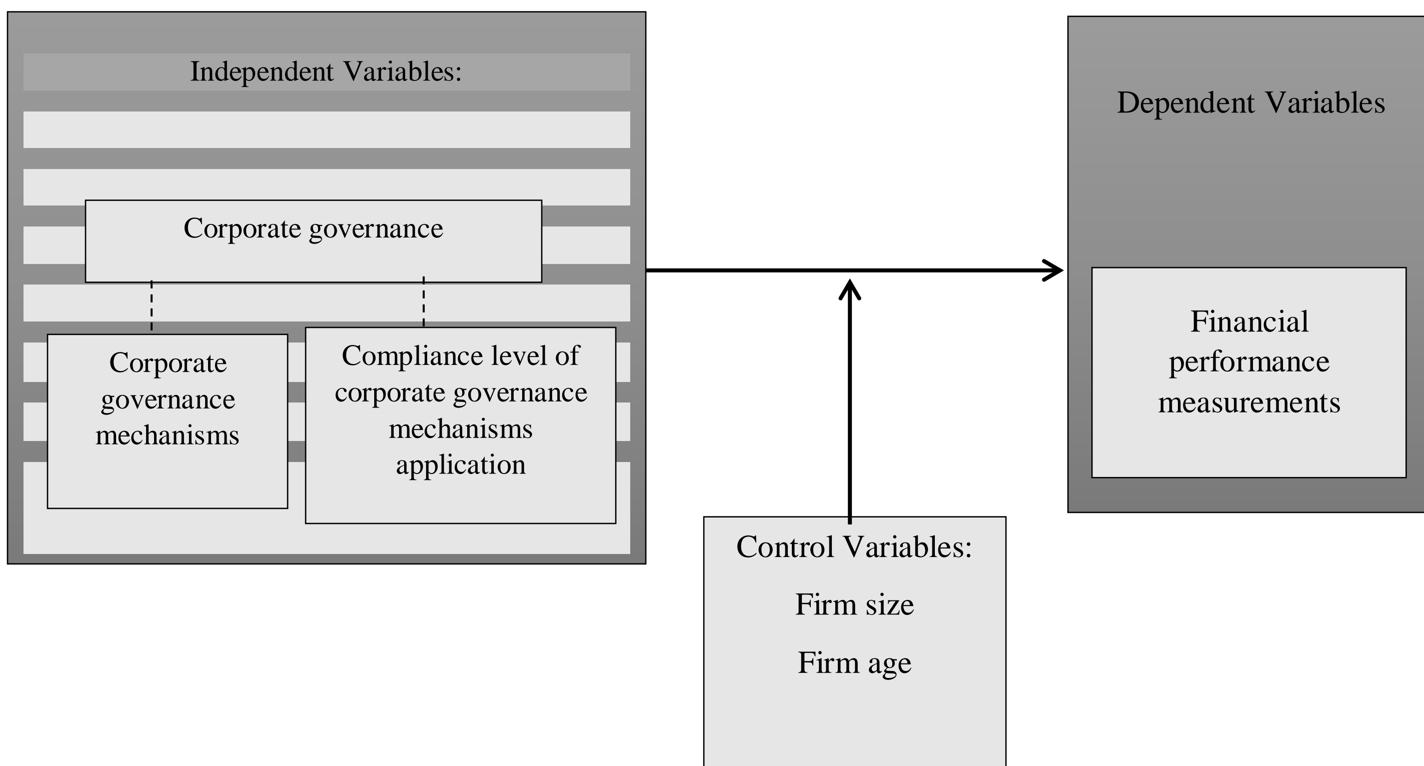


FIGURE 4: THE SIMPLE RESEARCH CONCEPTUAL FRAMEWORK, AUTHOR.

Lastly, the donated theory and what elements will be used to represent corporate governance mechanisms is given; thus, the following table (5) demonstrates the argument of agency theory with regard to these elements:

Theory:	Argument
1. The agency theory:	- Board activity: higher board meetings better firm performance - Board size: larger board size is more effective for firm performance - CEO duality: combining the role of CEO and chairman reflects less efficient firm performance. - Board independence: enhancing board independence results in improving firm performance. - Board of directors` sub-committees independence improves firm performance.

TABLE 5: RESEARCH`S THEORIES ARGUMENT WITH ADOPTED ELEMENTS, AUTHOR.

2.13. The Research Hypotheses Development:

In order to achieve this main research purpose, the above reflected theoretical framework and conceptual framework are formulated to be the ground for developing testable hypotheses for this research. These hypotheses are based on the main arguments, which is represented by the agency theory as aforementioned. Six corporate governance mechanisms are going to be used for investigating the impact on financial performance. Consequently, in the following, the development of this research`s hypotheses is illustrated.

2.13.1. Corporate governance mechanisms and firm performance:

As previously stated, the corporate governance mechanisms proposed to eliminate agency issues and improve managerial incentives to meet shareholders and managers interests. Board of directors monitoring is a part of these mechanisms concerns. Referring to Kiradoo (2019), corporate governance mechanisms work as a system that aims to better coordinate shareholders` and managers` relationship. The board of directors' primary responsibility is to keep an eye on the company's management and to reduce the issues that come with the agency problem (principal-agent relationship). The shareholders are the principals, the managers are the agents, and the board of directors performs the controlling process. A conflict of interests may occur when the agent's and principal's interests are not matched. There is always the possibility of agency issues, in which agents work on their behalf with no consideration of principals` interests, which is why principals nominate managers and board of directors` member to make sure that the company is running in the owners' best interests. As a result, the board of directors serves primarily as a monitoring tool to safeguard the interests of the principals. Since independence from management clearly strengthens the board's ability to exert its role of overseeing the firm on behalf of principals, an independent board is usually regarded favourably as part of an efficient governance process (Liu and Fong, 2010). Because of the conflict of interests and the need to supervise agents, the company incurs agency expenses, such as monitoring and bonding fees, as well as residual losses (Jensen and Meckling, 1976). Since the principals are ultimately responsible for these costs, lowering agency costs is an important part of maximizing shareholder value (Robinson et al., 2015). However, as said by Moez (2018), regardless of the incurred agency costs, paying such costs reducing the agency issues and ultimately enhancing the firm`s performance and avoiding paying this can be more costly.

An effective board effectively controls management and is a valuable mechanism for board members to adhere to firm policies in order to minimize managerial practices that are not in

the best interests of shareholders. As a result, the consistency of board decisions has an effect on firm efficiency and valuation; stronger management oversight increases the likelihood that managers will behave in the best interests of shareholders, which means that operational profitability will rise along with share value, minimizing agency conflict between managers and shredders. To ensure the best structure, Solomon (2010) recommended adhering to the following principles: frequent meetings, board members and shareholders interaction and communication, ability to take into account suggestions from each other, adequate reliability, considering financial risks, financial problems awareness with the ability to fix, and the desire to pursue actions that may advance the company effectiveness. Based on the formulated conceptual framework, this research`s hypotheses development of this part exploits six different board of directors monitoring mechanisms, including board size, CEO duality, board operation, board independence, and board sub-committees independence.

- **Board activity:**

The number of the annual meeting is the indication of board activity. Agency theory proposes that board meetings assist in creating strong activities of monitoring and management. The theory suggests that more board meeting indicates better monitoring of directors` engagement and ensuring a better discussion, thus more appropriate decisions which enhance firm performance. The firs sub-null hypothesis concerns how board activity affects a firm`s financial performance. According to Johl et al. (2015), discuss that a diverse effect might exist on firm performance by board activity. Further, Paul (2017) suggests that effective board activity enhances a firm financial performance, where board activity reflects enough number of board meeting annually, in turn, shows good monitoring processes. Abdul Gafoor et al. (2018) discusses that the number of board meetings and the level of attendance to ensure that firm`s health and profitability is checked. Other studies such as Ramos and Olala (2011), Buchdadi and Chou (2017), and Eluyela et al. (2018) suggests that the board meeting numbers reflecting what extent the board of directors is active, where enough board meetings is an indicator of firm`s profitability enhancement, where firm`s matters are addressed and discussed and accordingly appropriate decision is made. Aldaoud et al. (2016) propose that number of meetings reflects that the board is active enough to propose and discuss the firm`s best strategies and thus improving firm performance. A high number of board’s meeting does not necessarily mean an effective discussion of a firm`s issues, and thus not a precise indication for that the most appropriate decision is taken on behalf firm. Further, other studies such as Bhatt and Bhattacharya (2015) show no relation between board activity and performance.

However, other researchers such as, Jackling and Johi (2009), Jansakul (2018), Yameen et al. (2019) discuss that a high number of board meetings maximizes the cost of monitoring which in turn reducing a firm`s profitability. A high number of board's meeting does not necessarily mean an effective discussion of a firm`s issues and thus taking the most appropriate decision on behalf firm. Aryani et al. (2017) suggest the number of board meetings has no effect on firm performance. They discuss that the high or enough board meeting number does not support that board is active, where at normal conditions board is met to make well-effective decisions, but rather just for fulfilling the meeting number requirement, and for normal discussion about the firm.

The explanation of these contradictive arguments can be, firstly, high and enough number of the board meeting is an indication of a good performance of the board as directors identify firm`s issues and strategies for determining a solution and improvement for a firm, therefore, improving its performance. Secondly, increasing board meeting number increases monitoring cost to be paid by a firm; board meetings is not an indication for good activity as this might just for meeting the regulations requirement and routine behaviour, thus impacting firm`s profitability negatively and might not affecting firm`s performance.

As the findings are mixed, the board activity of Jordanian financial firms might have an impact on their financial performance, which is measured by ROA. Based on the agency theory that suggests higher board`s meetings is more effective, this research`s conceptual framework considers the importance of board activity to impact financial performance; the first sub-hypothesis of the first main hypothesis are "H0A1: Board activity has a positive statistical effect on firm`s financial performance (ROA)".

- **CEO duality:**

The CEO duality means that the CEO and chairman positions are held by one person. As indicate by Boyd (1995), the active and effective leading of a firm can be by integration of CEO and chairman positions. As said by Vafeas and Theodorou (1998), costs can be minimized, such as compensation and remuneration by the duality of the CEO. Peng et al. (2010) said that restricting both positions to one person can lead to effective management in terms of responsibilities and decisions. Machold et al. (2011) mentioned duality of the CEO has more existed in a small firm that seems to have high ownership structure concentration. The CEO duality is supported by several previous studies to be a good element for firm performance including, Guillet et al. (2013), Arosa et al. (2013), Yang et al. (2014), Gohar and

Batool (2015), Moscu (2015), Tang (2017), Singh et al. (2018), and Ben-Rejeb and Missaoui (2019). These researches have a various argument in this regard. The integration between both positions leads to faster actions and responses when it is needed, firm strategy can be achieved effectively as CEO has more power as there are clean authority lines, opposite practices might be performed if CEO role is combined with chairman role, CEO duality can minimize the bad effects of inconsistent interaction and communication, and in terms of accountability, having an integrated position eases determining the responsible person, where there is only one person who occupies both positions. Further, combined CEO and Chairman minimize the associated costs of both positions. Moreover, CEO duality can give more freedom at the same time higher responsibility; thus, freedom gives comfortability, and responsibility makes sense of accountability.

The agency theory proposes the chairman and CEO roles have to be separated for the best protection of shareholders` interests and ensuring transparency and accountability. Several previous studies, such as Aygun and Ic (2010), Grove et al. (2011), Liang et al. (2013), and Duru et al. (2016), propose that chairman and CEO role separation results in enhancing board monitoring quality. Other researches such as De Jonghe et al. (2012), Adams (2013), Kouki and Guizani (2015), and Hamdan and Ahmad (2015) suggest that potential interests` conflict might be maximized if the same person occupies chairman and CEO roles, where activities of the board will reflect excessive alignment to management team interests rather than shareholders` interests. Further, as reported by some literature, Kiradoo (2019) and Onofrei et al. (2019) board`s effectiveness might be hindered by avoiding separation between CEO and chairman, leading to power concentration; therefore, a decision can be risky to shareholders` interests, but rather decision can be opportunistic on behalf CEO`s interests, thus reducing roles domination for more effective decisions and controls. Others such as Roy (2016) and Isik (2017) discusses that the separated leadership decreases the CEO`s power to perform against shareholders` interests, CEO duality might end with overconfident CEO and thus making a decision with no appropriate judgment, and unethical issues might be raised if there both positions are occupied by one person, such as appointing a manager for personal interests.

It is worthy of being noted; other studies find no significant impact of firm performance on a separate leadership structure including, Ujunwa (2012), and Hamdan and Ahmad (2015), Almustafa (2017), Makhlouf et al. (2017), Mutlu et al. (2018), and Singh et al. (2018).

Consequently, there are contradictive views; most views support the argument of agency theory which suggests that CEO and chairman roles should be separated for more effective performance; other researches argue the opposite and suggest a duality of CEO and chairman, while others indicate no implication. This research adopts the argument of agency theory, the duality of CEO has a negative impact on Jordanian listed financial firm, thus proposing the second sub-hypothesis (H0A2: CEO and chairmen duality has a significant positive effect on firm`s financial performance (ROA).

- **Board of directors' composition:**

As said by Fuzi et al. (2016) that "The non-executive directors on the board will not be able to exercise their duties effectively unless they are independence from management and ensure they provide unbiased business judgment". As discussed by Yusoff and Alhaji (2012) and Sheikh et al. (2013), NEDs are outside directors who have not enough deep information about firms and thus are not qualified to perform well for firm's improvement. The composition of the board of directors' influences on firm performance is a debatable perspective in the literature of corporate governance and firm performance. The Board of directors contains two directors' classifications, executive directors and non-executive directors (NEDs), both have dissimilar characteristics in terms of behaviours and incentives. According to the agency theory, protecting shareholders` and aligning managers' interests on behalf of shareholders, optimal monitoring mechanisms are required and a part of this insuring board of directors' independence. To make sure of formulating an independents board, no executive and independent directors are therefore necessary to thus reducing agency conflicts. It is noted that the most well-known codes of corporate governance, such as the UK and US codes, recommend combining both directors independent and dependent in the board (Machold, 2011). According to Garcia et al. (2010), despite the fact that executive directors are significantly beneficial as they are qualified and experienced in addition to having detailed information of the firm, but executive directors can have a self-interest motivation that is against shareholders` benefits. Conversely, non-executive directors do not have many details and knowledge of the firm`s daily operations comparing to executive directors, yet, they improve firm performance by providing independent monitoring and judgement. As stated by Leung et al. (2013), that the main function of outside directors is to mitigate misalignment among managers and owners in order for shareholder wealth maximization and, therefore, finally enhancing the performance of a firm. According to Joh and Jung (2012), and Anis et al.

(2017) that external knowledge can be brought by NEDs; therefore, they perform to link external and internal environments for enhancing managerial function.

Some studies such as Kumar and Singh (2012), Afzalur Rashid (2017), and Palaniappan (2017) indicate that board of directors independence does not has significant implication on firm performance.

Similar to other corporate governance mechanisms, the findings of the board of directors' independence impact on the firm performance show no consensus; some results reveal a positive relationship supporting the agency theory concept which suggests board monitoring from self-interests is reduced by having none-executive directors on board, while others reflect a negative impact supporting the stewardship theory. Therefore, the third sub-hypothesis are developed supporting the agency theory concept, which suggests outside directors enhance firm performance. The third sub-hypothesis (H0A3) is "board independence has a significant positive effect on firm`s financial performance (ROA)".

- **Board of directors' sub-committees:**

As stated by Chalmers et al. (2019), the board subcommittee enhances the efficiency of the board of directors. Board`s committees contain two main types, management monitoring committees and management supporting committees. Management monitoring committees protect the interests of shareholders by providing an independent and objective review of affairs and executives. While management supporting committees are responsible for advising the board regarding the vital decision of the firm. In addition, based on the agency theory, the board`s committees should make sure about appropriate corporate governance auditing as well as appropriate remuneration for directors and senior management. As stated by Kirsch (2018), the previous traditional researches (e.g. Johnson et al., 1996) was limited to the audit committee; it was mostly the only committee to be focused on. However, according to Kang et al. (2018), other board`s sub-committees have recently been given more attention. As said by Chen and Wu (2016), board sub-committees helps in improving accountability and functions efficiency.

The audit committee main responsibility is supervising the firm`s financial disclosure and reporting; it enhances transparency and ensures a valid company`s information (Asiriuwa, 2018). While remuneration committee is to determine policies of remuneration, set remuneration packages for executive directors, and formulate performance-related pay targets (Abu Zraiq and Fadzil, 2018). As reflected by Appiah and Chizema (2016), the remuneration

committee is one of the most crucial board of directors` committees; agency issues are minimized by it and encourage directors to work on behalf of principals` interests. As mentioned by Achtenhagen et al. (2018), Cadbury Report suggests that board committees are crucial for enhancing shareholders` protection and maximizing their wealth, where information asymmetry and principal-agent conflicts are reduced, as a consequence lowering cost and increasing return, which results in better firm performance. According to FRC (UK), "Remuneration policies and practices should be designed to support strategy and promote long-term sustainable success. Executive remuneration should be aligned to company purpose and values, and be clearly linked to the successful delivery of the company's long-term strategy", and "Audit policies and procedures to ensure the independence and effectiveness of internal and external audit functions and satisfy itself on the integrity of financial and narrative statements"(Financial Reporting Council, UK Corporate Governance Code, 2018).

As stated by Mohammed (2018) that "the audit committee plays a correspondent role between the full board, internal auditor, external auditor, executive officers, and the fund executives. It serves as trustees in a governance system that helps to decrease information asymmetry and mitigates agency issues." The main role of the audit committee is to have regular meetings with internal and external auditors in order to review financial statements accuracy, proper audit procedures, and effective accounting controls internally. Referring to Abdalkadar (2014), and efficient audit committee plays a significant role in decreasing financial fraud, improving financial disclosure, and deficiencies identification, including absence or ineffective systems for internal controlling, and no or low existence of external directors, which in turn maximizing confidence of investors and as a consequence improving firm performance. As Ibrahim (2019) point out that management of the financial statement process and biased judgments on behalf of shareholders` interests are ensured and fulfilled by the audit committee, which contains independent directors. As suggested by Sun and Cahan (2009) that corporate governance success efficiency is maximized when the committee has independent members as this makes the audit committee to be more effective. As revealed by Saat et al. (2012) that firm performance is improved when the firm`s audit committee has a high percentage of independent members.

The remuneration committee is discussed by previous studies such as Herdan et al. (2011), Chen and Wu (2016), Eulaiwi et al. (2016), Abubakr, 2017, and Abu Zraiq and Fatzi (2018), they indicate that by providing high motivation and compensation board members and managers work more effectively. Further, the remuneration scheme has highly attractive role

to have extra encouragement of the board members and executive, to ultimately work more efficiently. As mentioned by Conyon (2013), positions remuneration can have an inadequate correlation with the performance of those who occupy these positions. Saha et al. (2018) indicate the importance of the board`s sub-committees independence; not only the committee should be created, but independence of it is also vital.

A significant positive influence of the board`s committees on financial firms is found. Insurance firms Herdan et al. (2011), Chen and Wu (2016), Eulaiwi et al. (2016), Abobakr, 2017, and Abu Zraiq and Fatzi (2018), Saha et al. (2018), and Ibrahim et al. (2019). Conversely, as mentioned by Marashdeh (2014) that many studies reveal a negative impact on firm financial performance by board subcommittees; he stated, the presence of board committees incurs additional costs of compensation, incentives, and services for committees, as well as travel expenses. Second, a high level of managerial oversight can suppress executive ambition and vision. Third, it can be unnecessary if the tasks of corporate boards are duplicated. Finally, the growing lack of unique proficiency between board members (i.e., greater heterogeneity) will exacerbate tensions and adversely affect boardroom consistency; the remuneration for chief executive managers in the UK`s firms found to be negatively impacted for performance, as found by Gregg et al. (2010). Nevertheless, Al-Matari et al. (2012), and Ghabayen (2012) found no impact on firm performance by audit committee. This result was earlier recognized by Klein (1998).

This research will not adopt remuneration and audit committees existence, but these committees` independence is employed for investigating the impact on financial performance. Consequently, the fourth and fifth sub-null hypotheses of the main null hypothesis are for the audit committee independence" H0A4: Audit committee independence has a significant positive effect on firm`s financial performance (ROA)”. While for remuneration committee independence, “H0A5: Remuneration committee independence has a positive statistical effect on firm`s financial performance (ROA).

- **Board size:**

The board size is the number of members of the board of directors. As early discussed by a piece of literature such as Lipton and Lorsch (1992) and Eisenberg et al. (1998), when the concept of boards is accepted, it can be intuitively assumed that a larger board is preferable, as this enables more diversity through having wide board member from various expertise areas. However, issues of connection and coordination might be maximized as board size increases,

which undermines board monitoring efficiency. Wide boards, according to Jensen (1993), higher incurred costs are more expected for managing firms and are more vulnerable to inefficient functions as board size exceeds seven or eight members. As per the agency model, as board size increases, the agency issue reduced as a large group can make better monitoring. According to Tornyeva and Wereko (2012) state that prior to members appointing, various concerns should be taken into considerations, where firms differ from each other in terms of sizes, abilities, power, skills, structures, procedures, regulations, and opportunities.

As said by Azim (2012), directors on larger boards can be an indication of a lower capacity to criticize top executives and to critically evaluate and evaluate firm performance. He indicates that the optimal size of the board is still a controversial perspective of corporate governance. As mentioned by Topak (2011) and Guo and Kga (2012), a Small board is more appropriate for a firm as this enhances better communication and coordination in addition to decreasing control`s associated costs. According to Damak (2013), a high number of board`s size hinders or makes it difficult in achieving consensus decision because of a greater diversity of views and ideas. Thus, large boards make decisions more slowly and inefficiently. Both of these activities can exacerbate agency conflict, as a lack of teamwork and cooperation would limit the board's ability to regulate and track management, potentially resulting in poor firm results. According to Badu and Apiah (2017) and Yameen et al. (2019), large boards are less likely to develop and embrace new ideas and reach consensus on differing viewpoints, resulting in a decrease in the board's ability to offer good ideas and contributions to managers. As a result of the board's dispute, the shareholder's objectives are less likely to be taken into account by the board`s members, resulting in an increase in the agency issue. As reflected by Gambo et al. (2018), large board size is not an indicator for efficient performance, where a smaller board might have sufficient and outstanding capabilities to perform well on behalf firm. Kiradoo (2019) stated that communication and interaction are easier among the small board of directors.

As board size increases, this can improve the quality of decisions` outcomes, this might be due to having more members who are experienced, educations background diversity, and more ideas sharing, which in turn, firm performance is developed by high quality and efficient advice and suggestions Awan and Jamali (2016). When the board size is increased, the market reacts favourably, according to Sheikh et al. (2012), due to their variety of backgrounds and communication skills results in a better track and oversight of businesses management. Lehan et al. (2009) suggest that a small board`s power can be reduced by the CEO, where the CEO can override decisions on behalf himself herself more strongly in the existence of a small board

rather than a large board, thus small board impacts financial performance negatively. Latif et al. (2013) suggest that a larger board is more able to collect information about factors and elements which can affect a firm such as, market factors and acquisition. Adhikary et al. (2014) propose that decision making and strategic planning can be enhanced when board size is large. Referring to Kalsie and Shrivastav (2016), boards with larger seats have more abilities of understanding and accordingly responding to external and internal circumstances and stakeholders. Kalsie and Shrivastav (2016), boards with larger seats have more abilities of understanding and accordingly responding to external and internal circumstances and stakeholders. They suggest that a larger board is more able to collect information about factors and elements which can affect a firm such as, market factors and acquisition. To be noted that other studies (Johl et al., (2015) and Saha et al., 2018) indicate that the bord size number has no role in determining firm performance.

There is no set method for determining the optimal number of directors aboard. In addition, some studies endorse smaller boards; others find that larger boards are more advantageous, while others suggest no relation, either high or low number. Therefore, the sixth sub-null hypothesis is formulated supporting the agency theory concept, which suggests a positive impact of board of directors` size on firm performance. The sixth sub-null-hypothesis (H0A6) is “board size has a significant positive effect on firm`s financial performance (ROA).

To strengthen the finding of corporate governance mechanisms influence on firm performance. This thesis goes more in-depth, the compliance level of corporate governance will be considered, where the researcher will exploit the collected data to make three categories of corporate governance compliance level, low, moderate, and high compliant firms. The level of corporate governance application was rarely exploited in the previous researches, up to the author knowledge, Lamport et al. (2011) and Akonda (2014) are the only researches to do so. Hence, this research aims to investigate the impact of corporate governance compliance level on the financial performance measured by ROA, and accordingly this thesis generates the second main hypothesis as reflected below:

- **The second research`s hypothesis:**

H0B: Corporate governance compliance level has a significant positive impact on the financial performance (ROA) of listed financial firms in Amman Stock Exchange.

The sub-hypotheses that are reflected above will be exploited to investigate this hypothesis, but taking into consideration that these sub-hypotheses will be applied separately on low, moderate, and high compliant firms` levels.

Accordingly, this thesis has two main hypotheses, and six sub-hypotheses that are formulated and derived from the first sub-hypothesis. In the following, these hypotheses are tested to how they inform the agency theory. The agency theory recommends monitoring activities represented by corporate governance mechanisms.

2.13.2. Hypotheses summarization:

The firs main research`s hypothesis (H0A: Corporate governance mechanisms has a significant negative impact on the financial performance of listed financial firms in Amman Stock Exchange) is relative to the corporate governance mechanisms and financial performance; this hypothesis will be connected to the agency theory, the theory states that financial performance of a firm is improved by the implementation of good mechanisms of corporate governance, where alignment between managers and shareholders is maintained, and as a result, the conflicts between these parties are mitigated. The formulated sub-hypotheses of corporate governance mechanisms are H0A1, H0A2, H0A3, H0A4, H0A5, and H0A6. These sub-null hypotheses represent corporate governance mechanisms, including board activity, separation of the CEO and chairmen, board of directors' independence, remuneration committee independence, audit committee independence, and board size.

These hypotheses are going to be analyzed in accordance with agency theory. The financial performance is positively impacted by low board activity, and this is represented by H0A1, where a less active board might lead to decisions that are not appropriate on behalf of shareholders and is an indicator of inappropriate monitoring board`s activities. At the same time, H0A2 proposes that the duality of CEO and chairmen affects a firm`s financial performance positively as this will the monitoring efficiency. H0A3 proposed a significant positive impact of board of directors' composition on a firm`s financial performance; the optimal percentage of independent directors enhance shareholders` rights protection. H0A4 proposes that remuneration committee independence has a significant positive effect on a firm`s financial performance; when the remuneration committee is independent, this will improve the protection of shareholders` interests by a fair and effective remuneration scheme. H0A5 shows that audit committee independence affects a firm`s financial performance significantly and positively; independent committee leads to reducing issues of information

asymmetry. Lastly, H0A6 proposes a significant positive impact of large board size on a firm`s financial performance as this leads to a free-rider issue. The first and second main hypotheses and sub- hypotheses are demonstrated below:

- **The first research`s hypothesis:**

H0A: Corporate governance mechanisms has a significant positive impact on the financial performance (ROA) of listed financial firms in Amman Stock Exchange.

- **The sub-hypotheses:**

- H0A1: Board activity has a significant positive effect on a firm`s financial performance (ROA),
- H0A2: CEO and chairmen duality has a significant positive effect on firm`s financial performance (ROA),
- H0A3: Board of director composition has a significant positive effect on a firm`s financial performance (ROA),
- H0A4: Audit committee independence has a significant positive effect on a firm`s financial performance (ROA),
- H0A5: : Remuneration committee independence has a significant positive effect on a firm`s financial performance (ROA),
- H0A6: Board size has a significant positive effect on a firm`s financial performance (ROA).

- **The second research`s hypothesis:**

H0B: Corporate governance compliance level has a significant positive impact on the financial performance (ROA) of listed financial firms in Amman Stock Exchange. The hypothesis employs identical sub-hypotheses as the first main hypothesis.

2.14. Summary:

This chapter provided an overview of key and critical pieces of literature about the financial market, stock market, corporate governance, liquidity management, an overview of the Jordanian stock market, and corporate governance in Jordan summary. As this thesis mainly aims to analyze the impact of corporate governance on financial performance, this element was discussed, this includes, firstly, corporate governance as a concept discussion, corporate governance impact on and relation with financial performance, corporate governance mechanisms discussion and their impacts on financial performance, critical criticism of previous studies that consider corporate governance with financial performance in the ASE listed firms, theories of corporate governance, the adopted corporate governance theory for this thesis as reflected by the theoretical framework, the elements which represent the adopted corporate governance mechanisms as demonstrated by the conceptual framework, the hypotheses formulation of these mechanisms. More specifically, this chapter discussed the relevant theories of corporate governance, which are connected directly to the main research purpose. The main corporate governance mechanisms were discussed are board of director, size of the board, CEO duality, independence of the board, and sub-committee of the board. The adopted theory for this thesis theoretical framework is agency theory of corporate governance. Yet, other corporate governance theories were discussed and provided through the appendices. Furthermore, one main null hypothesis was formulated, which includes six sub-null hypotheses that are going to be tested to achieve the objectives of this research.

Chapter Three: Research design & Methodology:

3.0. Introduction:

As added by Williams (2011) that the research process is systemic, where objective definition, data management, and findings interaction happen according to existing guidelines and established frameworks. In addition, as he also suggested that researchers should follow and adopt a particular methodology in order achieving research objectives. The research methodology can be defined according to Leedy and Ormrod (2015) as the overall approach which is employed by researchers for research project implementation. As defined by Collis and Hussey (2003) that research methodology is the general approach to research procedure, starting from theoretical underpinning to data gathering and data analysis. Research methodology is considered as a general roadmap which researcher follows for identifying the manner of collecting data, analyzing and interpreting it to achieve the purpose of study. Generally, the research`s purpose lies in the process of preparing, implementing, and examining for finding answers to the formulated research hypotheses and questions. The nature of this process or procedures might be practical or theoretical (Ghauri and Gronhaug, 2005). According to Silva (2017) that research is defined as a way of verifying and expanding the current knowledge based on a specific purpose through an investigation or inquiry for finding a new evidence, information or association.

The previous chapter ends with the hypotheses development section, one main hypothesis, and six sub-null hypotheses. Achieving the main purpose of this research will be by testing these formulated hypotheses. To that end, this chapter presents the research design and methodology of this research. This chapter firstly restates the research objectives, then this research paradigm adoption section is reflected, then research`s population and sampling design section , followed by data collection discussion section, variable measurements section, and data analysis processing section, ends with ethical and legal considerations section. Thus, this chapter summarizes the approach of research design and methodology for the purpose of analysis preparation, and ultimately meeting the primary purpose of this thesis.

3.1. Research objectives:

The primary purpose of this thesis is to examine the effect of corporate governance on financial performance; as a result, financial performance is the primary focus of this thesis. The implementation of corporate governance mechanisms and their level of compliance on firm financial performance are the focus of this research. Therefore, the research aims to boost the

financial performance profile of listed financial companies in a developing country, Jordan, by enhancing the implementation of corporate governance mechanism. The objectives of this study are listed below to help achieving this main purpose:

- Examine the effect of corporate governance mechanisms on the financial performance of ASE-listed financial firms.
- Examine the effect of corporate governance mechanisms compliance level on the financial performance of ASE-listed financial firms.

3.2. Research paradigm adoption:

Burrell and Morgan (1994), and Hustsey and Hussey (1997) indicate to that research paradigm have to be determined by researchers. As said by Saunders et al. (2007), research paradigm is a beneficial practice to understand a social phenomenon. A paradigm of research is a way of defining possible research` nature by a group of philosophical assumptions (Mingers and Gill, 1997). The research paradigm selection should be passed through several steps which go from wide perspectives and then be narrowed down to eventually reach the research`s data analysis. These perspectives including philosophical assumption, research-modeling design, research philosophy, approach to theory development, methodological choice, source of data selection, data collection strategy, research instruments and techniques, and analysis methods (Bryman, 2008).

The philosophical assumption is the most important part of any social science study. The epistemology is adopted as a philosophical assumption of this research, under the epistemology this research follows the positivist paradigm. This study takes the positivist paradigm where as indicated by Hussey (1997) that elements of social phenomena including, facts, causes and effects are targeted by the positivist approach. Furthermore, this research adopts a descriptive research design, where according to Shmueli (2010) descriptive modeling shows a precise profile of events and people, therefore, examining the relation between independent and dependent variables using a regression model in order revealing dimensions of this relationship whether positive or negative. In addition, this study adopts deductive approach to theories development, where Saunders et al. (2009) affirmed that deduction is linked to positivism, and induction is linked interpretivism. This is due to that the development of this research`s hypotheses is based upon corporate governance interpretation and liquidity management view in regard with financial performance, and accordingly the data will be collected, then employing the researcher‘s tools of analysis and the theoretical conjectures for an examination

and empirical investigation. Where, based on this study`s objectives, the researcher formulates a set of hypotheses as previously shown to be tested in the aim of achieving the thesis`s objectives. Bryman (2008) indicates to that science must be value-free. The concept of positivism is based on that facts can be proved and reality is identical for all people, and reality can be found by observation and measurement, for instance, weight of patient does no change whoever measures it (Gemma, 2018). While, as mentioned by Flick (2014) that elements of studies are interpreted by researchers` involvement and human interests are integrated into studies. Denzin and Lincoln (2011) state that positivism starts with formulating and preparing hypothesis for a study. This leads to confirm that positivism is appropriate for this thesis and thus it is adopted.

According to Berg (2004), researchers all over the world have used two types of research techniques, namely qualitative and quantitative methods. As said by Mishra and Alok (2017), "In natural sciences and social sciences, quantitative research is based on the aspect of quantity or extent. It is related to object that can be expressed in terms of quantity or something that can be counted. Such type of research involve systematic experimental analysis of observable phenomenon via statistical, mathematical or computational techniques in numerical form such as statistics, percentages, etc. whereas qualitative research, is concerned with qualitative phenomenon, i.e., relating to quality or variety. Such type of research is typically descriptive and harder to analyze than quantitative data. Qualitative research involves looking in-depth at non-numerical data. It is more naturalistic or anthropological". According to Babbie (2012), quantitative approach can cope with longer periods of time and a larger samples number, resulting in increased generalization power. Furthermore, to get better results and explanations, some researchers combine the two approaches. The qualitative method, on the other hand, has a range of flaws. To begin with, small sample is employed, hemce the entire population is not represented. Second, in qualitative approaches, transparency and reliability are still lacking. Third, qualitative approaches take a long time to complete. This could lead to ineffective tools for obtaining satisfactory explanations (Bryman, 2012).

Finding the implication on the firm`s financial performance that is generated by corporate governance mechanisms is the main purpose of this thesis,

a positivist enables control and precision of data, and due to the difficulty of collecting data through interviews from various firms, this research used the deductive positivism method, in which the pre-existing theoretical foundation is established and based on constructing the

hypotheses; the rejection or acceptance of these hypotheses is shown by empirical result. This thesis used regressions as the primary tool of analysis to accomplish this goal researcher seeks a positivist view of the conducting methodological processes that cannot be affected by dissimilar perceptions of individuals (Ardalan, 2012). Multiple regression analysis, according to Hair et al. (2009), is the proper form of analysis when the study issue includes a single metric variable, and it is assumed to be linked to two or more independent variables. As a result, the key method that is adopted for this research is multiple regression analysis. Earlier studies (e.g., Claessens et al. (2006), Marashdeh (2014), Abdelkadar, (2014), and Hillary (2016) have used the multiple regression model, it is employed for investigating the effect of corporate governance and liquidity management on financial performance. Therefore, based on the research`s purpose, one main empirical model is formulated, the empirical model is for examining effect of corporate governance mechanisms and the mechanisms application compliance level on the financial performance of the ASE-listed financial companies.

3.3. Population and sampling design:

As stated by Taherdoost (2016) that population and sample selection is a crucial part in scientific researches. Population is a group that scholar objects for investigation, this could be events, people, or areas of interest, while sample is a whole or part of population and is determined based on research`s objective.

The aim of this study is to investigate the influence on firm`s financial performance resulted by corporate governance mechanisms. Therefore, the study's target population is all Amman Stock Exchange listed companies. The financial sector was selected for this research sample, as indicated previously that financial firms are unlike other firms and has specific features, thus none financial firms are excluded. The financial sector was selected for this research sample, as indicated previously that financial firms are unlike other firms and has specific features, thus none financial firms are excluded. Hence, all listed firms of the financial industry will be exploited, includes three main sectors, Banks, Insurance firms, and Financial Services firms. The targeted sample period is selected to be 10 years starting from 2010 to 2019. This period was adopted as the corporate governance regulations were seriously adjusted and applied on ASE`s organizations in 2009, in turn, 2010 is the best starting year to reflect the consequences of corporate governance application, and this period covers almost all years after the major adjustment of corporate governance. For avoiding firms` effects, this period is long enough, a very few studies or even no study that were applied to cover this period in regard to corporate governance impact on financial performance.

The criteria for including firms are, ensure that firm has worked during the sample period, firm`s corporation must not be suspended due to any single reason, firm must have all required data for all years to be exploited in calculations, and firm is not merged, sold or and stopped during the sample period. Based on the thesis`s main purpose, as aforementioned one empirical model will be formulated. After implementing a preliminary revision the final sample for the first empirical model, it is consisted of 39 firms as illustrated by appendix (1).

3.4. Data Collection:

Using the secondary data to provide additional information for the research problem solution, secondary data helps to explain and understand research problem (Ghauri and Gronhaug, 2005). As mentioned by Saunders et al. (2007), and Sekaran and Bougi (2010) that employing secondary data sources may reduce the time and expense of gathering information, as well as reduce resource requirements, provide comparative and contextual data, lead to unexpected discoveries due to the use of appropriate methods, and easier access. As indicated by Veal (2005) that the secondary data have various sources, this includes journal articles, companies' annual reports, official firms` websites, governmental reports, books, surveys data, statistical data base, and official websites such as Bloomberg. Therefore, as Bougie (2010) suggested that in some cases it is very crucial to employ secondary data, where if secondary data is accessible to answers research questions, it can be easier rather than using primary data. Achieving the main purpose of this research can be accomplished by exploiting official annual reports, this can be done by downloading these reports from the ASE` official website, these reports will be scanned to get the financial and none financial data.

Consequently, the required data for the empirical model is considered "secondary." The targeted data is available in the companies` annual reports which are publicly available. All these annual reports will be downloaded, to make the data ready for analysis, researcher will download all available and required annual reports of firms which are included in the sample and covering all sample period, annual reports are going to be reviewed to extract data about corporate governance. Most firms have a separate section of corporate governance, these sections were reviewed and all needed data was extracted and entered in a fitted format for excel sheet to be ready for the analysis. The disclosure requirements about corporate governance were limited in 2009, 2010, 2011, therefore, the required data are not well-organized comparing to other years, and as a consequence, additional efforts were required to find data through the long annual reports.

The independent variables to be used in the secondary data for the model includes size of the board, CEO and chairman duality, and board composition independence, independence of the audit committee, the remuneration committee independence, and board activity. Further, the dependent variable that represent firm`s financial performance is ROA ratios, this requires values including net profit and overall value of assets. The required data for control variables are firm size, and firm age these values were also calculated based on collected data from the annual reports and aforementioned official websites. The next section illustrates the measurements of these selected variables.

3.5. Variables measurements:

- **Independent variables (corporate governance mechanisms):**

The ability of board monitoring is affected by annual board meetings number. High or low board meetings threaten the efficiency of board monitoring. A too high number of meetings may indicate that firm faces a difficult situation, while too low meetings might be due to less attention that board of directors pay (Kang et al., 2007, and Al-Daoud (2016). As indicated by Guest (2009) that when a board of directors has frequent meetings this is reflected in enhancing the board's efficiency and accordingly the performance. As added by Ntim and Osei (2013) that board of directors' activity is required and essential, where annual reports transparency is improved by an active board. As indicated by Eluyela and Oladipo (2018) that the agency theory supports having more meetings to enhance the board`s performance. The board activity is measured by the annual meetings number of board of directors, this measure is used by some previous studies such as Guest (2009), Ntim and Osei (2013), Al-Daoud (2016), and Paul (2017).

Board size is a vital variable to be considered in examining the impact of corporate governance and financial performance, it is measured by the director`s number on the board (Lawal, 2012). As stated in previous chapter that the larger the board number the lower firm performance as agency theory supports. Previous studies have used structure of board leadership to examine firm performance with corporate governance, this includes Jackling and Johl (2009), Ujunwa, (2012), and Yusoff Alhaji (2012). The structure of board leadership is about the separation between the role of chairman and CEO. The number of firms which has a duality in leadership structure is the measure for this mechanism. As reflected in previous chapter that the agency theory supports that both roles separation allows duties to be more effective and efficient and accordingly useful for performance of firms.

Board composition is measured according to proportion of none executive directors comparing to number of board`s member of firms. The independent directors are majorly important for firms to have unbiased practices of the board of directors (Heenetigala and Armstrong, 2011). The agency theory suggests that none executive director's existence on the board resulting in improving monitoring of firms. In respect to the agency theory regarding committees of the board, the main board of directors' responsibilities are making sure that corporate governance auditing is appropriate, and insuring suitable remuneration. Therefore, in reference to the agency theory these committees play a key function in enhancing monitoring board`s management and decision-making activities (Anis et al., 2017). In Jordan, it is recommended to formulate three types of committees, this includes remuneration, nomination, and audit. It concerns the independence of these committees, where it is vital to have independent directors' members, besides, to appoint an independent director as a head of these committees. This research exploits audit and remuneration committees` independence, it excludes nomination committee. The independence percentage is measured by a percentage according to the Jordanian stock market regulations, 50%, if the committee has two independent directors, and another 50% is for if one of these independent directors is a head of the committee. However, all measures of these variables are summarized as follow:

- Board Size is the number of people who are occupied on board.
- Duality of CEO is the CEO and Chairman positions are held by same person? If yes (1), and (0) otherwise.
- Board of Directors Independence is the none executive directors percentage in comparison to total board`s directors.
- Audit Committee Independence is divided for two elements, (50%) is given if committee`s independent members are at least two. The other (50%) is given if one of these independent directors is the head of the committee.
- Remuneration Committee Independence is divided for two elements, (50%) is given if committee`s independent members are at least two. The other (50%) is given if one of these independent directors is the head of the committee.
- Board Activity is board`s meetings number per annum.

- **Dependent Variables (Financial Performance Measures):**

As mentioned by Gunawan (2007) that the financial performance is measured by previous studies by exploiting accounting measures. Return on Asset (ROA) is used mostly as accounting measure for calculating financial performance since it is widely used by regulators

(Brooks, 2014). Nonetheless, as stated by Gentry and Shen (2010) that return on Investment (ROI) is a well-known accounting ratio that is commonly regarded as the true indication of a company's bottom line. According to Brooks (2014), ROA is a reliable indicator of how well a company invests its assets to produce revenue.

The most popular financial performance metrics in the research literature, according to Boaventura et al. (2012), are ROA, ROE, revenue growth, return-on-sales, market shares, operating income, and earnings-per-share, respectively. He also added despite the fact that there is no single measure for measuring financial output in scientific research, previous piece of literature support each indicator, with detailed forms of measurement. According to Galant and Cadez (2017) that is that accounting measures are mostly available to public, which by this makes an advantage of it, while it is historical data in nature which indicating to a drawback of these measures, thus, choose among these ratios are sensitive. Nevertheless, some studies including Inoue and Lee (2011) and Galant and Cadez (2017) emphasize that firm-specific conditions such as corporate social responsibility activities affect accounting measurements to be sensitive, in addition to that these measures only an indication for short-term performance.

The financial performance of a firm can be measured in several ways as indicated above, this study adopts two measurements of financial performance, which include Return on Assets (ROA). The ROA is mostly used as financial performance measures by the European Central Bank according to European Central Bank Report (2016). Further, this measure has been used extensively by previous researchers, to name some, Ebaid (2009) Gentry and Shen (2010), Sengur (2011), Velnampy and Niresh (2012), Topal et al. (2013), Ferrouhi (2014), Brooks (2014), Salim and Hamd (2015), Demirgunes and Ucler (2015) and K, Demirgunes (2016). Even though that some literature such as Demirguness (2016) suggests that ROE is more fitted for the financial industry and ROA is more appropriate for non-financial companies, yet, return on asset is used for measuring the financial performance of the financial industry, and similarly return on equity is used for measuring the financial performance of none financial industry, this is recognized in several previous studies such as Ferati and Ejupi (2012), Topal (2013), Kaya (2014), and Salim and Mohamed (2016). Return on equity is a measurement corporation's profitability position by reflecting how well a company can generate profits by exploiting invested shareholders‟ money, whereas, return on asset measures how well a company can generate profits by exploiting its assets.

Consequently, ROA is the dependent variable of this part. To be noted, as suggested by Marcellina (2011) that financial ratios are appropriate predictors to be used for assessing a firm`s performance. Furthermore, Al-khatib and Al-Horani (2012) recommend that ROA is one of the most significant ratios to predict the listed firms` profitability in ASE. This measure is also adopted by this research as a dependent variable for measuring a firm`s financial performance and reflected through the conceptual framework.

The ROA provides the company`s capabilities in making profits using the available assets for investment. A corporation's profit is reflected through the ROA by showing the generated profit can a firm make by exploiting its assets. Hence, the higher is better, the ROA is expected to be impacted positively by better application of corporate governance. Further, it is an indicator of a firm`s asset efficiency in maximizing the interests of shareholders (Haniffa and Hudaib, 2006). The measure equation is illustrated below:

- **Return on Asset (ROA)= Net Income / Total Asset**

- **Control variables:**

The influence of corporate governance and liquidity management on financial performance can be isolated by employing control variables, previous literature such as Prommin et al. (2014), Alsertawi (2015), and Hillary (2016), Alkahtani (2016) suggest that control variables are used due to their implications on financial performance, in turn, using these controls isolating the impact of corporate governance and liquidity on financial performance. This study adopts two control variables, these variables indicating firms` features including, firm size and firm age. The research conceptual framework demonstrates previously these variables. The firm age is going to be calculated by the total year's number since the business has started operations, while total assets are employed for measuring firm size.

3.6. Data Analysis processing:

To be useful in achieving research goals and answering research questions, data collected from any study must be analyzed and interpreted. The type of data analysis to use is determined by a number of factors, including the variables kinds, variables nature, the variable's distribution shape, and the data collection design of variables. The classification of statistical methods consists of two broad types, descriptive and inferential statistics (Williamson and Johanson, 2017). Descriptive statistics gives an exploratory insight to the data (Zikmund, 2010). The statistical tests that will be used to analyze the prepared secondary data (which is in a fitted

format), this includes, correlation analysis, and regression analysis and the necessary specification tests.

3.6.1. Descriptive analysis:

According to Greener (2008), before proceeding with the main research`s analysis, it is suggested to conduct analysis for the collected data` values, such as, central tendency and dispersion around the mean. It can be called exploratory analysis as it gives researcher an insight into the collected data. Referring to Saunders et al. (2009), descriptive statistics can enhance researcher` comprehension about the data, which in turn, reflecting better understanding as researcher goes step by step to the main analysis. Mean and standard deviation will be used as the basic descriptive statistics. The mean a central tendency measurement or a dataset normal figure for which is clustered around the central value. is clustered. The standard deviation is a summation of the average distance from the mean of all values in the dataset (Sachdeva, 2008).

3.6.2. Correlation analysis:

As suggested by Kothari (2004) that correlation analysis is performed in order evaluating the linear relationship between two variables in terms of nature and strength. There are several correlation techniques, such as the Pearson's correlation, Spearman's correlation, point-biserial correlation, Kendall correlation, cross tabulation techniques. This research will employ the Pearson correlation technique, where the data which will be used is raw, each column and row contain specific values. The Pearson is used to measure the strength and direction of the association between two variables. Similar to all correlation coefficients such as Spearman, The Pearson correlation coefficient, which ranges from -1 to +1, measures the strength of association between two variables in a single calculation, with 0 (zero) indicating no association, -1 indicating a perfect negative association, and +1 indicating a perfect positive association (Hair et al., 2009). The correlation is acceptable unless it is 0.8 degree or more, which in turn indicating for significant chance of issue existence. The term "positive correlation" refers to a relationship between two variables in which as one increases, the other increases as well. Negative correlation, on the one hand, implies that as one variable increases, the other decreases, and the opposite is true (Hauke and Kossowiski, 2011).

The formula to calculate the Pearson correlation is demonstrated below according to Mukaka (2012):

$$P(x, y) = \frac{\epsilon\ [(xi - x) * (yi - y)]}{\sqrt{\epsilon(xi - x)^2 * (yi - y)^2}} \ldots\ldots\ldots\ldots\ldots\ldots\ldots.(1)$$

Where:

P(x, y): correlation coefficient

Xi: sample x-variable values

X: *x*-variable values` mean

Yi: sample y-variable values

Y: y-variable values` mean

In the word of Ahmed (2015), although correlation coefficients indicate to the relationship`s nature among two or more variables, though, these coefficients cannot for sure specifying a causal relationship, but rather, discovering a causal relationship is only by the regression analysis. Thus, for support the study findings, implementation of regression analysis will be as the next section shows.

3.6.3. Multiple Regression Analysis (MR):

There are two regression analysis categories, simple and multiple regressions. The simple regression analysis is employed in the case of investigating impact of one independent variable over one dependent variable. While, multiple regression analysis is a multivariate methodology commonly used in business research that involves employing above one independent variable to describe variation in the dependent variable (Denis, 2018). The regression analysis is widely used in the business studies, for example, Sengur (2011), Marcellina (2011), Al-khatib and Al-Horani (2012), Ghabayen (2012), Kaya (2014), Charles et al. (2016), Al-Daoud (2016), and Paul (2017), Waswa et al. (2017), and Charmler (2018) adopting the multiple regression analysis in their researches. Therefore, regression is a method of attempting to describe changes in a variable through referring to movements in one variable or more, this study utilizes multiple regression analysis, using secondary data, one main multiple regression model is developed to study the causative effect on the dependent variable (financial performance)

which is resulted by the independent variable (mechanisms of corporate governance of ASE-financial firms).

This impact can be formulated into the following regression equation by referring to Denis (2018):

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_p X_p + \varepsilon \dots \dots \dots \dots (2)$$

Where:

- β_0 is the intercept
- $\beta_1 - \beta_p$ are the slopes or regression coefficients
- $\mathcal{E}$ is the residuals assuming to follow a normal distribution with mean 0 and variance σ^2
- Y is the dependent variable
- $X_1 - X_p$ are the independent variables

The overall fit of a regression model can be evaluated by the coefficient of multiple determination (R^2) as well as the F-test. The coefficient of multiple determination quantifies how well the model fits the data, with the values ranging between 0 and 1. When R^2 is close to zero, the model does not fit the data whereas R^2 that is close to 1 indicates better-fitted regression. The F-test examines the regression model's overall significnace. It compares the null hypothesis, which states that all regression coefficients are equal to zero, to the alternative hypothesis, which states that at least one regression coefficient is not equal to zero. In other words, the null hypothesis states that the effect of the independent variables on the dependent variable is not significant, while the alternative hypothesis states that the effects of the independent variables are significant (Cavus, 2016).

$$\text{The null hypothesis: } \mathrm{H_0}: \beta_1 = \beta_2 = \cdots = \beta_\mathrm{p} = 0$$

$$\text{The alternativehypothesis: } \mathrm{H_1}: \text{at least } \beta_\mathrm{i} \neq 0 \text{for } \mathrm{i} = 1,2,.., \mathrm{p}$$

A well-fitting regression model can be ascertained from the p-value associated with the F-test as mentioned. If the p-value is less than the significance level ($\alpha = 0.05$) a piece of strong evidence to reject the null hypothesis is obtained. Thus, it can be concluded that at least one regression coefficient is not equal to zero, or that at least one independent variable has a substantial effect on the dependent variable. When the overall model fit is significant, we can

further examine the significance of the individual regression coefficient by using a t-test. It tests the following hypothesis:

$$\text{The null hypothesis: } H_0: \beta_k = 0$$

$$\text{The alternative hypothesis: } \mathrm{H}_1: \beta_k \neq 0$$

The null hypothesis states that the regression coefficient is not different from zero or that the dependent variable is not affected significantly by the independent variable, whereas the alternative hypothesis states that the regression coefficient is not equal to zero or that the independent variable reflecting a significant influence on the dependent variable. The null hypothesis is rejected if obtained p-value from the t-test is less than the level of significance. Therefore, in the following the three multiple regression models are demonstrated, these models` variables are explained and illustrated in the following.

- **The main regression model:**

The first model's ultimate objective is investigating the effect on the ASE-listed financial firms` financial performance resulted by corporate governance mechanisms. Board activity, the board size, CEO duality, board composition, audit committee independence, and remuneration committee independence are the independent variables, they represtent corporate governance mechanisms, while ROA and ROE are indicators of a company's financial performance. The model is described below. The employed mechanisms include, activity of board, duality of CEO and chairman role, board of directors independence, independence of audit committee, independence of remuneration committee, which are independent variables of the main model, whereas financial performance of the company is a dependent variable, represented by ROA.

$$\mathbf{FP_{i,t} = \beta 0 + \beta 1^{DCEO\ i,t} + \beta 2^{BS\ i,t} + \beta 3^{BINDi,t} + \beta 4^{BCPi,t} + \beta 5^{RCIi,t} + \beta 6^{BA\ i,t} + \beta 7^{FSi,t} + \beta 8^{FAi,t} + €.........\ (3)}$$

Where:

i: represents individual firms (i = 1, 2…,)

t: time period (t = 2009, 2010 ..…. 2018)

FP: is the financial performance, ROA is a measure of financial performance.

β0: intercept

β0, β1, β2, β3, β4, β5, β6, β7, β8, and β9 are common coefficients of regression.

The independent variables are represented by DCEO (duality of chief executive officer), BS (board size), BBP (board of directors' composition), ACIND (audit committee independence), RCI (remuneration committee independence), and BA (board activity).

FS and FA: represent the firm size and age, these are employed as control variables.

€: error term

- **The corporate governance mechanisms and financial performance considering the compliance level:**

As aforementioned, that this thesis goes more in-depth in examining the impact of corporate governance mechanisms application on financial performance. Hence, this part is for investigating whether the firm`s compliance level with the above-mentioned corporate governance mechanisms implies an effect on the financial performance. The level of CG`s mechanisms compliance level will be determined by referring to the corporate governance regulations of the ASE, this is clarified in the table (6) as follow:

Independent variables	Compliance requirements
Board Size	5 – 11 directors (2010-2016). 7-13 directors (2017-2019)
Duality of CEO	The chairmen and CEO should be separated.
Board of Directors composition.	None-executive directors should consist the majority of board.
Audit Committee Independence.	It has to contain at least two independent and one of them is a committee` head.
Remuneration Committee Independence.	It has to contain two independent directors at minimum, and one of them is a committee` head.
Board Activity	The board of directors must have at least 6 meetings annually, one meeting each two months.

TABLE 6: CORPORATE GOVERNANCE MECHANISMS REGULATIONS, THE ASE.

Then researcher categorizes firms into three main compliance groups, high, moderate, and low compliant firms as tables (7 and 8) below demonstrate. The expected observations number for

each firms are 60, the observation number is calculated by that the corporate governance mechanisms are six, this six is multiplied by 10 which is the years` number for this study sample period from, 2010 to 2019. The compliance level is identified based on the total number of "yes, 0" answers, the firm that has 41-60 answers of "Yes, 0" is considered as a high compliant firm. A moderate compliant firm has 21-40 "Yes, 0" answers. Lastly, a low level of compliance is for a firm that reflects 1-20 "Yes, 0" answers.

Corporate governance principle:	Comply with CG` rules
separation of chief executive officer	Yes "0"/No"1"
Board size	Yes "0"/No"1"
Board of directors' composition	Yes "0"/No"1"
Audit committee independence	Yes "0"/No"1"
Remuneration committee independence	Yes "0"/No"1"
Nomination committee independence	Yes "0"/No"1"
Board activity	Yes "0"/No"1"
Result	Number of Yes "0" answers

TABLE 7: FIRMS` COMMITMENT WITH CG`S PRINCIPLES.

Compliance level	Low	Moderate	High
Categories	**01-20 "Yes" answers**	**21-40 "Yes" answers**	**41-60 "Yes" answers**

TABLE 8: FIRMS COMPLIANCE LEVEL CATEGORIZATION.

Once these groups are formulated, the influence of corporate governance mechanisms compliance level on firms` financial performance will be examined following the identical way as used in the main regression model (equation 3). This regression is done separately for each compliance level group, and using the same measures of independent and dependent variables. Adding to this, using the same specification tests as phase one, the regression model has to meet the three assumptions, the dependent variable has to follow a normal distribution,

secondly, there is no multicollinearity between independent variables, and lastly, constant variance (homoscedasticity) for the model residuals. However, the independent variables of the regression model are dealt with in the different way of measurement, where, here for instance the independent variable "board size" is not the number of boards` members, but rather it is whether a firm complies or not with the required board size by the ASE`s regulation. Besides, the correlation test for this part exploits the point-biserial technique, where values here are considered binary (Dichotomous), point-biserial is more fitted for binary values as mentioned by Lani (2010). Therefore, corporate governance mechanisms as independent variables are dealt with as follow:

Referring to table (3) above, the duality of CEO will be measured using a dummy variable, it takes the number ”1” in the event that CEO and chairman are held by one person, and takes “0” otherwise. Board size is measured by a dummy variable which takes number “1” if the board members` number is not between 5 and 11 from (2009-2016), and is not between 7 and 13 from (2017-2018), and takes "0" otherwise. While, the board of directors’ independence is measured by a dummy variable which takes the number “1” if the none-executive members constitute less than %50 of the boards of directors, and takes the number “0” otherwise. Regarding audit committee independence, it is measured by a dummy variable which takes the number “1” in the event of the audit committee does not contain at least two independent directors and one of them is the head of the committee, it is “0” otherwise. In terms of remuneration committee independence, it is measured by a dummy variable that takes the number “1” if a committee does not contain at least two independent directors and one of them is the head of the committee, it is “0” otherwise. And lastly, board activity is evaluated by a dummy variable which takes the number “1” if the boards of directors` meetings are less than 6 meetings every two year and takes “0” otherwise. These measurements are employed following to several previous studies, to name some, Azim (2012), Ali (2013), and Munisi et al. (2014).

For determining the intensity of the relationship between a continuous and a binary or dichotomous variable, the point-biserial correlation coefficient is adopted. The two outcomes of a binary variable are commonly labeled “success” (0) and “failure” (1). Similar to all correlation coefficients such as Pearson correlation, the point-biserial correlation coefficient, which ranges from -1 to +1, determines the strength of association between two variables in a single measure. A measure value of -1 indicates a perfect negative association, while a value of +1 indicates a perfect positive association. The point-biserial correlation coefficient, which

ranges from -1 to +1, determines the strength of association between two variables in a single calculation. A value of -1 indicates a perfect negative association, while a value of +1 indicates a perfect positive association. The formula to calculate the point-biserial correlation is expressed below according to Sheskin (2011):

$$r_{pb} = \left(\frac{\hat{Y}_1 - \hat{Y}_0}{s_Y}\right)\sqrt{\frac{np_0(1-p_0)}{n-1}} \dots\dots\dots\dots (4)$$

Where:

- s_Y is the standard deviation of the continuous variable
- p_0 is the proportion of "failure" observation
- $p_1 = 1 - p_0$ is the proportion of "success" observation

The hypothesis to test if there is a significant correlation between a continuous and a binary variable can be performed by using the following test which is equivalent to the two-sample t-test.

$$t_{pb} = \left(\frac{r_{pb}\sqrt{n-2}}{1 - r_{pb}^2}\right)$$

This test statistic follows Student's t distribution with $n - 2$ degree of freedom. The null hypothesis of no correlation is rejected if $|t_{pb}| > t_{critical\ value}$ or if the p-value is less than the significance level (α). Typically, $\alpha = 5\%$ is used throughout the analyses.

- **Specification Tests:**

As suggested by Hair et al. (2010), the regression analysis implementation requires some basic assumptions that need to be addressed. As a general rule, in the multiple linear regression (the standard), all independent variables are entered into the regression equation at the same time, and each independent variable is evaluated based on how well it predicts the dependent variable, that that is why these assumptions have to be met. According to Denis (2018), these assumptions are, firstly, the dependent variable has to follow a normal distribution, secondly, there is no multicollinearity between independent variables, and lastly, constant variance (homoscedasticity) for the model residuals.

There are several methods available to assess the normality assumption. As stated by Gupta et al. (2019), Kolmogorov–Smirnov test is one of the most popular ways for normality test. As he stated that this test is more appropriate for a sample size that has more than 50 observations. It test the null hypothesis "the data is taken from normal distributed data." If the P-value is less

than the significance level (0.05) the null hypothesis is accepted, thus, data is normally distributed.

Multicollinearity is a case in which the independent variables have extremely high inter-correlations or inter-associations. This is one type of disturbance in the data and the presence of multicollinearity can affect the reliability of the statistical inferences made about the data. There are various reasons why multicollinearity occurs, such as inaccurate use of dummy variables, repetition of the same kind of variable, when (Daoud, 2017). To detect if multicollinearity is present in the data, Variance Inflation Factor (VIF) and Tolerance can be used. There are collinearity diagnostic factors that can be used to determine whether there is multicollinearity or not. The VIF is a metric that assesses the impact of collinearity between variables in a regression model. It equals to 1/Tolerance and always more than one or equal one. There is no VIF value to be used formally for evaluating whether or not multicollinearity exists. VIF values greater than 10 are often regarded as suggesting multicollinearity, but values greater than 2.5 in weaker models may be cause for concern. (Victoria-Feser, 2013).

The last regression assumption that needs to be verified is the homoscedasticity assumption. This assumption means that the variance around the regression line is the same for all values of the independent variable. Breusch–Pagan (BP) is employed to test heteroscedasticity in data, it test the null hypothesis “no heteroscedasticity.” If the P-value is less than the significance level (0.05) the null hypothesis is accepted, therefore, no heteroscedasticity in data.

3.7. Ethical and Legal Considerations:

As stated by Sekaran (2003) that business research has to consider ethics that refers to a code of conduct and behavior norm. Furthermore, Ghauri and Gronhaug (2005) reported that at the early phase of study procedures more attention has to be given to all associated ethical issues which might be resulted by performing research, in turn, the researcher has a responsibility of moral to collect, organize, analyze data and presenting the obtained data accurately and honestly. As stated by Saunders et al. (2007) that all researches have various ethical problems, these problems have to be taken into consideration at all study`s phases in order to avoid their effects on research. Consequently, authors have the responsibility to present accurate and correct outcomes of their researches for best presenting to the current situation of targeted researches topics and areas (Cooper, Schindler and Sun, 2006). Consequently, research ethics processes are passed strictly and carefully by the University of Wales Trinity Saint David, not

doing such influencing the outcomes of this thesis. Therefore, the researcher has considered all research ethics, which were reflected clearly by the University of Wales Trinity Saint David.

Chapter Four: Analysis Findings:

4.0. Introduction:

As chapter three reflected, for investigating the influence of corporate governance on financial performance, one main model was formulated. This part shows the analysis and result`s discussion. This chapter is separated into two parts, the first part reflects analysis outcomes of the corporate governance mechanisms effect on financial performance. The second part reflects analysis outcomes of the corporate governance mechanisms compliance level effect on financial performance. To be noted, model has its specific descriptive statistics, specification tests` results including, normality, homoscedasticity, multicollinearity tests, and regression analysis. Taking into account, the main regression model was employed for both analyses.

4.1. Data analysis for the first model, corporate governance and financial performance:

4.1.1. Descriptive statistics for (dependent variables):

Table (9) below for the dependent variable (ROA) demonstrates the descriptive summary statistics. The descriptive statistics summary considers the mean, minimum, maximum, and Standard Deviation (SD), where the Mean reflects central tendency, while SD reflects dispersion from the mean. The mean average of ROA is 2.441%; it is the highest in 2014 and the lowest in 2017, 71% and -0.43, respectively. The value of 71% can be explained by that some financial firms, in particular diversified financial firms have exceptional ROA in some years due to their activities` nature, this ROA might be inconstant and is altered heavily from year to year, while banks reflect unwavering ROA to some extent. The standard deviation is %1.6 for ROA. Consequently, considering this value the data seems to be clustered narrowly round the mean and it is not widely spread.

Dependent variables:	Mean	Standard Deviation	Minimum	Maximum
ROA	0.0244	0.016	-0.43	0.71

TABLE 9: ROA, AND ROE DESCRIPTIVE STATISTICS, FIRST MODEL, AUTHOR

4.1.2. Descriptive statistics (independent variables):

Table (10) below reports the summary statistics for the corporate governance mechanisms, the mean of the duality of CEO is (46.2), the standard deviation of this variable is (364). As long as it is a high value relative to its mean, there is no exception. The mean of principle related to

board size is (6.24). As long as SD (5.4) is also acceptable comparing to its mean, this suggests that data is reliable and it seems to be clustered narrowly around the mean. The mean of board of directors' independence is (0.304). The standard deviation of this variable is 0.085. As long as it is a low value, this suggests that there is no widespread in the data and it is reliable. The mean of principle related to audit committee independence is (0.605). The standard deviation of this variable is 0.123. As long as it is a low value, the data is no widespread and reflects reliability. The mean related to remuneration committee independence is 0.457. The standard deviation of this variable is 0.1142; as long as it is a low value, this suggests that data is not widely spread, and it is reliable. The mean of principle related to board activity is 7.42. The standard deviation of this variable is 0.717; it is a small value, data is not widely spread and reliable.

The mean of the duality of CEO is (46.2%), which indicates that 21 firms (53.8%) of ASE-financial listed firms separate the CEO and chairman positions as recommended by the regulations. This is a good indication, where among firms which are mostly a family owned firms, the CEO Chairperson positions are usually combined in one position by one person, usually the old person of the family. Board size is measured by the total number of directors on board; the overall mean is 6.245 members. Considering the Jordanian guidelines regard board size (5-11 member form 2009-2016, 7-13 from 2017-current), the mean is 5.93 and 6.97, respectively, this means that firms are complied with instruction from 2010-2016, and almost complied from 2017-2019. The Board of directors needs to be consisted of a none-executive director's majority. The financial firms in the ASE show their commitment to this proportion, where the mean is 41%; in turn, independent members constitute more than the third of the board. This is surprising as long as board of directors of family firms in general consisted of the family itself, and usually these families` members do not have the suitable qualification to be a board member and are not none-executives, none-executive members are external and their percentage out of the total boards of financial firms under these circumstances is quite good. Moving to the audit and remuneration committees' independence, these variables mean is 0.61 and 0.46, respectively. Hence, 61% (23 firms) of these firms have an independent audit committee that contains two independent directors, and one of them is the committee`s head. Similar to the remuneration committee, 46% of financial firms follow the independence rules. In general, to satisfy the ASE`s regulation and getting the shareholders` trust, these firms hire independent directors and formulating board`s committee of them. The mean of board activity is 7.4, and this suggests that financial firms in the ASE make 7.4 meetings annually. This is

consistent with the regulations of corporate governance (6 meetings per annum) in this regard. That means that these firms have a frequent meeting to discuss the current situation e.g. issues of firms and might be also to plan for these companies` future.

	Summary Statistics			
Independent Variable	**Mean**	**Std. Deviation**	**Minimum**	**Maximum**
Duality of CEO	0.462	0.364	0	1
Board of directors' composition	0.404	0.085	0.08	0.82
Audit committee independence	0.605	0.123	0	1
Remuneration committee independence	0.4577	0.114	0	1
Board activity	7.4	0.717	3	13
Board size	6.24	5.4	4	13

TABLE 10: INDEPENDENT VARIABLES` DESCRIPTIVE STATISTICS, MAIN MODEL, AUTHOR

4.1.3. Correlation analysis:

The result of Pearson's correlation test of corporate governance mechanisms, which represent the independent variables, and dependent variables (ROA), describing financial performance. The result shows that none executive directors, Audit committee independence, Remuneration committee independence, board size, and board activity have a positive correlation with ROA, except CEO duality is negative. The correlation coefficient values are reflected in table (11) below. Correlation analysis is strong as long as all p-values are less than the significance level (0.05) except for board activity and board size. The CEO duality has a strong negative correlation with ROA.

N=10	Pearson Correlation ROA	
	Coefficient	**p-value**
CEO duality	-0.83	0.00296
Board composition	0.87	0.001
Audit committee independence	0.64	0.046
Remuneration committee independence	0.79	0.0065
Board size	0.252	0.482

Board activity	0.117	0.373

TABLE 11: PEARSON'S CORRELATION ANALYSIS, AUTHOR.

According to the outcomes of corporate governance correlation with financial performance during the previous years from 2010 to 2019, when the CEO duality increases by 0.83 the financial performance (ROA) is changed by the same value, but in an opposite direction. When the board composition (none executive director) maximized by 0.87 the ROA will be improved by the same percentage. While, when audit committee independence improved by 0.64, the financial performance (ROA) will move in the same direction by identical percentage. The financial performance (ROA) is moved up by 0.79 when remuneration committee independence maximized by similar value. Lastly, board size and board activity improvement will maximize the financial performance (ROA) by 0.252 and 0.117, respectively. In the word of Ahmed (2015), although correlation coefficients indicate to the relationship`s nature among two or more variables, though, these coefficients cannot for sure specifying a causal relationship, but rather, discovering a causal relationship is only by the regression analysis. Thus, for support the study findings, implementation of regression analysis strengthens this research`s outcomes as mentioned in the previous chapter, hence, the following section reflect the outcomes of the regression analysis.

4.1.4. Regression analysis result:

The regression analysis is employed for validating the outcomes of correlation analysis and identifying the casual relationship between corporate governance mechanisms and financial performance, the following regression model was formulated (referring to chapter three, section 6.3.):

$$\mathbf{FP_{i,t} = \beta0 + \beta1^{DCEO\ i,t} + \beta2^{BS\ i,t} + \beta3^{BINDi,t} + \beta4^{BCPi,t} + \beta5^{RCIi,t} + \beta6^{BA\ i,t} + \beta7^{FSi,t} + \beta8^{FAi,t} + €\text{.........}\ (3)}$$

Where: i: represents individual firms (i = 1, 2…,), t: time period (t = 2009, 2010 ...… 2018), FP: is the financial performance, ROA is a measure of financial performance, β0: intercept, β0, β1, β2, β3, β4, β5, β6, β7, β8, and β9 are common coefficients of regression, and the independent variables are represented by DCEO (duality of chief executive officer), BS (board size), BBP (board of directors' composition), ACIND (audit committee independence), RCI (remuneration committee independence), and BA (board activity).

However, before implementing the regression analysis, the overall fit of regression is measured. The overall model fit shows that the regression model is a good fit model (ROA) since the F-test is significant at a 5% level (p = 0.01). The coefficient determination R^2 is 0.62, which is a good percentage. Thus, it can be noticed that the corporate governance mechanisms can explain about 63% of the variability in the ROA, and other factors explain the remaining 37%. The coefficient determination R^2 is 0.6267. Since the fitted model is significant, we can further examine the estimated regression. These values are illustrated by the table (12) below:

ROA Regression analysis				
Variable	**Coeff.**	**Coeff. SE**	**T-value**	**p-value**
CEO duality	-0.21	0.08	-2.62	0.009
Board composition	0.607	0.2904	2.09	0.0037
Audit committee independence	0.0563	0.2746	2.05	0.04
Remuneration committee independence	0.462	0.0753	2.18	0.029
Board size	0.443	0.3991	1.11	0.27
Board activity	0.133	0.101	1.31	0.19
Other values				
P-Value	S.E. of Regression	R-Squared	S.D of Dep. Variable	Mean of Dep. Variable
0.01	0.2034	0.6267	0.016	0.0244

TABLE 12: REGRESSION ANALYSIS OF THE MAIN MODEL, RESEARCHER, 2022.

- **The board activity influence on financial performance (ROA):**

As demonstrated on the above table (12), it can be noticed that board activity has a positive impact on the ROA, albeit this positive impact is not significant (p-value= 0.101). The estimated regression coefficient for board activity is positive (0.133), indicating that a one unit increase in board meetings number will increase ROA by %13.3. Keeping in mind that this impact is not significant. The agency theory recommends more board meetings is better for performance, the outcomes is not consistent with the agency theory.

- **The CEO duality impact on financial performance (ROA):**

Referring to table (12), the estimated regression coefficient values of duality of CEO is negative, indicating that the CEO duality reflects a negative impact on the ROA. The impact is

significant since the ROA p-value is less than 0.05. For financial performance measured by ROA, the estimated regression coefficient for the duality of CEO is negative (-0.21), indicating that a one unit increment in duality of CEO will decrease the ROA by 21%. As long as agency theory suggests separation of chairman and CEO roles, the outcome is consistent with the agency theory.

- **Board of directors` composition:**

It is recognized by table (12) that a significant and positive impact of board of directors` independence on ROA, where this variable reflect a positive estimated regression coefficient with significant p-values less than significance level (0.0037<0.05). The estimated regression coefficient for board of directors' composition is positive (0.607), indicating that a one unit increase in it will increase ROA by 60.7%. The agency theory suggests that none-executive directors existence enhances board independence, hence, improving firm performance. The findings of this variable confirms this suggestion.

- **Board sub-committees independence effect on financial performance (ROA):**

The audit committee independence reflects a positive impact on ROA, this impact is significant as the p-value (0.04) is lower than the significance level (5%). The estimated regression coefficient for audit committee independence is positive (0.56), indicating that a one unit increase in audit committee independence will increase ROA by 56%. According to the estimated regression coefficients of remuneration committee independence, it shows a positive influence on the ROA, this impact appears to be significant at the 95% significance level. The estimated regression coefficient for remuneration committee independence is positive (0.46), indicating that a one unit increase in audit committee independence will increase ROA by 46%.

The agency theory recommends that board`s committees independence should be high, the higher the committees independence the better the performance, therefore, the outcome of both variables is in accordance with the agency theory argument.

- **Board size impact on financial performance (ROA):**

The ROA is positively impacted by the board size considering the estimated regression coefficient, despite this, this impact is not significant at 95% significance level. The estimated regression coefficient for board size is also positive (0.443), indicating that a one unit increase in board size will increase the ROA %44. However, this estimate was found not significant

since the p-value is not less than 0.05. The agency theory argues that more board members is more effective for firm performance, even the impact is positive but it is insignificant, thus, the findings contraries to agency theory argument.

4.1.5. Specification tests result:

Following the multiple regression results, diagnostic testing to make sure about the model's validity is also reported. It is a critical step in statistical analysis to have a valid and trusted statistical inference. First, we examine the assumption of normality. The normal test is based on "error is normally distributed", since the p-value are (0.0423415) for ROA, hence the null-hypothesis is accepted. Since the normality assumption is met, this is crucial to trust the outcomes of the model, and the model now can be checked in terms of homoscedasticity.

To check if the assumption of homoscedasticity is satisfied, a Breusch-Pagan test is employed. It tests the null hypothesis of "no heteroscedasticity". As long as the P-value is (p-value = 0.100005), it is impossible to reject the null hypothesis "the data has no heteroscedasticity", so the null-hypothesis is accepted and the data does not reflect heteroscedasticity. Now, the second step of validating the model is done and accordingly strengthen the trust level of the model, and moving to insure that the model meet the third assumption.

Lastly, as table (13) below demonstrates, the assumption of no multicollinearity is also verified using the tolerance levels and the Variance Inflation Factor (VIF). Indication of multicollinearity is if the tolerance levels are above 1 and the VIF scores are greater than 10. The results of collinearity statistics as shown reveal that there is no reason to concern that the independent variables excessively influence each other because the tolerance levels are all below ten and the VIF scores are all around (2) and less than 10.

	Tolerance	VIF
	ROA	
Duality of CEO	0.475	2.106
Board size	0.761	1.314
Board of directors' independence	0.592	1.690
Audit committee independence	0.448	2.234
Remuneration committee independence	0.388	2.574
Board activity	0.475	2.106

TABLE 13: VIF TEST, AUTHOR.

As suggested by Hair et al. (2010), the regression analysis implementation requires some basic assumptions that need to be addressed. According to Denis (2018), these assumptions are, firstly, the dependent variable has to follow a normal distribution, secondly, there is no multicollinearity between independent variables, and lastly, constant variance (homoscedasticity) for the model residuals. Therefore, the diagnostic tests performed above meeting these requirements and indicating that the regression assumptions satisfied all regression assumptions and thus the interpretation of the regression coefficients can be trusted and that the model is appropriate for the data.

4.1.6. Control variables result:

The number of years a company had been in business before 2008 was used to calculate its age, it is raised by 1 as it passes year over year. Firm age is seen to reflect a positive impact on ROA but its impact is not significant. This suggests that to a limited extent firms outperformed younger firms. The lesser the firm`s age, the greater the risk and the less mature the company, so upper firm age was supposed to associate with better financial performance (Kipesha, 2013). The size of firm is evaluated by the total assets. Firm size have a positive but insignificant impact on ROA of firms. The positive impact shows that older firms outperform younger firms to a limited extent. The positive impact can be interpreted according to Ashehri (2016), where larger companies are more likely to have a wider and complicated structure, in turn, such mechanisms make it simpler, larger firms might have more ability to bear the generated cost of applying the mechanisms, and these firms might hire more talented people that control businesses.

4.2. Data analysis for corporate governance compliance level and financial performance:

The aim of this section is to strengthen the finding of corporate governance mechanisms influence on firm performance. It is the only study which considers the compliance level of corporate governance application, except Lamport et al. (2011) and Akonda (2014), up to author knowledge. The consequences of firms` classification shows that there is no firm falls in the low compliant level, there are 27 firms in the high compliance level, and 12 firm in the moderate compliance level. This means that almost 70% of firms included in the sample are highly complied with most mechanisms.

4.2.1. Descriptive statistics for dependent variables:

Table (14) below demonstrates the descriptive summary statistics for the dependent variable (ROA). The descriptive statistics summary considers the mean, minimum, maximum, and Standard Deviation (SD), where the Mean reflects central tendency, while SD reflects dispersion from the mean. For both compliance level, the standard deviation values are seen well enough as table. Consequently, the data seems to be clustered narrowly around the mean, and it is not widely spread.

Dependent variables:	Mean	Standard Deviation	Minimum	Maximum
ROA (High)	0.0242	0.007	-0.43	0.71
ROA (Moderate)	0.008	.021	-0.17	0.034

TABLE 14: DESCRIPTIVE STATISTICS FOR ROA AND ROE CONSIDERING THE COMPLIANCE LEVEL, AUTHOR.

High compliant firms are seen to have a better financial performance in terms of ROA, where the ROA`s mean among the firms which are highly complied is %2.9, while it is %0.8 in a moderate compliant firms. It can be noticed that the highest ROA is among high compliant firms. However, the minimum ROA value was (-0.43) among the High compliant firms, this might be due that one of these firms faced unstable and bad circumstances that resulted in very low ROA value. In addition, the mean of high compliant firms` ROA is nearly four times the ROA of moderate compliant firms. This can give initial indication about that high compliant outperformed moderate compliant firms in terms of ROA, this might be due to that these firms have stronger corporate governance structure.

4.2.2. Descriptive statistics for independent variables:

Considering the table (15) below, considering the compliance levels the table demonstrates the descriptive statistics for the independent variables of high and moderate complaint companies. To begin with the high compliant firms, the mean of CEO duality among high compliant firms is 26%, this suggests that almost 75% of the financial listed firms in the ASE that are rated high compliant firms separate the roles of CEO and chairman. This value was expected to be higher among the high compliant firms, yet, it is considered a good value, the firms that are not complied are from the diversified financial firms rather than banks. High compliant firms show that 96.3% of these firms are complied with the instruction of none-executive members rate from the total board`s members. A very low firms` number show none compliance in this regard, these firms consist almost 4% from the overall high compliant firms, this means only

one firm does not comply with this instruction. 92.5% of the audit committees in high compliant firms are independent, that a clear indication that these firms take the independence of audit committee as a crucial element and/or the ASE insure a restricted rules to force companies having independent audit committee. The independence of remuneration committee is reflected by a mean of 86% among high compliant companies, this means that 23 firms of 27 firms have in their remuneration committees at least two independent directors and one of them is the head of the committee. Having such independent committee insure that these companies might have effective remuneration schemes. Regarding the board activity which is measured by the number of board of directors` annual meetings, this should be at least six meetings on annual basis and each two months one meeting. The high compliant firms show that all these firms comply with the board activity`s instructions, this is an indication for the importance of these meetings to high compliant companies, and thus all of them are complied. Moving to the last mechanism which is the board size, and again, considering the instructions which were applied from 2009 to 2016 and the others between 2017 and 2019. The high compliant firms show that 76% of these firms are complied with the board size instruction, this means 21 firms meet this instruction. To be noted that all standard deviation values are satisfactory comparing to the mean`s values regardless of high values, which means good level of data reliability.

	High compliant firms (27 firms)		Low compliant firms (12 firms)		Both levels	
Dependent variables:	Mean %	S.D	Mean	S.D	Min.	Max.
Duality of CEO	0.26	0.288	0.58	0.49	0	1
Board of directors' composition	0.963	0.192	0.266	0.316	0	1
Audit committee independence	0.925	0.266	0.583	0.549	0	1
Remuneration committee independence	0.862	0.35	0.416	0.51	0	1
Board activity	1.00	0	0.916	0.288	0	1
Board size	0.76	0.36	0.50	0.452	0	1

TABLE 15: DESCRIPTIVE STATISTICS FOR C.G MECHANISMS CONSIDERING THE COMPLIANCE LEVEL, AUTHOR.

As table (15) above illustrates, considering the moderate compliant firms, the mean of the duality of CEO of these firms is (0.58), the standard deviation of this variable is 0.49. As long as it is a high value relative to its mean, there is no exception. However, the mean of the CEO duality indicates that 7 firms out of 12 firms of the ASE-financial listed firms that are rated as moderate compliant companies. High majority of these firms are not banks, this acceptable rate as long as most diversified financial companies are family owned businesses, which mostly combine CEO and chairperson role. The standard deviation for the board of directors` composition is (0.316), which is fine considering this element`s mean value, suggesting that data is reliable and it seems to be clustered narrowly around the mean. According to the board of directors` composition mean value (26.6%), the instruction in regard to the none-executive directors' percentage of the total board of directors' members among the moderate compliant companies is incredibly not met, where the mean indicates that only 3 firms are complied with the instruction in this regard. This might be due to low restrictions to implement the guidance of board composition, in particular before 2017 and among the diversified financial firms. The audit committee independence among the moderate compliant firms shows a mean of 58.3% and standard deviation of (0.54), in comparison to the mean value the standard deviation is suitable. The mean value indicates that almost 60% of the moderate compliant firms show commitment to the instruction of audit committee independence, which is more than the half of these firms have an independent audit committee that contains two independent directors, and one of them is the committee`s head. The standard deviation of the remuneration committee independence variable is (0.51), this value is satisfactory by taking into account the value of this variable` mean value, meaning data is reliable enough. Nonetheless, the mean value is 41.6%, which means 41.6% of the moderate compliant companies have independent remuneration committees as required by the rules and guidance, and that is 5 firms out of 12 firms, it is good that these firms have remuneration committee itself, with more restricted and stronger instructions these companies might have independent committee. The standard deviation of this variable is 0.288. As long as it is a low, hence it is suitable value, and this suggests that there is no widespread in the data and it is reliable. The mean of board activity is 91.6%, and this suggests that financial firms in the ASE that are rated as a moderate compliant firms are consistent with the regulations of corporate governance (6 meetings per annum) in this regard. That means that these firms have a frequent meeting to discuss the current situation e.g. issues of firms and might be also to plan for these companies` future. The standard deviation of mechanism related to board size is (0.452). As long as this value is acceptable comparing to its mean, this suggests that data is reliable and it seems to be clustered narrowly

around the mean. Considering the Jordanian guidelines regard board size (5-11 member form 2009-2016, 7-13 from 2017-current), as overall by taking the mean value of board size among moderate compliant firms, 50% of these firms are in line with the instructions, this rate is considered low to some extent, and this might be because of low awareness among these firms about the board size importance, or due to low seriousness in forcing these firms to comply with such mechanism`s guidelines.

It is clear that the high compliant firms reflect a better compliance with all corporate governance mechanisms instructions than moderate compliant firms. However, high compliant firms show higher values incredibly, this includes the mechanisms of CEO duality, board of directors` composition, audit committee independence, and remuneration committee independence. While, the moderate compliance firms reflect values that are close to the high compliant firms values of two corporate governance mechanisms including, board activity and board size, with values of (1.00 and 0.916) for the board activity and (0.76 and 0.50) for the board size.

4.2.3. Correlation analysis result:

The point-biserial analysis was employed for testing the correlation between corporate governance mechanisms and financial performance, considering the compliance level. The correlation analysis reveals that board activity, board composition, audit committee independence, remuneration committee independence have a strong and significant correlation with ROA of high compliant firms. While CEO duality shows a negative and significant association with ROA. In addition, ROA is correlated positively with board size, but this correlation is weak. The moderate compliant firms show that their ROA is correlated positively with all mechanisms except CEO duality, yet, all these correlations are insignificant. While the CEO is the only mechanisms which has a strong correlation with these firms ROA, this correlation is negative. Accordingly, the higher the firm compliance with corporate governance, the better the ROA. Please refer to table (16) below for correlation findings.

ROA	Biserial Correlation High compliance		Biserial Correlation Moderate compliance	
Dependent variables:	**Coeff.**	**P-value**	**Coeff.**	**P-value**
Duality of CEO	-0.921	0.001	-0.324	0.027
Board of directors’ composition	0.948	0.001	0.150	0.059

Audit committee independence	0.868	0.001	0.070	0.378
Remuneration committee independence	0.642	0.045	0.015	0.852
Board activity	0.233	0.044	0.206	0.18
Board size	0.289	0.238	0.069	0.386

TABLE 16: CORRELATION ANALYSIS BETWEEN CORPORATE GOVERNANCE AND ROA CONSIDERING COMPLIANCE LEVEL, AUTHOR.

According to the outcomes of corporate governance correlation with financial performance of the high compliant firms, during the previous years from 2010 to 2019. When the CEO duality increases by 0.921 the financial performance (ROA) is changed by the same value, but in an opposite direction. When the board composition (none executive director) maximized by 0.94.8 the ROA will be improved by the same percentage. While, when audit committee independence improved by 0.868, the financial performance (ROA) will move in the same direction by identical percentage. The financial performance (ROA) is moved up by 0.642 when remuneration committee independence maximized by similar value. Lastly, board size and board activity improvement will maximize the financial performance (ROA) by 0.289 and 0.233, respectively. While, regarding the moderate compliant firms, When the CEO duality increases by 0.324 the financial performance (ROA) is decreased by the same value. Taking into account that the other variables have no significant correlation with the ROA, yet, when the board of directors` composition, audit committee independence, remuneration committee independence, board activity, and board size increased by 0.15, 0.070, 0.015, 0.206, and 0.069, respectively, the ROA is changed by the same values. In the word of Ahmed (2015), although correlation coefficients indicate to the relationship`s nature among two or more variables, though, these coefficients cannot for sure specifying a causal relationship, but rather, discovering a causal relationship is only by the regression analysis. Thus, for support the study findings, implementation of regression analysis strengthens this research`s outcomes as mentioned in the previous chapter, hence, the following section reflect the outcomes of the regression analysis.

4.2.4. Regression analysis result:

Among firms with moderate level of compliance, the ROA`s regression model did not fit well to the data since the p-value is greater than 0.05. Meanwhile, firms with high level of compliance, the fitted regression models fits well to the data (p-value= 0.001). The independent

variables are able to explain 73.3% of total variability in in ROA under high compliant firms and explain just about 13.2% of total variability in ROA of moderate compliant firms. These findings are summarized in table (17) below:

Group	R^2	F-test	
		F	p-value
Moderate compliant firms ROA	0.132	1.05	0.415
High compliant group ROA	0.733	8.31	0.001

TABLE 17: MODEL FIT TEST FOR ROA AND ROE CONSIDERING THE COMPLIANCE LEVEL, AUTHOR

Since the overall model fit of moderate compliant firms is also not significant, thus, there is no need to interpret the individual regression coefficient. In addition, the high compliant firms' regression analysis will not be applied, where the aim of regression is to compare with moderate compliant firms. The discussion in next chapter (5) about compliance level will be limited on the correlation analysis`s findings.

4.3. Summary:

The findings were given by this chapter covering a sample which is selected from the ASE-listed firms. The primary goal of this chapter is to investigate the impact on financial performance by corporate governance and liquidity management practices. Therefore, three empirical models were employed to that end. The multiple regression analysis is applied for investigating the resulted impact on the dependent variables (ROA) by the independent variables that are adopted for this thesis. The study's variables, corporate governance mechanisms, are all described in detail. Moreover, this chapter presented the descriptive statistics for dependent variables, independent variables of corporate governance, and independent variables of liquidity management. The correlation test was employed to investigate the relationship among these variables. Furthermore, the regression analysis validity was tested using three main tests, normal distribution, multicollinearity, and heteroscedasticity.

This research`s findings show that board activity and board size have no significant influence on firm financial performance (ROA), but the impact is positive. While, CEO duality shows a significant negative impact on financial performance (ROA), this suggests that CEO and chairman positions separation leads to better profitability. Board composition reflects a positive and significant effect on ROA. Board`s sub-committees independence including audit and remuneration committees impacts ROA positively and significantly.

The corporate governance compliance level of mechanisms application was considered, this for strengthen the findings of corporate governance. High compliant firms reflect a higher compliance level than moderate level, the ROA tend to be better for these firms as the descriptive statistics shows. The correlation analysis shows that high compliant firms' ROA has a strong positive correlation with board composition, audit committee independence, remuneration committee independence, and board activity. While CEO duality reveals a negative and strong association with both measures, and board size shows a positive and weak correlation. In addition, finding revealed that moderate compliant firms' financial performance (ROA) have a weak and positive correlation with all mechanisms, with exception of CEO duality, which reflected a strong positive association. Control variables including firm size and firm age have no significant but positive impact on ROA.

The analysis also employed three tests for examining models validity including, normality test, Breusch-Pagan test of heteroscedasticity, and variance inflation factor (VIR) to test collinearity. These test are crucial for validating the outcomes. However, the next chapter presents the discussion of this findings.

Chapter Five: Discussion:

5.1. Introduction:

The key objective of this thesis is to analyze the effect of corporate governance mechanisms and liquidity management practices on listed financial companies` financial performance in the ASE. This chapter shows the discussions of outcomes according to the objectives and questions of this research. Further, testing the null hypotheses, which were generated through this research`s conceptual framework, are discussed. There is two main hypothesis, H0A: Corporate governance mechanisms application has no significant impact on the financial performance of listed financial firms in Amman Stock Exchange, and H0B: Corporate governance compliance level has a significant positive impact on the financial performance (ROA) of listed financial firms in Amman Stock Exchange. To be noted, the discussion is according to the formulated hypotheses as well as in relation with the previous literature outcomes, which were mentioned through the literature review chapter.

5.2. Corporate governance mechanisms and firm`s financial performance:

5.2.1. Board activity:

Board activity is employed in this research as one of the corporate governance mechanisms. It represents the annual meetings number of a firm; other researchers named it board diligence". As reflected previously, there is no consensus on its impact on a firm`s financial performance. This conceptual research framework and hypotheses development reflect this mechanism based on the agency theory argument. Correlation and regression analyses revealed that this mechanism has a positive impact on the ROA, but the research fails to find a significant effect. Thus, the ROA of financial firms in the ASE are not impacted by a number of annual meetings significantly. The impact is not significant and is positive; hence the sub null hypotheses H0A1 "Board activity has a significant negative effect on firm`s financial performance (ROA),", is rejected. It can be assumed that board meetings number has no effective role in maximizing ROA; hence, board meetings guidelines should be reconsidered.

The agency theory recommends that more board meetings per annum are more effective for firm performance, as the board discusses important issues and strategies for improvement during these meetings. Jordanian corporate governance regulations require firms to meet six times annually. Investigating board activity influence over financial performance is in line with the agency theory argument in regard to board activity. The average annual meetings number

shows that ASE-listed financial firms meet the requirements of Jordanian corporate governance guidelines during the sample period. The finding is inconsistent with the agency theory argument. Thus, ROA maximization cannot be achieved by the current average of the board`s annual meetings of Jordanian financial firms.

This research finding fails to support a piece of the previous argument regarding board activity impact on firm performance. This finding is not in line with Paul (2017) argument; board activity reflects enough number of board meeting annually, in turn, shows good monitoring processes. However, Abdul Gafoor et al. (2018) discusses that the number of board meetings ensuring that firm`s health and profitability is checked. It also contradicts Ramos and Olala (2011), Buchdadi and Chou (2017), and Eluyela et al. (2018) argument, suggests that the board meeting numbers reflecting activity level, higher board meetings is an indicator of firm`s profitability enhancement as matters are addressed and discussed. The result additionally is not consistent with arguments that are against board activity, Jackling and Johi (2009), Petchsakulwong and Jansakul (2018), Yameen et al. (2019) argument is not confirmed, a high number of board meetings means higher expenditures. The finding cannot support the Johle et al. (2015) argument; higher meetings indicate more resources waste and time productivity minimizing. Aryani et al. (2017)`s claim is not consistent with this research result, "high board meeting number does not mean that board is active, where at normal conditions board does not necessarily meet to make well-effective decisions". However, the outcome cannot deny that the average of board meetings number during the sample period is not enough for basic discussion and issues addressed, as long as the board meetings number does not reflect a negative impact.

The finding reveals the insignificant and positive effect of board meetings on measure of financial performance (ROA). The outcome of ROA is consistent with Bhatt and Bhattacharya (2015), Abdulsamad et al. (2018), Alqudah et al. (2019), Yameen et al. (2019), and Ebun Emmanuel (2019). Nonetheless, it contradicts a piece of researches that find a significant positive impact such as, Al-Daoud et al. (2016) and Paul (2017), Abdul Gafoor et al. (2018), and Eluyela et al. (2018). And also contradicts studies that reveal a significant negative impact including, Johl et al. 2015, Aryani et al. (2017), Petchsakulwong and Jansakul (2018), Gambo et al. (2018), and Yameen et al. (2019).

The reason for not finding a significant impact on firm performance, regardless it is positive, might be due to, annual meetings has an ineffective routine which hinders appropriate practices

by a board, the incurred cost of these meetings might be almost equal to generated benefits that caused by extra meetings, and also due to absence of keyboard members or and sophisticated practices.

5.2.2. CEO Duality:

As a part of testing the corporate governance impact on financial performance, CEO duality was employed as a variable for testing this impact. It represents CEO and chairman are the same people. The conceptual framework considers this variable based on the argument "The effect of CEO duality on financial performance is negligible", this variable`s hypothesis is built on the argument of agency theory which suggests a separation between CEO and chairman reduces the conflict of interests. Based on analysis outcomes, ROA ratio is impacted significantly by CEO duality of listed financial firms in the ASE; this impact is negative. The previous chapter shows this research regression analysis; it revealed that CEO duality has a significant negative impact on financial performance, ROA. This finding indicates that the financial performance of the ASE-listed financial firms is influenced by the duality of CEO and Chairman. Further, the correlation analysis verifies the outcomes of regression analysis. Therefore, the second sub null hypothesis (H0A2) "Separation of CEO and chairmen has a significant negative effect on firm`s financial performance (ROA), is accepted. Thus, when the chairman and CEO positions are not combined, the financial performance in terms of profitability (ROA) of listed financial firms in Jordan will improve.

The agency theory proposes the chairman and CEO roles have to be separated for best protection of shareholders` interests and ensuring transparency and accountability, hence improving firm performance. Moreover, the corporate governance regulations of 2008 and 2017 in Jordan recommends the separation between CEO and chairman. The impact of CEO duality on financial performance was grounded based on the agency theory concept. This research reveals consistent outcomes with the agency theory concept in regard to the CEO duality. Jordanian financial firms show that more firms had separated the CEO and chairman roles between 2010 and 2019. This separation was reflected in a better financial performance in terms of profitability, including ROA. This proves that the separation of both positions leads to a better alignment of shareholders and managers` interests, thus reducing the agency issues and therefore improving firm's performance. To be noted, this outcome contradicts the stewardship theory argument, which recommends CEO duality.

The finding of the CEO is in support of various arguments of CEO duality impact on financial performance. Firstly, the finding is consistent with the argument of that potential interests` conflict might be maximized by CEO duality, where the board will be more able to align management activities to their own interests. Thus, this is in line with De Jonghe et al. (2012), Adams (2013), Kouki and Guizani (2015), and Hamdan and Ahmad (2015). Further, results also confirm the argument of Kiradoo (2019) and Onofrei et al. (2019) board`s effectiveness might be hindered by CEO duality, where power concentration can create risky decisions against shareholders` interests be opportunistic on behalf of CEO`s interests, thus reducing roles domination for more effective decisions and controls. The outcome is in line with that CEO power can be minimized by a separate leadership structure as potential unethical issues might be easier and, in turn, maximized; this is in line with Roy (2016) and Isik (2017). In contrast, the finding contradicts some arguments of previous literature, such as Guillet et al. (2013), Moscu (2015), Tang (2017), Singh et al. (2018), Al-Msiedeen (2019), and Ben-Rejeb and Missaoui (2019). There are some arguments that are reflected by these researches; in a nutshell, CEO duality allows faster reactions and response, clean authority line, bad consequences, reduction of conflictive interaction, improving accountability, and costs decrement.

As indicated, this research finds a significant positive impact on ASE-listed financial firms` financial performance by CEO duality. These findings are in line with Grove et al. (2011), Al Manaseer et al. (2012), Akdogan and Boyacioglu (2014), Kouki and Guizani (2015), Tanko (2015), Duru et al. (2016), Roy (2016), Anis et al. (2017), Tang (2017), Qadora and Hanim (2018), Kiradoo (2019), and Onofrei et al. (2019). At the same time, it is not consistent with previous studies which found a positive effect, such as Arosa et al. (2013), Marashdeh (2014), Al-Msiedeen (2019), Ben Rejeb and Missaoui (2019). In addition, it contradicts researches that reveal an insignificant or no influence including, Ujunwa (2012), and Hamdan and Ahmad (2015), Almustafa (2017), Makhlouf et al. (2017), Abdul Gafoor et al. (2018), Mutlu et al. (2018), and Singh et al. (2018).

Most of the studies which found a positive impact of CEO duality on firm performance targeted none financial firms, such as Marashdeh (2014), Almustafa (2017), Al-Msiedeen (2019), and Ben-Rejeb and Missaoui (2019), these results might be due to the differences in applying corporate governance, as none financial firms are less obliged to adopt corporate governance application, the application might be less effective, and no real or serious application has existed. A justification for this argument could be that most of the non-financial firm's

ownership in Jordan attributes to family ownership, as mentioned by Mansur and Tangl (2018). Family business mostly is under chairman management who is the owner of a firm and occupies the role of CEO as well; the owner might work more effectively on behalf of shareholders to preserve his business.

5.2.3. Board of directors' composition:

Board composition is measured by the overall division percentage none executive directors to all directors on board. The agency theory argument is a ground for testing this mechanisms influence on financial performance. The result of regression and correlation analyses confirm that board independence has a significant positive impact on financial performance of ASE-listed financial firms, including ROA. Therefore, the third sub null-hypothesis (H0A3) “board composition has a significant positive effect on firm`s financial performance (ROA), accepted. This implies that none-executive directors on board improves ROA and ROE of financial firms in the ASE.

The argument of the agency theory suggests that none-executive directors involving is encouraged, by this, management activities that are opportunistic are minimized and thus reducing agency issues and costs. The guidelines of Jordanian listed firms recommends the majority of board to be none-executive directors. The average of none executive directors of financial firms hits the majority level and thus complied with Jordanian guidelines. The finding supports the argument of agency theory.

The finding is in line with argument of Leung et al. (2013), the existence of none executive directors are crucial to minimize self-interest practices. It also consistent with Fuzi et al. (2016) argument, none executive directors are able to perform efficiently if they are independent from management. It additionally confirms argument of Anis et al. (2017) that external knowledge can be brought by NEDs, therefore, they perform to link external and internal environments for enhancing managerial function. However, outcome opposes arguments of Yusoff and Alhaji (2012) and Sheikh, Wang and Khan (2013), NEDs are outside directors who have not enough deep information about firms and thus are not qualified to perform well for firm’s improvement.

Result confirm what was found by Garcia et al. (2010), Machold (2011), Joh and Jung (2012), Leung et al. (2013), Fuzi et al. (2016), Anis et al. (2017). The findings is inconsistent with Kumar and Singh (2012), Sheikh et al. (2013), and Palaniappan (2017) indicate that board of directors independence does not has significant implication on firm performance.

5.2.4. Board sub-committee independence:

The major function of an audit committee at a firm is to oversee the process of financial reporting, the auditing monitoring, the firm's internal controls system, and fulfilment with regulations. As a part of testing the board`s sub-committees impact on financial performance, Audit committee independence was employed as a variable for testing this impact. The conceptual framework considers this variable based on argument of agency theory. this variable`s hypothesis is built on the same argument. Based on analyses outcomes, ROA ratio is impacted significantly and positively by Audit committee independence of listed financial firms in the ASE. Consequently, the fourth sub null-hypothesis (H0A4), "audit committee independence has a significant positive effect on firm`s financial performance (ROA)".

The remuneration committee's primary responsibility is to establish the company's remuneration schemes, determine remuneration packages separately of executive directors`, and setting targets in relation to pay. Testing the board`s sub-committees impact on financial performance furtherly includes remuneration committee independence impact on financial performance (ROA). The conceptual framework considers this variable based on argument of agency theory. this variable`s hypothesis is built on the same argument. Based on analyses outcomes, ROA of listed financial firms in the ASE is significantly and positively affected by the remuneration committee independence. Consequently, the fifth sub null-hypothesis H0A5 "remuneration committee independence has a significant positive effect on firm`s financial performance (ROA)", is accepted.

The argument of agency theory recommends to have independent audit and remuneration committees for transparent disclosure and fair compensation schemes. The finding is in line with agency theory argument. This results confirms the importance of both committees independence in improving firm`s financial performance. The outcomes confirm argument of Appiah and Chizema (2016) and Achtenhagen et al. (2018), the remuneration committee is one of the most crucial board of directors` committees for agency issues mitigating. It also in line with Abubakr, (2017) and Abu Zraiq and Fatzi (2018). The providing high motivation and compensation board members and managers work more effectively. It contradicts Ghabayen (2012) argument, the growing lack of unique proficiency between board members (i.e., greater heterogeneity) will exacerbate tensions and adversely affect boardroom consistency. Finding is consistent with Conyon (2013), Chizema (2016), Abubakr, (2017), Abu Zraiq and Fatzi (2018), and Achtenhagen et al. (2018) who find a positive impact of board committees

independence and financial performance. While, it contradicts Gregg et al. (2010) and Ghabayen (2012) who revealed a negative impact.

As stated by Abdullatif et al. (2015) that according to Abdullatif and Al-Khadash (2010), "Jordanian public listed companies are in general closely-held with the family business model dominant. There is limited separation between the management and ownership of companies, and audit committee members, while not executive managers, may be of direct relations with some executive managers, thus limiting the effectiveness of these committees. In addition, they indicate that in the listed companies on the ASE used to witness inadequate separation between management and ownership, hence, a limited independence of remuneration and audit committees was existed. However, it seems that regulations were not strong enough to ensure independent and effective committees and this was confirmed by Abdullatif (2006), and by referring to the ASE`s corporate governance regulations, remuneration committee was out of the interest and even disclosure about it was limited. Based on this research findings, these committees independence might be improved and was seriously considered in the new regulations in 2009 and 2017, and thus reflected positively on the financial performance. The justification of this result can be also attributed to that financial firms` activities nature requires employees and members who have a financial background, it is easier for these firms to find qualified and independent members to be appointed at these committees.

5.2.5. Board size:

The number of directors on board is used as a measurement for board size. The conceptual framework considers this variable as a part of testing the corporate governance impact on financial performance, based on the agency theory argument. This variable`s hypothesis is built on the same argument. Based on regression analyses outcomes, ROA ratio is not impacted significantly by the size of the board; despite this, the impact is positive. The correlation analyses show a similar result. Therefore, since the impact is not significant, H0A6 hypothesis "board size has no significant negative impact on firm`s financial performance (ROA)", is rejected. Board size guidelines in Jordan should be reviewed, where increasing the board is not reflected in the financial performance.

Based on the agency argument, increasing the board size will result in better firm performance; a high number means more diverse background and experience. The regulation of board size of listed firms in the ASE recommends having 5-11 members on the board between 2009 and 2016, while 7-13 members since 2017. The average of ASE-listed financial firms` board size

shows that firms complied with Jordanian context during the sample period. However, the result contradicts the argument of agency theory. ROA is not improved by increasing board size; this emphasizes that current guidelines in regard to board size should be reconsidered.

Result approves with an argument of Saha et al. (2018), who indicate that the board size number might have no role in determining firm performance. The outcome shows a disagreement with some previous literature`s arguments. Contradicting the argument of Damak (2013), a high board`s size hinders timely consensus decision because of a greater diversity of views and ideas. It also against Gambo et al. (2018) argument, a smaller board might have outstanding capabilities to perform well. The result is not in line with Yameen et al. (2019); large boards are less likely to develop and embrace new ideas due to many viewpoints, board's ability to offer good ideas is disrupted and might be costly. It is not consistent with that communication and interaction among the small board of directors is more readily, as Kiradoo (2019) discussed. The findings also fail to confirm the argument, which suggests more effective performance by larger board size. Finding is against Latif et al. (2013) argument, larger board`s capacity to gather information is higher, which results in enhancing firm performance. The large board has more experienced, educations background diversity, and ideas sharing as indicated by Johl et al. (2015), Awan and Jamali (2016), and Kalsie and Shrivastav (2016) argue that a larger board is more comprehensive to improve firm performance, the result cannot confirm this argument.

Regarding the ROA`s result, it contradicts Latif et al. (2013), Johl et al. (2015), Kalsie and Shrivastav (2016), Badu and Apiah (2017), Saha et al. (2018), Ahmed et al. (2019) positive, Alqudah et al. (2019), and yameen et al. (2019), these studies find a significant positive impact. Further, this finding is not in line with studies that find a significant negative impact on ROA such as, Arosa e al. (2012), Damak (2013), Gambo et al. (2018). However, it is consistent with Emile et al. (2014) and Saha et al. (2018).

The finding reveals a positive impact of board size on financial performance (ROA) of listed financial firms in the ASE, yet, this impact is not statically significant. As this finding contradicts some previous researches, this finding might be a result of characteristics of the board of directors, e.g., structure of ownership. Highly concentrated ownership (including families and government ownership) is reported in most Middle East Countries (ROSC, 2019). Marashdeh (2014) reported that firms` ownership is highly concentrated and shareholders` right is not strongly protected in most developing countries. In Jordan, firms` ownership

structure is highly concentrated by families, where the board of directors, in many cases, contains members of one family or a clique of families. As a consequence, board`s members can be appointed by ignoring position`s requirements such as education, experience, and skills, but rather appointment might be under nepotism and friendship; as a result, unqualified member affects financial performance negatively. This leads to worsening coordination and flexibility of aboard. The study which found a significant positive impact might be due to the opposite argument of this argument, briefly, the existence of effective appointing procedures. If the outcomes of previous researches that considered the period before 2009 on Jordan (before applying the new corporate governance regulations) were considered, for instance, Marasdeh (2014) found similar result indicating that board size increment does not improve the financial performance (ROA) during the period between 2000 and 2010. In addition, considering the study of Al-Manaseer et al. (2012), they found that board size has a negative impact on the financial performance (ROA), this might suggest that the new regulations are not effective enough to be reflected in a better financial performance, in particular, it might be that regulation does not ensure qualified and experienced board members. This is also true for the new regulations that were applied on 2017 in Jordan. Therefore, regulations should reviewed and updated.

5.2.6. Firm's size and age (control variables):

Firm age is seen to reflect a positive impact on ROA but its impact is not significant. This suggests that to a limited extent firms outperformed younger firms. The number of years a company had been in business before 2008 was used to calculate its age, it is raised by 1 as it passes year over year. The lesser the firm`s age, the greater the risk and the less developed the firm, so a upper firm age was supposed to associate with better financial performance (Kipesha, 2013). Older firm might have more experience and familiarity about the market and businhess, advanced systems, sophisticated cooperation, and talented people that control businesses. However, as stated by Hossain and Saif (2019) that the grow rates of companies might be minimized as a firm goes older. In addition, they stated that the higher the age the better the investors` comprehension about a firm, thus, more available data about the firm and this might be against or with a company financial performance depending on how a firm preforms from several elements e.g. corporate performance. In the case of the ASE`s financial firms, the size seems to not affecting the financial performance

The size of firm is evaluated by the total assets. A positive and weak influence on ROA is reflected by the size of firms. The positive impact shows that older firms are outperformed by younger firms to a limited level. The positive impact can be interpreted according to Ashehri (2016), where larger companies are more likely to have a wider variety of operations, value creation sources, output range, and market power. In addition, old firms might have more financial facilities, wider relations base, and more experience in facing issues. Furthermore, high firm`s age might be an indication for more company`s stability and lower business financial risks. Firm age impacts firm`s abilities and resources and unintentionally involving in determining the performance of a company (Olumide, 2010). However, as mentioned by Gunun and Adamadw (2015) that "While old firms may have developed time test capability to wisely block new entrants and sustain first movers' advantage, new firms may have advantages since they are not clobbered with untradeable resources. Inertia increases with age and it is expected that older firms would incur more overheads and exhibit costly corporate governance behaviours (large board sizes)."

5.2.7. Compliance level of corporate governance mechanisms application and financial performance:

The findings indicate that firms that are highly complied with corporate governance show that these firms` financial performance is positively and significantly correlated with all corporate governance mechanisms, including board of director independence, remuneration committee independence, audit committee independence, board activity, board size, and board activity, except the CEO duality which reflects a significant negative impact on high-compliance firms` financial performance.

The correlation analysis shows that high compliant firms' ROA has a strong positive correlation with board composition, audit committee independence, remuneration committee independence, and board activity. While CEO duality reveals a negative and strong association with ROA, and board size shows a positive and weak correlation. In addition, finding revealed that moderate compliant firms' financial performance (ROA) have a weak and positive correlation with all mechanisms, with exception of CEO duality which reflected a strong negative association. Control variables including firm size and firm age have no significant but positive impact on ROA. This is in line with Boyacioglu and Akdogan (2014) and opposes to Lamport et al. (2011) who find no significance difference.

Therefore, the researcher applied further step which is the comparison between the mean (average) of each level`s ROA, the findings reveal that the means of ROA seem to be higher for firms which are highly complied. By referring to table (14), it is clear that the mean (0.242) of these firms` ROA outperformed the ROA`s mean (0.008) of moderate compliant firms. Consequently, high compliant firms reflect higher return on assets and thus better performance. Accordingly, the firms which comply highly with the corporate governance codes tend to have better financial performance. These findings strengthen the fact that corporate governance application in general has a significant positive impact on the financial performance. Consequently, the outcomes suggest that corporate governance impact on financial performance support the argument of agency theory which was adopted for this thesis`s part, this is in agreement with previous studies such as Chaghadari (2011), Topak (2011), Ujunwa, 2012, Coskan and Syiliar, 2012, Khan and Awan (2012), Hamdan et al. (2013), and Chan and Li (2018). However, In fact, as long as both compliance levels results are limited on the correlation analysis, and the regression analysis was not completed, this thesis cannot confirm the second main hypothesis "H0B: Corporate governance compliance level has a significant positive impact on the financial performance (ROA) of listed financial firms in Amman Stock Exchange", as well as it is not possible to apply the sub-hypotheses.

According to the outcomes, this outperformance might be justified due to better application of corporate governance, where these firms are mostly complied with all corporate governance mechanisms that are included in this research. However, the regulation might need further adjustment because it may be harder for some firms to be complied with in terms of costs, abilities, and efforts. On the other hand, moderate firms might do not comply with intention to do so, hence, the ASE and relative entities should introduce more restrictions on these firms and also shareholder might help with this too. To that end, the ASE might follow a categorization criteria to classify these firms in terms of compliance to all corporate governance practices to identify the most required regulations` adjustment, and make some restrictions based upon to. Lastly, another categories can be formulated to identify firms` compliance level in a way that results in a fitted model for the analysis.

5.3. Summary:

The findings of the thesis are discussed by this chapter, discussion considers the impact of corporate governance mechanisms on financial performance of listed financial firms in the ASE. The outcomes reveal that agency theory arguments in regard to this study`s mechanisms is the best suited for corporate governance of listed financial firms in Jordanian stock market. The findings reveal that the application of corporate governance mechanisms among financial firms in the ASE has been developed since 2010, consequently the listed financial firms in the ASE can improve their financial performance by improving the application of corporate governance mechanisms.

This research findings show that board activity and board size have no significant influence on firm financial performance (ROA), but the impact is positive. While, CEO duality shows a significant negative impact on financial performance (ROA), this suggests that CEO and chairman positions separation leads to better profitability. Board composition reflects a positive and significant effect on ROA, it can be suggested that the existence of more none executive members to some extent on board is likely to improve financial performance of firms, where they are considered as an unbiased members. Board`s sub-committees independence including audit and remuneration committees impacts ROA positively and significantly.

In addition, compliance level of corporate governance mechanisms application is considered to strengthen corporate governance findings, firms with high compliance level are seen to have better financial performance including ROA than moderate compliance level firms. The correlation analysis shows that high compliant firms' ROA has a strong positive correlation with board composition, audit committee independence, remuneration committee independence, and board activity. While CEO duality reveals a negative and strong association with both measures, and board size shows a positive and weak correlation. In addition, finding revealed that moderate compliant firms' financial performance (ROA) have a weak and positive correlation with all mechanisms, with exception of CEO duality which reflected a strong positive association. This might be due to effective procedures of determining board size, and who are in board size. In addition, these firms might have better control on and guidelines of their annual meetings, in turn, discussing firms' issues and strategies in a better way.

Lastly, firm age of the ASE`s financial companies is seen to reflect a positive impact on ROA but its impact is not significant. This suggests that to a limited extent firms outperformed

younger firms. The lesser the firm`s age, the greater the risk and the less developed the firm, so a upper firm age was supposed to associate with better financial performance. Older firm might have more experience and familiarity about the market and business, advanced systems, sophisticated cooperation, and talented people that control businesses. In the case of the ASE`s financial firms, the size seems to not affecting the financial performance. The size of financial firms in the ASE is evaluated by the total assets. A positive and weak influence on ROA is reflected by the size of firms. The positive impact shows that older firms are outperformed by younger firms to a limited level. Larger companies are more likely to have a wider variety of operations, value creation sources, output range, and market power. In addition, old firms might have more financial facilities, wider relations base, and more experience in facing issues.

Chapter Six: Conclusion:

6.0. Introduction

As reflected through chapter one that the main purpose of this thesis is investigating the liquidity management and corporate governance impact on financial performance of listed financial companies in the ASE. Both areas are have witnessed significant adjustments for better practices. The firms` financial performance is a considerable challenge that all firms seek to deal with. As aforementioned according to previous studies such as Hassan (2011), Hasan, Kobeissi and Song (2011), Piesse, Strange and Toonsi (2012), Alnaif (2014), Alkahtani, Nour and Arabiat (2016) that the MENA region particularly Jordan witnesses a scarcity of comprehensive academic researches which consider financial performance and how it is impacted by corporate governance. It is also added by Ahmad (2010) that financial crisis has created greater significance of corporate governance regulations to be applied on listed companies. The present chapter shows a summary of this thesis`s main findings, limitations discussion, practical contribution, future studies` recommendations, and reflection.

6.1. Main Findings Summary:

According to the thesis objective, two main objectives were formulated, the first objective is to analyze the impact of corporate governance mechanisms application during the period from 2010 to 2019. The second objective is to examine the effect of corporate governance`s compliance level on financial performance of financial listed companies in the Amman Stock Exchange.. Accordingly, in the following the findings of this thesis are presented separately, these findings meet these two objectives. The required data for applying the analysis is secondary and was obtained from the annual reports which are publicly available at these firms` and ASE`s websites. The main employed analysis tool was used to investigate this impact was the multiple linear regression. Further, some analyses were exploited including autocorrelation, multicollinearity, descriptive summary, normality, and correlation analyses. However, the employed corporate governance mechanisms (independent variables) for the first model were board activity, the board size, CEO duality, board of directors' independence, audit committee independence, remuneration committee independence, and board activity. The final firms` number which was used for this section was 39 listed financial firms in the ASE for the period between 2010 and 2019.

6.1.1. Findings of the corporate governance impact on financial performance:

The first objective is to examine the impact on financial firms by corporate governance mechanisms of ASE-listed financial firms. Thus, for the first objective corporate governance is used and represented by six mechanisms. The corporate governance mechanisms were selected for both banks and other financial firms. The significant difference is that banks are under more restrictions in applying these codes. At the same time, diversified financial firms have more flexibility, where these firms voluntarily comply with most of these codes. Ultimately, this does not affect the objective of this research, whether voluntary or compulsory, but most importantly is the availability of required information.

The outcome of board size impact on financial performance reports a positive impact on the ROA, but this impact is insignificant. This suggest that this research contradicts some previous studies that finds a negative impact such as, Hair et al. (2009), Kota and Tamor (2010), Rashid (2010), Lawal (2012), Damak (2013), and Badu and Apiah (2017), and other studies which revealed a positive significant effect including Lehn et al (2009), and Al-Hadad et al. (2011), Topak (2011), Larmou and Vafeas (2010), Sheikh et al. (2012), Guo and Kga (2012), Lawal (2012), Fauzi and Locke (2012). Latif et al. (2013), Adhikary et al (2014), Kalsie and Shrivastav (2016), and Qadora and Hanim (2018). While, this research is consistent with outcomes of Topak (2011) and Chaghadari (2011), and Almustafa (2017). The justification for this negative impact can be due to members` appointment processes, where board of directors are highly dominated by families, as a consequence, nepotism and friendship might be basis for appointment. As a result, monitoring, decisions, and coordination of board might be ineffective. Thus, the board size result does support the concept of agency theory.

Considering the outcomes of a number of applied researches on the ASE, Toumar (2008) reveals a positive impact of ownership structure and board composition on banks` performance, while board size has no impact. As indicated by Al Manaseer et al (2012) that board independence and foreign ownership have a positive relationship with firm performance, but board size and CEO duality show a negative relationship. Al-Daoud et al. (2016) targeted the industry and services sectors, their outcomes show that board activity impacts financial performance positively and significantly. The findings of Almustafa (2017) suggest that board of directors' independence, CEO duality, and board size have no significant impact on financial performance, whereas ownership structure has a positive significant effect. Qadora and Hanim (2018) show that listed industrial firms` financial performance is influenced positively and

significantly by board size but a negative and significant effect is show by CEO duality. According to Mansur and Tangl (2018)'s study, Jordanian firms' performance improves after they implement corporate governance. The research of Al-Msiedeen (2019) reveals that ROA is impacted positively and significantly by board of directors' independence, while CEO duality has a significant positive impact, and board gender found to not impacting ROA.

The finding of CEO duality impact on financial performance suggests a significant negative impact on the ROA. Separation role of CEO and chairman hinders CEO to exploit his-her concentration of executive duties in opportunistic way. In addition, separation can mitigate the impact of board members' domination on CEO, and ensuring that executives' decisions are on behalf firm succession, or at least CEO are not the only person who has the power of decision making. This finding supports the agency theory concept, it contradicts Dalton. and Dalton (2011), Machold et al. (2011), Sheikh et al. (2012), Al Manaseer et al (2012), Arosa et al. (2013), Gove and Junkunc (2013), and Yang and Zhao (2014), Moscu (2015), and Isik (2017), Almustafa (2017), and Al-Msiedeen (2019). The result is consistent with Aygun and Ic (2010), Grove et al. (2011), De Jonghe et al. (2012), Adams (2013), Liang et al. (2013), Guizani (2015), Moscu (2015), Duru et al. (2016), and Isik (2017). It also inconsistent with some previous studies that find no impact of CEO on firmperfromance including, Jackling and Johl (2009), Rashid et al. (2010), Chaghadari (2011), Ujunwa (2012), and Coskan and Syiliar (2012).

Board of directors' independence result shows a significant positive impact on financial performance, including the ROA. The existence of independent directors albeit they do not have a piece of detailed information about firms` operations, yet, they have no bias or self-interest in performing their role for firm`s management, which in turn, makes board`s monitoring and decisions more effective for best interest of firms and shareholders. This research finds a positive significant impact of board of directors composition on the ROA. It confirms the concept of agency theory, it is consistent with Al Manaseer et al (2012), Alhaji et al. (2013), Leung et al. (2013), Fuzi et al. (2016), Al-Msiedeen (2019) outcomes. While it is against findings of Kajola (2008), Yusoff and Alhaji (2012), Fitriya Fauzi and Locke (2012), and (Sheikh et al., 2013), Almustafa (2017), and Rashid (2018).

The outcome of audit committee independence indicates to a significant positive impact on the ROA. Information asymmetry issues are reduced by having more independent members in this committee. Further, independent directors in the audit committee insure eliminating any misconduct for changing the real situation of firm. The present study contradicts work by

Kajola (2008), Al-Matari et al. (2012) and Ghabayen (2012). Nonetheless, it is in line with Chan and Li (2008), Triki and Bouaziz (2012), Al-Matari et al. (2012), Hamdan et al. (2013), Tricker (2015), Mohammed (2018), Ibrahim (2019) who find a significant positive effect of audit committee independence. The findings is in line with the agency theory concept. The outcomes is consistent with Herdan et al. (2011), (Abugu, 2012), and Peter (2016), while it contradicts Gregg et al. (2010).

Lastly, board activity impact on the ROA is not significant but positive, board meetings are an indicator for ensuring that board`s members are met for discussing and controlling operations activities, issues, decisions of firms. The insignificant impact might be due to that these firms` board meeting is for running the usual business operations and no other things. The outcomes support the agency theory albeit the positive impact is not significant, result is also in accordance with some previous studies such as Tauringana (2008), Ramos and Olala (2011), Aldaoud et al. (2016), Buchdadi and Chou (2017), Paul (2017), Abdul Gafoor et al. (2018), and Eluyela et al. (2018). While contradicted some other researches that found a negative impact including Jackling and Johi (2009), Bhatt and Bhattacharya (2015), Al-Daoud et al. (2016), Aryani et al. (2017) and Jansakul (2018).

Firm age of the ASE`s financial companies is seen to reflect a positive impact on ROA but its impact is not significant. This suggests that to a limited extent firms outperformed younger firms. The lesser the firm`s age, the greater the risk and the less developed the firm, so a upper firm age was supposed to associate with better financial performance. Older firm might have more experience and familiarity about the market and business, advanced systems, sophisticated cooperation, and talented people that control businesses. In the case of the ASE`s financial firms, the size seems to not affecting the financial performance. The size of financial firms in the ASE is evaluated by the total assets. A positive and weak influence on ROA is reflected by the size of firms. The positive impact shows that older firms are outperformed by younger firms to a limited level. Larger companies are more likely to have a wider variety of operations, value creation sources, output range, and market power. In addition, old firms might have more financial facilities, wider relations base, and more experience in facing issues.

This thesis goes more in-depth, the compliance level of corporate governance was considered, where the researcher exploited the collected data to make three categories of corporate governance compliance level, low, moderate, and high compliant firms. As chapter four reflects that the researcher adopts a way for this categorization. The data reveals that there is

no firm which falls in the low compliance level; therefore, the groups for analysis were moderate and high compliance levels. Each level had its own values whether for stock liquidity or for corporate governance principles values which were represented by dummy variables as research methods chapter illustrated. In fact, both compliance levels show similar result according to the correlation and regression analysis. Therefore, the researcher applied further step which is the comparison between the mean (average) of each level`s ROA, the findings reveal that the means of ROA seem to be higher for firms which are highly complied. Accordingly, the firms which comply highly with the corporate governance codes tend to have better financial performance. These findings strengthen the fact that corporate governance application has a significant positive impact on the financial performance. Consequently, the outcomes suggest that corporate governance impact on financial performance support the argument of agency theory which was adopted for this thesis`s part, this is in agreement with previous studies such as Chaghadari (2011), Topak (2011), Ujunwa, 2012, Coskan and Syiliar, 2012, Khan and Awan (2012), Hamdan et al. (2013), and Chan and Li (2018).

The table (18) in the following page illustrates this thesis` hypotheses acceptance or rejection:

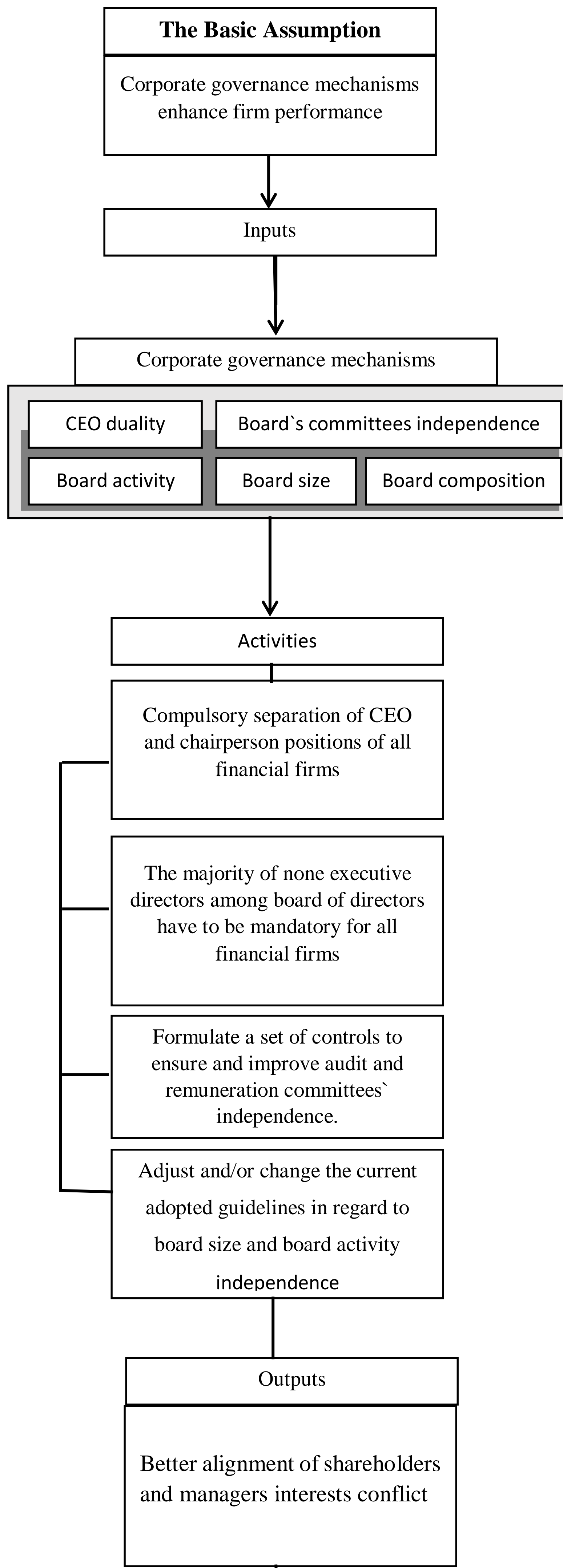
Summary of all Hypotheses` outcomes				
H0A: Corporate governance mechanisms has a significant positive impact on the financial performance (ROA) of listed financial firms in Amman Stock Exchange.				
Sub-Hypothesis:	Number:	Outcomes:	Conclusion:	Relevancy to the agency theory
- Board activity has a significant positive effect on a firm`s financial performance (ROA)	H0A1	Rejected	Board activity does effect financial performance (ROA) positively but insignificantly.	Inconsistent with the agency theory
- CEO and chairmen duality has a significant positive effect on firm`s financial performance (ROA)	H0A2	Rejected	CEO impacts the ROA significantly and positively.	Consistent with the agency theory
- Board of director independence has a significant positive effect on a firm`s financial performance (ROA)	H0A3	Accepted	The financial performance (ROA) is impacted positively and significantly by the board of director independence	Consistent with the agency theory
- Remuneration committee independence has a significant positive effect on a firm`s financial performance (ROA)	H0A4	Accepted	Remuneration committee has a significant positive impact on financial performance (ROA)	Consistent with the agency theory
- Audit committee independence has a significant positive effect on a firm`s financial performance (ROA)	H0A5	Accepted	Audit committee does influence the financial performance (ROA) positively and significantly.	Consistent with the agency theory
- Board size has a significant positive effect on a firm`s financial performance (ROA)	H0A6	Rejected	Board size does impact financial performance (ROA) positively but insignificantly.	Inconsistent with the agency theory
H0B: Corporate governance compliance level has a significant positive impact on the financial performance (ROA) of listed financial firms in Amman Stock Exchange.			The hypothesis is not tested due to none-fitted model.	

TABLE 18: HYPOTHESES' OUTCOMES, MADE BY AUTHOR, 2020.

Colour	Meaning
Yellow	The research main hypotheses
Green	Accepted (positively significant)
Red	Rejected (negatively significant)
Grey	Rejected (positively or negatively insignificant)

6.2. The recommended framework for the ASE`S listed financial firms:

According to the result analysis and discussion, the researcher formulated a new framework for ASE-listed financial firms, which combines corporate governance practices with financial performance. This framework can be adopted as guidance by these firms in order to enhance the current profile of corporate governance mechanisms, to ultimately improving their financial performance in terms of profitability, represented by return on asset. To be noted, that this framework is grounded firstly on this research framework and secondly on this research findings. The steps of formulating this framework were by referring to Robert (2012). Figure (5) in the next two pages demonstrates this research recommended framework:


The Basic Assumption
Corporate governance mechanisms enhance firm performance
Inputs
Corporate governance mechanisms
CEO duality
Board`s committees independence
Board activity
Board size
Board composition
Activities
Compulsory separation of CEO and chairperson positions of all financial firms
The majority of none executive directors among board of directors have to be mandatory for all financial firms
Formulate a set of controls to ensure and improve audit and remuneration committees` independence.
Adjust and/or change the current adopted guidelines in regard to board size and board activity independence
Outputs
Better alignment of shareholders and managers interests conflict

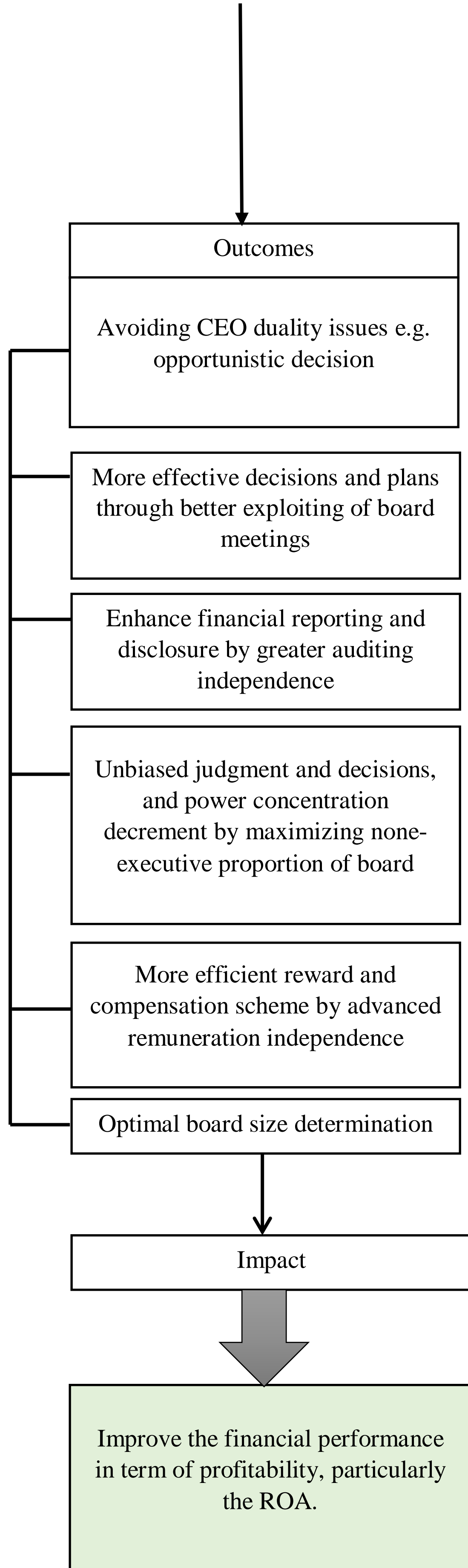


FIGURE 5: THE RECOMMENDED FRAMEWORK FOR THE ASE`S LISTED FINANCIAL FIRMS, AUTHOR

6.3. The thesis`s contribution:

By employing company level data, this research tries to enhance the corporate governance comprehension in Jordan. Empirical examination was applied in order revealing the implication of various corporate governance`s mechanisms on financial performance. This thesis was performed after and during a crucial period of time that witness vital amendments of corporate governance in developing countries, in particular Jordan, as aforementioned in 2009 and 2017 corporate governance structures were amended and updated, hence, since then the attention of corporate governance has raised among several parties including, listed and unlisted firms, academics, practitioners, decision-makers, investors, local or international consultants, and managers. This attention is about relative elements of corporate governance whether in practice or in academic community. Consequently, this research contributed to both sides discussed in the following.

The corporate governance has yet to be analyzed in the MENA region; therefore, this research makes a crucial contribution in this index. This study develops a practical corporate governance index which is appropriate for the countries of MENA region, specifically in Jordan. As a consequence of index` development, valuable models are introduced which can be exploited for corporate governance discussion facilitation in Jordan and other emerging markets. In addition, findings give a clear comprehension of issues with, and current state of corporate governance practices in the Amman Stock Exchange for several parties, decision makers, regulators, owners, researchers, policy makers, investors, shareholders listed firms. The Jordan Securities Commission (JSC), Amman Stock Exchange (ASE), Securities Depository Centre (SDC), Central Bank of Jordan (CBJ), Insurance Commission (IC), and Companies Control Department (CCD) are the responsible entities to for controlling the practices of firms in Jordan, this research is one of the few recent studies which are applied on listed firms in Jordan, and contains updated information and results, all this suggests that these entities can benefit from the findings.

In the practice, the best corporate governance structure has not been achieved due to several factors such as, differences in stock markets, natures of listed firms, restrictions. Therefore, it hard to formulate a suited structure which fits all firms when it comes to practice. Each market has its own features even though of some similarities, hence applying studies that can be reflected to practical world is crucial to improve a particular market from various perspectives. This research involved in the continuous investigations in the part of corporate governance that aim to achieve outcomes, which can be applied in the practical world. For instance, when it

comes to decide whether to have independent audit committee, the outcomes of this research can be referred to, and this might be supported by other records that a company has, but at least this outcome can be used as a part of guiding the company to its final decision.

Listed firms can use the outcome of this research as a base for adjusting the current adopted practices of this main profiles, this could enhance their financial performance which is crucial for all firms. Practical researchers who are interested in the areas of this research will find an updated knowledge and results to base upon for further researches. The findings can also be beneficial for regulators, as long as the practices of corporate governance under the control of governmental entities in Jordan, they have the power to modify the current practices for better outcomes, regulators can find a helpful information which is supported by empirical results to be used in regulation reform.

The first aim of any business existence is to improve the financial performance, financial performance is determined by many elements, and this includes corporate governance. In addition, some firms might not aware that there is a connection between its financial performance and corporate governance, in particular in the practice. This research reflects how mechanisms of corporate governance affect financial performance. Accordingly, this outcomes can be exploited to adjust the application of corporate governance to eventually improve the financial performance. In addition, as the result is not based on expectation but rather it is derived from a real world and data, hence, this might be convincing to enhance firms` awareness about the role of corporate governance to improve financial performance, and motivating firms to apply such mechanisms, where some firms avoid these mechanisms application due to the associated costs with this application with no awareness about the benefits, hence, such research allows effective comparison between benefits and costs and eventually achieving the maximum paybacks.

Even though this research covers a widespread topic area, the features of emerging markets (such as Jordan) are dissimilar compared to other markets. In fact, some of the most dominant characteristics in Jordan are nepotism and favouritism that may play a prominent role in restraining the efficiency of initiating the regulations that are relative to social and economic perspectives, since such markets are positioned under the tribes' umbrella (Rwashdeh, 2016). Further, as a result of corporate scandals worldwide, there has been a lot of studies and policy initiatives on corporate governance matters. However, the majority of investigations have been

undertaken in developed economies. In comparison, studies on corporate governance in developing economies, particularly Jordan, is scarce.

Unlike other researches that have been applied on the Jordan in this regard, this thesis adopted a systematic way which starts from finding a problem, significance, and objectives of the study, then building a theoretical framework employing the agency theory, after this the conceptual framework is formulated which reflects the view of the researcher about the corporate governance and financial performance, and then reviewing the corporate governance mechanisms with the financial performance to formulate this thesis`s hypothesis. And lastly, applying the analysis. It is very rare to follow this way in the previous literature, especially in Jordan. This research can be referred to by other researchers as it is almost conclusive study and not briefed. In addition, previous studies that were applied on the Jordanian stock market, which analyze the impact of corporate governance on the financial performance, these researches are not enough to update all elements in this regard. Therefore, this research`s contribution involve in this update in the purpose of filling the current gaps in the literature.

Adding to these elements, the points below reflect how this thesis contribute to the field of literature:

- The previous literature of corporate governance in particular in Jordan is enhanced, this includes, relative concepts, theories, mechanisms, challenges, discussions, and brief of Jordanian corporate governance.
- The previous literature of financial performance is enriched, this includes, relative concepts, determinants, discussions.
- Revision of the previous literature which considered corporate governance impact on financial performance, in addition to provide a critical appraisal of these studies that were applied on Jordan stock market.
- An update in terms of time of the relation and effect of corporate governance mechanisms on financial performance in Jordan is provided.
- Employed variables to analyze the relation and effect of corporate governance mechanisms on financial performance are maximized.
- Previous studies mostly do not consider corporate governance theories to examine the implication of corporate governance on financial performance, except Almustafa (2017) and Al-Msiedeen (2019), but both studies employed none financial companies,

this research discusses this relation in accordance to agency theory. This was reflected through the theoretical framework.

- Even it is occasional, emerging markets might share related conditions such as, cultures, economic situation, and environment, market strength, etc.…. Therefore, these emerging markets might take benefits of this thesis` outcomes.
- Besides, findings give an unmistakable comprehension of issues with the current state of corporate governance practices in the Amman Stock Exchange for several parties such as, listed and unlisted firms, academic and practical researchers, decision-makers, investors, local or international consultants, managers, and policymakers.
- The outcomes would be expectedly crucial for enhancing the overall profile of the Jordanian stock exchange, and this involve in one way or another in improving the economy.

6.4. The Limitations of the Study:

Regardless of the important findings of this thesis, this research, like all other studies, has limitations. To begin, the sample size itself was a limitation, where the financial firms are only considered by the sample of this research only. The financial firms have different features and structures than none-financial firms, which in turn, makes a limitation of combining both kinds of firms. These financial firms include banks, insurance firms, and diversified financial firms. The limitation here also was to remove the real estate firms; this was due to that these firms do not mostly last in the secondary market, many firms are suspended from trading, and the rate of entering and exiting from the secondary markets, therefore, these firms reflect instability which makes targeting these firms difficult. Further, the sample size is affected by firms that do not have the required data and others are not lasted from 2010 to 2019. To be also noted, there are several Jordanian firms that are listed in other stock or securities exchange, the listed firms at the Amman Stock Exchange is only considered, this thesis is accordingly does not go for other firms as these firms might reflecting dissimilar profiles in terms of liquidity, financial performance, corporate governance, and stock liquidity.

Despite the fact that the corporate governance application was considered into the regulations of the ASE in 2006, this application was not serious enough, specifically in terms of compliance and disclosure, there was not a compulsory procedure to force firms declaring most elements of their adopted corporate governance profile, in turn, there is lack of information for the years 2007 and 2008. The ASE introduced new regulations of corporate governance in 2008 and

started to be applied in 2009, this update forced firms, especially financial firms to expand their indications to include further elements through annual reports about these firms` corporate governance profile. To be noted, other reforms of corporate governance regulations were done on 2017. As a consequence, a limitation of having the opportunities to investigate corporate governance`s impact on stock liquidity in 2007 and 2008 after its application in 2006, where it is not possible to do so using similar corporate governance mechanisms as this thesis. In addition, data on corporate governance characteristics was manually gathered by exploiting annual reports of companies. In emerging markets such as Jordan, it is believed that governance and accounting norms are lacking. As a result, the yearly reports may not fairly reflect all data.

As aforementioned that financial firms have dissimilar structure as none-financial firms. In addition, financial firms themselves are different, where in terms of corporate governance regulations, the regulations applied on banks are unlike these applied on insurance and other financial services firms. The application and disclosures regulations of banks are more restricted than other financial firms, some perspectives are compulsory for banks while they are voluntary for other financial firms. As a consequence, information is more sorted and organized in the banks` annual reports while is not through other firms` annual reports. Some firms were removed from the sampling as they have not information for the required corporate governance data. Further, even the disclosure and compliance for some corporate governance elements were voluntary for financial firms except banks, several firms provided the needed data, but as mentioned in a way which is not organized as banks. Obtaining information from such unorganized annual reports was problematic. Further, as firms have option of not adopting specific elements of corporate governance, not all required data was mentioned through annual reports. Accordingly, this results in creating a limitation for this thesis by removing some firms in addition to make obtaining the required information much harder.

The main objective of this thesis is to investigate the impact of corporate governance on firm`s financial performance, the limitation here was the measurements of firm`s financial performance, it was planned to employ more than one measurement of financial performance but this was limited to accounting measures (ROA). Where, for instance, but not limited to, the financial performance can be measured using market-based measure such as the Tobin`s Q measures, the required data of this measurement is relative to replacement cost. In the context of emerging markets, firm’s performance`s market-based measures are seen to be challenging, this is because the characteristic of most firms is not equity financing but rather it is debt-

financing. Consequently, the financial performance of firms was measured using accounting-based perspective using the return on assets, where listed firms in Jordan do not declare data to be used in replacement cost calculation and thus it hinders this research to include other measurements such as Tobin`s Q. According to Kumar (2004) the real investor profits cannot be represented by market-based measures in this context. Despite all this, as said by previous researchers such as Pham et al. (2011), and Nazir and Afza (2018) that accounting-based measurements and market-based measurements are subjected to be manipulated simply by management of companies, which in turn, the results` reliability might be affected. However, these measures still acceptable in the literature of financial performance.

As stated many times throughout this thesis, this research goes further to consider the compliance level of corporate governance application, this is for strengthen this thesis`s findings regarding the impact of corporate governance on financial performance, firm`s categories were formulated to that end. The correlation analysis was applied with no issues, but the limitation here was due to the regression analysis, the model of moderate compliant firms did not fit well referring to the p-value, hence, it hinders this research to compare between different compliance levels. However, brief findings were achieved exploiting the correlation analysis.

Another element which is seen as a limitation of this study which is targeting a particular geographic part. This study was only limited on the Jordan and was particularly taking into account the listed financial firms. The Jordanian features might differ from other countries such as, environment, regulations, and stability, therefore, the research findings are applicable to Jordan and might not be generalized to another countries, even though it may be that there is another country which share similar features, but this is not guaranteed.

The COVID-19 pandemic which is "an infectious disease caused by a newly discovered strain of coronavirus", the COVID-19 has permeated almost all countries around the world; Jordan is a part of this world and is impacted too. The government has created precautions and processes in order to mitigate the impact and spread of this virus. The social distance was one of the most processes which Jordanian government enforces people to follow. Further, government has applied a curfew during specific days, which was based on the infections rate. This pandemic has created fears for most people, in turn, me as student is a part of these people, hearing bad news from all the globe for sure affected me even this impact was to some extent not significant.

The researcher aims to combine the investigation of corporate governance mechanisms application on firms financial performance with using a primary data, this was to support this thesis objectives and findings. The aim was to consider the none-listed financial firms, thus, see how these firms' practices differ in terms of corporate governance mechanisms and liquidity management, and then examine the effect on financial performance. I obtained all the ethical approvals for data collection from the University of Wales **Trinity Saint David**. Three main reasons were responsible for deciding to not completing this part. The curfew during the pandemic hinders the researcher to best manage meetings with firms. However, the researcher has done eight meetings, the collected data was very limited, respondents were not widely opened to give the required data regardless it is not confidential or personal. In addition, the fears time constraints and probability of obtaining invalid or imprecise data were also reason to not completing this part.

6.5. Further researches and recommendation:

In general, both the phrase and the concept of corporate governance are new to emerging countries. As a result, there are numerous challenges in this field of study. Although the conclusions gained are unique to Jordan, their resemblance to the governance patterns of other emerging countries suggests that the Gulf countries, the Middle East, and North Africa region be investigated further. Future research may, for example, look at corporate governance in other Arab nations with identical cultures, economics, organizational setups, and financial systems.

Future research might look into whether outside independent directors and none-executive directors are viewed as a valuable resource to the company in terms of providing advice, credibility, and counsel that improves performance. As a result, future studies could employ resource dependence theory to see if specific board qualities, such as gender, age, experience, and certifications, can help firms to perform better and reduce agency costs.

However, the following points summarizes the area for further researches:

- Further researches are necessary to include further elements which might have impact on financial performance. This might include, liquidity, financial leverage, and innovation, in addition to other external factors.
- Including further corporate governance mechanisms than these were used in this study, this is required for expanding current understanding about these element themselves, and with financial performance.

- Other studies are suggested to be applied by employing another stock market to compare with the Jordanian stock market. Comparison might result in a beneficial information which might not be found otherwise.
- Applying further researches by targeting the Jordanian firm which are listed in the international markets, it is possible to find a way for a suitable research to that end. Such research might give an indication of how these firms apply corporate governance mechanisms and how this differs from the Jordanian firms that are listed within the ASE.
- Expanding our comprehension in regard to corporate governance and their implication on financial performance, but by using primary data to strengthen such this research`s outcomes and improve our understanding, this might require long time and funds to be applied.
- The world witnesses continuous changes and fluctuations, as such, the area of corporate governance and financial performance have to be updated from time to time, where sometimes rules and regulations that are effective for today might no longer applicable in the future. Hence, similar researches exploiting similar contexts are recommended, to keep the profile of Jordan in this regard up to date.
- As mentioned before that this thesis only limited on the financial companies, while none-financial firms are not targeted, thus, these firms are part and parcel from the market and crucial for the overall market performance and stability, analyzing the impact of corporate governance on these firms` financial performance are suggested to update their current profile in this regard.
- Future researches might follow another categorization criteria to classify the ASE`s listed firms in terms of compliance to all corporate governance practices to identify the most required regulations` adjustment, and make some restrictions based upon to.

6.6. Reflection:

The journey of this research starts mainly from the passion of the researcher to participate in providing a contribution in the areas of researcher specialist. With two year of experience and educational background (bachelor and master degrees) in finance, the knowledge in action begun from finding gaps, filing some of these gaps can be helpful and beneficial for various parties who work in the field of finance, whether academic or practical positions, such as, managers, regulators, and researchers. In order achieving the best outcomes, the researcher started to identify his abilities, interests, and points of strength, in turn, this allowed researcher to determine the best area to be studied. During the work experience Journey, regardless it is a

short journey to some extent (two years), company always tries to improve its financial performance (profitability), adding to this that all companies except none- profit companies aim to maximize their profit as a main priority, here the researcher thinking started to focus on how firms can improve its profitability, what elements are involved in improving firm`s financial performance. In addition, researcher started thinking about what the best source of information that can be used for that end, financial statements are found to be a source of determining firms` financial performance over the time. The researcher education and experience in analyzing and preparing firms` financial statements allowed researcher to be confident about using financial statements as a source of data. The researcher determined that there are two elements which can involve in firms` financial performance, corporate governance and liquidity management, these elements are selected based on the current gaps in literature, researcher`s interests, and practical issues in these elements that make them flexible to be adjusted. The researcher selected stock market as a starting point of selecting a sample of this research, the reason behind this is that stock market is a group of listed firms under the control of regulations. Targeting stock market ensure that the data which will be collected are reliable and can be based upon it. It is easier for the researcher to find a place which has a lot of firms from several industries rather than selecting random firms, adding to this the reliability of announced data of these firms. After all this, the knowledge in action ended with finding the research elements, this includes topic itself in order finding a good title, preparing main purpose and sub objectives, and formulating questions which meet the main purpose`s achievement.

The reflection in action started with making a proposal which combines the researcher thought about the topic and how research is going to be implemented. To be noted that the proposal was done in accordance to many sessions which provided many guidelines. After the proposal acceptance, ethical approval had given, this is followed by more in depth reading of the thesis topic. Starting from the beginning, regular supervision sessions were done and resulted in invaluable feedbacks, advices, and guidance. All these procedures have enriched the research`s outcomes, where it was necessary at some stages to adjust the way of doing this research for better consequences, this was mainly achieved by advices of the main supervisor. This left the researcher with various benefits and inspirations such as learning the influential procedures of academic researches. In addition, with the desire of researcher to improve the academic research methods and knowledge of main supervisor created a good improvement, this was

reflected through the research methods chapter and would expectedly beneficial on researcher`s future work.

In summary, the long journey of this thesis over than three years has enriched researcher`s knowledge and comprehension about stock markets, financial performance, corporate governance, liquidity management. Financial performance was the basic point, the researcher abilities to link all research elements have developed, such as, corporate governance and liquidity management with financial performance to end up with beneficial outcomes. In addition, different skills for academic research including, progress management, referencing, researching, resources of knowledge, these skills have been improved as these are necessary for this current research enhancement and future researcher`s studies.

Reference:

Abidin, Z., Kamal, N. and Jusoff, K., 2009. Board Structure and Corporate Performance in Malaysia. International Journal of Economics and Finance, 1(1).

Al-Amarneh, A., 2014. Corporate Governance, Ownership Structure and Bank Performance in Jordan. International Journal of Economics and Finance, 6 (6).

Abdul Gafoor, C., Mariappan, V. and Thiyagarajan, S., 2018. Board characteristics and bank performance in India. IIMB Management Review, 30(2), pp.160-167.

Ahmed, F., Talreja, S. and Kashif, M., 2019. Effects of Corporate Governance and Capital Structure on Firms' Performance: Evidence from Major Sectors of Pakistan. Indonesian Capital Market Review, 10(2).

Al-Beshtawi, S., Zraqat, O., and Al–Hiyasat, H., 2014. "The impact of corporate governance on non-financial performance in Jordanian commercial banks and Islamic banks," International Journal of Financial Research 5 (3), pp. 54-67.

Almustafa. Z., 2017 "Corporate governance and financial firm performance: Evidences from Jordan," Research Journal of Finance and Accounting, 8 (10), pp. 178-191.

Al-Manaseer, M. F., Al-Hindawi, M. A. Al-Dahiyat, R. M., and I. I. Sartawi, I. I., 2012. The impact of corporate governance on the performance of Jordanian banks," European Journal of Scientific Research, 67 (3), pp. 349-359.

Abdulsamad, A.O., Yusoff, W.F.W., and Lasyoud, A.A., 2018. The influence of the board of directors' characteristics on firm performance: Evidence from Malaysian public listed companies. Corporate Governance and Sustainability Review, 2(1).

Anis, M., Chizema, A., Lui, X., and Fakhreldin, H., 2017. The Impact of Ownership Structure on Firms Financial Performance - Evidence from Egyptian Listed Companies. Global Journal of Human-Social Science Research, 17(6).

Afzalur, R., 2018. Board independence and firm performance: Evidence from Bangladesh. Future Business Journal, 4, 34–49.

Almajali, S., Alamro, A. , and Al-Soub, Y. Z., 2012. Factors affecting the financial performance of Jordanian insurance companies listed at Amman Stock Exchange. Journal of Management Research, 4(2), p. 266.

Aryani, Y.A., Setiawan, D., and Rahmawati, I.P., 2017. Board meeting and firm performance. Proceedings of International Conference on Economics 2017.

Almajali, A., 2012. Factors Affecting the Financial Performance of Jordanian Insurance Companies Listed at Amman StockExchange. Journal of Management ResearchISSN 1941-899X, 4(2).

Al-Qudah, A., 2014. Stock Exchange Development and Economic Growth: Empirical Evidence from Jordan. International Journal of Business and Management, 9(11).

Ayuso-Siart, S., and Argandoña, A., 2009. Responsible corporate governance: Towards a stakeholder board of directors?. Corporate Ownership and Control, 6(4), pp.9-19.

Al-Tal, Y., 2014. The roe of the Amman Stock Exchange in Jordanian corporate governance. University of Western Sydney, PhD thesis.

Appiah, K.O., & Chizema, A., 2016. The impact of board quality and nomination committee on corporate bankruptcy. Advances in Accounting, 35, 75-81.

Akbar, S., Poletti Hughes, J., El-Fatouri, R. and Shah, SZA., 2016). More on Corporate Governance and Firm Performance in the UK: Evidence from the Application of Generalized Method of Moments Estimation. Research in International Business and Finance, Accepted Manuscript, Forthcoming (DOI: 10.1016/j.ribaf.2016.03.009).

Ando, H., Cousins, R. and Young, C., 2014. Achieving Saturation in Thematic Analysis: Development and Refinement of a Codebook. Comprehensive Psychology, 3 (4)

Arazpour, A. and Fadaeinejad, M., 2014. The effects of corporate governance on stock liquidity: Evidence from Tehran Stock Exchange. Management Science Letters, 4(6), pp.1117-1122.

Almeida, H. and Campello, M., 2005. External Financing and Financing Constraints. SSRN Electronic Journal,.

Akenga, G., 2017. Effect of Liquidity on Financial Performance of Firms Listed at the Nairobi Securities Exchange, Kenya. International Journal of Science and Research (IJSR), 6(7), pp.279-285.

Ang, J.S., Cole, R.A. and Lin, J.W., 2000.Agency costs and ownership structure. Journal of Finance, 55, pp. 81–106.

Asymmetric Information: Theory and Applications LauriAuronen Helsinki University of Technology Department of Industrial Engineering and Management Lauri.Auronen@hut.fi May 21, 2003

Alexiou, C. and Sofoklis, V., 2009. Determinants of bank profitability: Evidence from the Greek banking sector. Ekonomski anali, 54(182), pp.93-118.

Anderson, R. and Reeb, D., 2003. Founding-Family Ownership, Corporate Diversification, and Firm Leverage. The Journal of Law and Economics, 46(2), pp.653-684.

Attig, N., 2007. Family pyramidal holdings and board of directors. International Journal of Business Governance and Ethics, 3(1), 394-406.

Ahuvia, A., 2001. Traditional, Interpretive, and Reception Based Content Analyses: Improving the Ability of Content Analysis to Address Issues of Pragmatic and Theoretical Concern. Social Indicators Research, 54(2), pp.139-172.

Aboubakr, A., and EsmaeilFadaeinejad, M. 2013. The effects of corporate governance on stock liquidity: Evidence from Tehran Stock Exchange
Ahuvia, A., 2001. Traditional, Interpretive, and Reception Based Content Analyses: Improving the Ability of Content Analysis to Address Issues of Pragmatic and Theoretical Concern. Social Indicators Research, 54(2), pp.139-172.

Al-Omari, R., 2020. The Impact of Liquidity, Solvency on Profitability: An Analysis of Jordanian Pharmaceutical Industries Sector. A multifaceted review journal in the field of pharmacy, 11(11).

AlQudah, A.M., Aleqab, M.M., and Shakhatreh, M.Z., 2019. The Impact of Board of Directors Characteristics on Banks Performance: Evidence from Jordan. Irbid-Jordan Academy of Accounting and Financial Studies Journal Volume 23 (2).

Achtenhagen, L., Inwinkl, P., Bjorktorp, J. Kallenius, R., 2018. More than two decades after the Cadbury Report: How far has Sweden, as role model for corporate-governance practices, come?. Int J Discl Gov 15, 235–251.

Ando, H., Cousins, R. and Young, C., 2014. Achieving Saturation in Thematic Analysis: Development and Refinement of a Codebook. Comprehensive Psychology, 3, pp.03.CP.3.4.

ALNAIF, B. and DRUTZ, H., 2014. Bacterial vaginosis increases in pessary users. Obstetrics & Gynecology, 93(4), p.S63.

Alsahlawi, A. and Ammer, M., 2017. Corporate Governance, Ownership Structure and Stock Market Liquidity in Saudi Arabia: A Conceptual Research Framework. Accounting and Finance Research, 6(4), p.17.

Almazari, A., 2014. The Relationship between Working Capital Management and Profitability: Evidence from Saudi Cement Companies. British Journal of Economics, Management & Trade, 4(1), pp.146-157.

Afza, T. and Nazir, M., 2015. Role of Institutional Shareholders' Activism in Enhancing Firm Performance: The Case of Pakistan. Global Business Review, 16(4), pp.557-570.

Ang, J.S., Cole, R.A. and Lin, J.W., 2000.Agency costs and ownership structure. Journal of Finance, 55, pp. 81–106.

Ahuvia, A., 2001. Traditional, Interpretive, and Reception Based Content Analyses: Improving the Ability of Content Analysis to Address Issues of Pragmatic and Theoretical Concern. Social Indicators Research, 54(2), pp.139-172.

Ando, H., Cousins, R. and Young, C., 2014. Achieving Saturation in Thematic Analysis: Development and Refinement of a Codebook. Comprehensive Psychology, 3, pp.03.CP.3.4.

Anglin, P. M. and Gao, Y., 2011. Corporate governance and information quality in capital markets. Research Paper.

Ariadna, D., 2010. Corporate governance and market liquidity. www.suef.org.

Adrian, T., Boyarchenko, N. and Shachar, O., 2017. Dealer balance sheets and bond liquidity provision. Journal of Monetary Economics, 89, pp.92-109.

Armstrong, G., Armstrong, A., Canales, J. and Bruce, P., 2005. Nanotubes with the TiO_2-B structure. Chemical Communications, (19), p.2454.

Abor, J., 2007. Corporate governance and financing decisions of Ghanaian listed firms. Corporate Governance: The international journal of business in society, 7(1), pp.83-92.

Abdul Rahman, R. and Haniffa, R., 2005. The effect of role duality on corporate performance in Malaysia. Corporate Ownership and Control, 2(2), pp.40-47.

Afrifa, G. and Tingbani, I., 2018. Working capital management, cash flow and SMEs' performance. International Journal of Banking, Accounting and Finance, 9(1), p.19.

AlAli, M. and Al-Yatama, S., 2019. Analyzing the Financial Soundness of Kuwaiti Banks Using CAMELS Framework. Financial Risk and Management Reviews, 5(1), pp.55-69.

Afonina, A. and Chalupský, V., 2014. The performance of high-tech companies: The evidence from the Visegrad Group. Ekonomická revue - Central European Review of Economic Issues, 17(4), pp.181-198.

Assfaw, A., 2018. Determinants of the Financial Performance of Private Commercial Banks in Ethiopia: Bank Specific Factors Analysis. Global Journal of Management and Business Research: C Finance, 18(3).

Arnold, J., Brys, B., Heady, C., Johansson, Å., Schwellnus, C. and Vartia, L., 2011. Tax Policy for Economic Recovery and Growth. The Economic Journal, 121(550), pp.F59-F80.

ADAMS, R. and FERREIRA, D., 2007. A Theory of Friendly Boards. The Journal of Finance, 62(1), pp.217-250.Arnold, J., Brys, B., Heady, C., Johansson, Å., Schwellnus, C. and Vartia, L., 2011. Tax Policy for Economic Recovery and Growth. The Economic Journal, 121(550), pp.F59-F80.

Alelfartas, E., 2019. The Impact of Internal Corporate Governance Mechanisms on the Unsystematic Risks at Jordanian Commercial Banks Listed on the Amman Stock Exchange. Research Journal of Finance and Accounting, 10(18, 2019).

Barucci, E. and Fontana, C., 2017. Financial Markets Theory. Springer Finance.

Bebchuk, L. and Ferrell, A., 2009. Federal Intervention to Enhance Shareholder Choice. SSRN Electronic Journal,.
Batchimeg, B., 2017. Financial performance measurement with the use of financial ratios: case of Mongolian companies. International Journal of Engineering and Management Sciences, 2(3), pp.20-32.

Bayaraa, B., 2017. Financial Performance Determinants of Organizations: The Case of Mongolian Companies. Journal of Competitiveness, 9(3), pp.22-33.

Babatunde, M. and Olaniran, O., 2009. The effects of internal and external mechanism on governance and performance of corporate firms in Nigeria. Corporate Ownership and Control, 7(2), pp.330-342.

BAGH, T., AZAD, T., RAZZAQ, S., LIAQAT, I. and KHAN, M., 2017. The Impact of Exchange Rate Volatility on Stock Index: Evidence from Pakistan Stock Exchange (PSX). International Journal of Academic Research in Accounting, Finance and Management Sciences, 7(3).

Baxter, P. and Cotter, J., 2009. Audit committees and earnings quality. Accounting & Finance, 49(2), pp.267-290.
Brown, L. and Caylor, M., 2004. Corporate Governance and Firm Performance. SSRN Electronic Journal.

Balagobei, S., 2018. Corporate Governance and Firm Performance: Empirical Evidence from Emerging Market. Asian Economic and Financial Review, 8(12), pp.1415-1421.

Bhatt, R. and Bhattacharya, S., 2015. Board structure and firm performance in Indian IT firms. Journal of Advances in Management Research, 12(3), pp.232-248.

Bagorogoza, J. and Waal, A., 2010. The role of knowledge management in creating and sustaining high performance organisations: The case of financial institutions in Uganda. World Journal of Entrepreneurship, Management and Sustainable Development, 6(4), pp.307-324.

Bozec, Y. and Bozec, R., 2011. Corporate governance quality and the cost of capital. International Journal of Corporate Governance, 2(3/4), p.217.Bolek, Monika; Wili'nski, Wojciech., 2012 : The influence of liquidity on profitability of Polish construction sector companies, e-Finanse: Financial Internet Quarterly, ISSN 1734-039X, University of Information Technology and Management, Rzeszów, Vol. 8, Iss. 1, pp. 38-52

Brooks, J.S., & Normore, A.H., 2015. Qualitative research and educational leadership: Essential dynamics to consider when designing and conducting studies. International Journal of Educational Management, 29(7), 798-807.

Becker, B. and T. Milbourn., 2011. How did market competition affect credit ratings? Journal of Financial Economics, forthcoming.

Banchuenvijit, W. (2012), Determinants of Firm Performance of Vietnam Listed.

Boyacioglu, A., M., and Akdogan, E., Y., 2014. The effect of corporate governance on firm performance: a case of Turkey. International Journal of Critical Accounting 6(2), pp 187 – 210.

Blair, M., 2007.Ownership and control – Rethinking corporate governance for the twenty-first century. In Clarke, T. (ed.), Theories of Corporate Governance. The Philosophical Foundations of Corporate Governance. Reprinted. London: Routledge, pp. 174–188.

Brancato, C., & Plath, C., 2004. Corporate governance best practices: A blueprint for the post-Enron era. New York: The Conference Board.

Brooks, J.S., &Normore, A.H., 2015. Qualitative research and educational leadership: Essential dynamics to consider when designing and conducting studies. International Journal of Educational Management, 29(7), 798-807.

Belkhir, M., 2009. Board of directors' size and performance in the banking industry. International Journal of Managerial Finance, 5(2), pp.201-221

Bebchuk, L., Cohen, A. and Ferrell, A., 2009. What Matters in Corporate Governance?. Review of Financial Studies, 22(2), pp.783-827.

Boo, E. and Sharma, D., 2008. The association between corporate governance and audit fees of bank holding companies. Corporate Governance: The international journal of business in society, 8(1), pp.28-45.

Ballinger, G. and Marcel, J., 2010. The use of an interim CEO during succession episodes and firm performance. Strategic Management Journal, 31(3), pp.262-283.

Ben, S. Bernanke, 2010. Chairman of the Board of Governors of the US Federal Reserve System, at the conference co-sponsored by the Center for Economic Policy Studies and the Bendheim Center for Finance, Princeton, New Jersey.

Bernanke, B., 2008. Current Economic and Financial Conditions. Business Economics, 43(4), pp.8-12.

Baranchuk, N. and Dybvig, P., 2009. Consensus in Diverse Corporate Boards. SSRN Electronic Journal,.

Clement, P., 2001. The Basel Committee on Banking Supervision report on customer due diligence, October 2001. Journal of Banking Regulation, 3(3), pp.206-207.

Caroll, J., and Sparks, J., 2014. Financial Market Participants. In M.Brose, M. Flood, D. Krishna and B. Nichols (EDS.), Hnadbook of Financial Data and Risk Information II: Software and Data (pp. 7-32). Cambridge: Cambridge University Press.

Cavus, U., Yildirim, S., Yurtseven, A. and Sonmez, E., 2015. Efficacy of Prothrombin Complex Concentrates for Oral Anticoagulant Therapy-related Major Hemorrhage. Journal of Academic Emergency Medicine, 14(1), pp.37-40.

Catchpole, C., Steinberg, R. and Wyess, W., 2004. Feasibility of remote control and development of remote control devices and sensors. 5. Continuous mining machine laser entry alignment sensor. International Journal of Rock Mechanics and Mining Sciences & Geomechanics Abstracts, 11(3), p.62.

Chahine, S. and Tohmé, N., 2009. Is CEO Duality Always Negative? An Exploration of CEO Duality and Ownership Structure in the Arab IPO Context. Corporate Governance: An International Review, 17(2), pp.123-141.

Chalmers, K., Hay, D., and Khlif, H., 2019. Internal control in accounting research: A review. Journal of Accounting Literature, 42.

Chae, J., 2005.Timing information, information asymmetry, and trading volume. The Journal of Finance, 61(1), 413-442.

Chambers, D., 2017. Financial Market History: Reflections on the Past for Investors Today

Financial Reporting Council. (2018).. [online] Frc.org.uk. Available at: https://www.frc.org.uk/getattachment/88bd8c45-50ea-4841-95b0-d2f4f48069a2/2018-UK-Corporate-Governance-Code-FINAL.PDF [Accessed 29 Nov. 2019].

Charmaz, Kathy C., 2006. Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis. Papers.Revista de Sociologia, 86, p.284.

Charmaz, Kathy C., 2006. Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis. Papers. Revista de Sociologia, 86, p.284.

Chaganti, R., Mahajan, V. and Sharma, S., 1985. CORPORATE BOARD SIZE, COMPOSITION AND CORPORATE FAILURES IN RETAILING INDUSTRY [1]. Journal of Management Studies, 22(4), pp.400-417.

CONGER, J. and LAWLER, E., 2009. Sharing Leadership on Corporate Boards:. Organizational Dynamics, 38(3), pp.183-191.

Cheung, Y.-L., Stouraitis, A., and Tan, W., 2011. Corporate governance, investment, and firm valuation. Journal of International Financial Management & Accounting, 22(3):246-273

Chen, K., Wu, A., 2016. The Structure of Board Committees. Academy of Management Annual Meeting Proceedings, (1):13306.

Chan, P., Li, S. and Chan, M., 2008. SU-GG-I-28: Performance Comparison of Two Different Cone-Beam CT Systems. Medical Physics, 35(6Part3), pp.2649-2649.

Chhaochharia, V. and Grinstein, Y., 2009. CEO Compensation and Board Structure. The Journal of Corporate

Cigna, G., P. and Sigheartau, A., 2017. Governance in Transition Economies Jordan Country Report. The European Bank for Reconstruction and Development.

Clement, P., 2001. The Basel Committee on Banking Supervision report on customer due diligence, October 2001. Journal of Banking Regulation, 3(3), pp.206-207.

DAHIYAT, A., 2016 Does Liquidity and Solvency Affect Banks Profitability? Evidence from Listed Banks in Jordan.

Darskuviene, V., 2010, Financial Markets. Leonardo da Vinci Transfer of Innovation, Vytautas Magnus University. Latvia.

Dastidar, S., 2017. Capital markets and investments. 13th ed.

David Silverman., 1993. "Beginning Research".Interpreting Qualitative Data. Methods for AnalysingTalk, Text and Interaction. Londres: Sage Publications.

Davis, J. H., Schoorman, F. D., & Donaldson, R., 1997.Toward a stewardship theory of management. Academy of Management Review, 22(1), 20-47

Denis, D., 2018. Simple and Multiple Linear Regression. In Book: SPSS Data Analysis for Univariate, Bivariate, and Multivariate Statistics, pp.103-130.

Drake, P. and Fabozzi, F., 2010. An Introduction to Financial Markets, Business Finance, and Portfolio ManagementThe Basics of Finance.

Debbie J. Dupuis, I, and Maria-Pia Victoria-Feser., 2013. Robust VIF regression with application to variable Selection in large data sets, The Annals of Applied Statistics, 2013, 7,319-34

Donadelli, M., Fasan, M. and Magnanelli, B., 2014. The Agency Problem, Financial Performance and Corruption: Country, Industry and Firm Level Perspectives. European Management Review, 11(3-4), pp.259-272.

Du Plessis, J., Hargovan, A., Bagaric, M., Bath, V., Jubb, C. and Nottage, L. (2011). Principles of contemporary corporate governance. 2nd ed. Cambridge [England]: Cambridge University Press.

Drobetz, W., Grüninger, M. and Hirschvogl, S., 2010. Information asymmetry and the value of cash. Journal of Banking & Finance, 34(9), pp.2168-2184.

Darroch, J., 2005. Knowledge management, innovation and firm performance. Journal of Knowledge Management, 9(3), pp.101-115.

Dumitrescu, A., 2010. Corporate Governance and Market Liquidity. SSRN Electronic Journal.

Diehl, M., 2016. Analyzing The Economics Of Financial Market Infrastructures. Hershey, Pa.: Business Science Refernce.

Duru, A.; Iyengar, R.J.; Zampelli, E.M.,2016. The dynamic relationship between CEO duality and firm performance: The moderating role of board independence. J. Bus. Res, 69, 4269–4277.

Denzin.NK & Lincoln.YA (2011) 6th Ed. The SAGE Handbook of qualitative research, SAGE, London UK.

Dobbin, F. and Jung, J., 2010. The misapplication of Mr. Michael Jensen: how agency theory brought down the economy and why it might again. Research in the Sociology of Organizations, pp.29-64.

Dufera, A., 2010. Financial Performance Evaluation. A Case Study of Awash International Bank (AIB). Retrieved from.

Donaldson-Davis, K., 2019. Retirement financial literacy levels among Jamaicans. Innovation in Aging, 3(Supplement_1), pp.S580-S580.

Ehikioya, B., 2009. Corporate governance structure and firm performance in developing economies: evidence from Nigeria. Corporate Governance: The international journal of business in society, 9(3), pp.231-243.

Esposito De Falco, S. and Renzi, A., 2020. Benefit Corporations and Corporate Social Intrapreneurship. Entrepreneurship Research Journal, 10(4).

Eddleston, K. A., &Kellermanns, F. W., 2007. Destructive and productive family relationships: A stewardship theory perspective. Journal of Business Venturing, 22(4), 545-565.

Eton, M., Uwonda, G., Mwosi, F., Barigye, G. and Ogwel, P., 2019. Financial Inclusion and Economic Growth in Uganda A case study of selected districts in Western Uganda. International Journal of Advances in Scientific Research and Engineering, 05(10), pp.138-151.

Edem, D., B., 2017. Liquidity management and performance of deposit money banks in Nigeria (1986–2011): An investigation. International Journal of Economics, Finance and Management Sciences, 5(3), 146-161.

Elsayed, K., 2007. Does CEO Duality Really Affect Corporate Performance?. Corporate Governance: An International Review, 15(6), pp.1203-1214.

Ebun, Araoye.F., and Emmanuel, Olatunji. T., 2019. BOARD MEETINGS AND FINANCIAL PERFORMANCE OF INSURANCE COMPANIES IN NIGERIA. European Journal of Accounting, Auditing and Finance Research, ECRTD-UK Print , 7(9), pp.1-16.

Elsayed, K., 2007. Does CEO Duality Really Affect Corporate Performance?. Corporate Governance: An International Review, 15(6), pp.1203-1214.

Ehikioya, B., 2009. Corporate governance structure and firm performance in developing economies: evidence from Nigeria. Corporate Governance: The international journal of business in society, 9(3), pp.231-243.

Etebari, A. 2018. Variance Analysis of Financial Ratios and Industry Target Ratios, Global Journal of Contemporary Research in Accounting, 4 (1), pp. 580–594.

Emile, R., Ragab, A., and Kyaw, S., 2014. The Effect of Corporate Governance on Firm Performance, Evidence from Egypt. Asian Economic and Financial Review, 4(12), 1865-1877.

Elloumi, F. and Gueyié, J., 2001. CEO compensation, IOS and the role of corporate governance. Corporate Governance: The international journal of business in society, 1(2), pp.23-33.

FABOZZI, F., JONES, F., FABOZZI, F. and MANN, S., 2019. Foundations of global financial markets and institutions. Cambridge (MA): The MIT Press.

Foerster, S. and Sapp, S., 2005. Valuation of financial versus non-financial firms: a global perspective. Journal of International Financial Markets, Institutions and Money, 15(1), pp.1-20.

Flick, U. (2014) 5th Ed. An introduction to qualitative research. SAGE Publications: London

Farinha, J., 2003. Corporate Governance: A Survey of the Literature. SSRN Electronic Journal

Fàbregues, S. and Paré, M., 2007. Charmaz, Kathy C., 2006. Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis. Papers. Revista de Sociologia, 86, p.284.

Fabozzi, F., 2015. Capital Markets. 5th ed. Institutions, Instruments, and Risk Management, The MIT Press.
FRESARD, L., 2010. Financial Strength and Product Market Behavior: The Real Effects of Corporate Cash Holdings. The Journal of Finance, 65(3), pp.1097-1122.
Farinha, J., 2003. Corporate Governance: A Survey of the Literature. SSRN Electronic Journal.

Fama, E. and Jensen, M., 1983. Agency Problems and Residual Claims. The Journal of Law and Economics, 26(2), pp.327-349.

Ficici, A. and Aybar, C. B., 2012. Corporate governance and firm value in emerging markets: An empiricalanalysis of ADR issuing emerging market firms. Emerging Markets Journal, 2: 37-51.

Fauzi, F., Hewa Wellalage, N. and Locke, S., 2012. The Global Financial Crisis' Impact on Short-Term Performance of IPO: The Case Study of New Zealand Firms' IPOs. SSRN Electronic Journal.

Filatotchev, I., Bell, R. and Rasheed, A., 2016. Globalization of Capital Markets: Implications for Firm Strategies. Journal of International Management, 22(3), pp.211-221.

Gehrig, T., and M. Haas. 2016. "Anomalous Trading Prior to Lehman Brothers Failure." Finance Working Paper No. 424/2014, European Corporate Governance Institute (March): http://papers.ssrn.com/sol3/papers. Cfm?Abstract id 2408489.

Gontarek, W. and Belghitar, Y., 2018. Risk governance: Examining its impact upon bank performance and risk-taking. Financial Markets, Institutions & Instruments, 27(5), pp.187-224.

Fauzi, F. and Locke, S., 2012. Do Agency Costs Really Matter? A Non-linear Approach of Panel Data. Asian Journal of Finance & Accounting, 4(1).

Guest, P. M., 2009. The impact of board size on firm performance: evidence from the UK. The European Journal of Finance, 15(4), 385-404.

Gupta, A., Mishra, P., Pandey, C., Singh, U., Sahu, C. and Keshri, A., 2019. Descriptive statistics and normality tests for statistical data. Annals of Cardiac Anaesthesia, 22(1), p.67.

Guo, Z. and Kga, U., 2012. Corporate Governance and Firm Performance of Listed Firms in Sri Lanka. Procedia - Social and Behavioral Sciences, 40, pp.664-667.

Gambo, E., Bello, B. and Rimamshung, S., 2018. Effect of Board Size, Board Composition and Board Meetings on Financial Performance of Listed Consumer Goods in Nigeria. International Business Research, 11(6), p.1.

Gray, P., 2015. The Science of Movement.R. A. R. Tricker , B. J. K. Tricker. The Quarterly Review of Biology, 43(2), pp.221-221.

Gillan, S., 2006. Recent Developments in Corporate Governance: An Overview. Journal of Corporate Finance, 12(3), pp.381-402.

Guillet, B.D.; Seo, K.; Kucukusta, D.; Lee, S.,2013. CEO duality and firm performance in the U.S. restaurant industry: Moderating role of restaurant type. Int. J. Hosp. Manag, 33, 339–346.

Gohar, R.; Batool, A., 2015. Effect of Corporate Governance on Performance of Microfinance Institutions: Case from Pakistan. Emerg. Mark. Financ. Trade, 51, S94–S106.

GEORGE A. AKERLOF; The market for "lemons": Quality uncertainty and the market mechanism; The Quarterly Journal of Economics 84(3):488–500; 1970

Ghabayen, M., 2012. Board Characteristics and Firm Performance: Case of Saudi Arabia. International Journal of Accounting and Financial Reporting, 2(2), p.168.

Gentry, J., Maness, T. and Zietlow, J., 1994. Short-Term Financial Management. The Journal of Finance, 49(2).

Gontarek, W. and Belghitar, Y., 2018. Risk governance: Examining its impact upon bank performance and risk-taking. Financial Markets, Institutions & Instruments, 27(5), pp.187-224.

Gove, S. and Junkunc, M., 2012. Dummy Constructs? Binomial Categorical Variables as Constructs: The Case of CEO duality. Academy of Management Proceedings, 2012(1), p.16888.

Hafer, R. and Hein, S., 2007. The stock market. Westport, Conn.: Greenwood Press.

HamdanAmer Al-Jaifi, Ahmed Hussein Al-rassas, Adel Ali AL-Qadasi, 2017 Corporate governance strength and stock market liquidity in Malaysia, International Journal of Managerial Finance Vol. 13 No. 5, 2017 pp. 592-610 © Emerald Publishing Limited

Huang, C.L. & Chang, B.G., 2010. The effects of managers' moral philosophy on project decision 200 under agency problem conditions. Journal of Business Ethics, 94(4), pp.595–611.

Hutchinson, M. and Zain, M., 2009. Internal audit quality, audit committee independence, growth opportunities and firm performance. Corporate Ownership and Control, 7(2), pp.50-65.

Hasbrouck, L., 2003. Use of Epidemiology in Clinical Medical Publications, 1983-1999: A Citation Analysis. American Journal of Epidemiology, 157(5), pp.399-408.

Huse, M., 1990. Board composition in small enterprises. Entrepreneurship & Regional Development, 2(4), pp.363-374.

Huang, C.L. & Chang, B.G., 2010. The effects of managers' moral philosophy on project decision 200 under agency problem conditions. Journal of Business Ethics, 94(4), pp.595–611.

Hassan Che Haat, M., Abdul Rahman, R. and Mahenthiran, S., 2008. Corporate governance, transparency and performance of Malaysian companies. Managerial Auditing Journal, 23(8), pp.744-778.

Hatem, B., 2017. Influence of Debt Maturity on Firm Performance: An International Comparison. International Journal of Economics and Finance, 9(5), p.106.

Halder, P. and Samad, A., 2015. Wave Energy Harvesting Turbine: Performance Enhancement. Procedia Engineering, 116, pp.97-102.

Heenetigala, K. and Armstrong, A., 2010. Corporate Governance Issues Facing Small Corporations in Australia. SSRN Electronic Journal.

Heenetigala, K. and Armstrong, A., 2011. The Impact of Corporate Governance on Firm Performance in an Unstable Economic and Political Environment: Evidence from Sri Lanka. SSRN Electronic Journal.

Hasan, I., Kobeissi, N. and Song, L., 2014. Corporate governance, investor protection, and firm performance in MENA countries. Middle East Development Journal, 6(1), pp.84-107.

Hewa Wellalage, N. and Locke, S., 2011. Capital Structure Choice: A Case Study on New Zealand Unlisted Firms. SSRN Electronic Journal.

Högerle, B., Charifzadeh, M., Ferencz, M. and Kostin, K., 2020. The development of working capital management and its impact on profitability and shareholder value: Evidence from Germany. Strategic Management, 25(2), pp.27-39.

Joffe, H., & Yardley, L., 2004.analysis. Research methods for clinical and health psychology (pp. 56-68). London: Sage.

Joanna Brooks and Nigel King.,, 2015. Doing Template Analysis: Evaluating an end-of life care service, Centre for Jensen, M. and Meckling, W., 1976 "Theory of the Firm: Managerial Behavior, Agency Costs And Ownership Structure". Journal of Financial Economics 3 (4), 305-360

Joel Hasbrouck., 2003. Intraday Price Formation in U.S. Equity Index Markets.THE JOURNAL OF FINANCE, VOL. LVIII, NO. 6, DECEMBER 2003

Jaimes-Valdez, M., Jacobo-Hernandez, C. and Ochoa-Jimenez, S., 2017. Corporate Governance: International Context and Trends from 2005 to 2015. International Journal of Business and Management, 12(3), p.158.

Joo, T. W. (Ed.)., 2004. Corporate governance: Law, theory and policy. Durham, NC: Carolina Academic Press.

Joel Hasbrouck, 2003. Intraday Price Formation in U.S. Equity Index Markets. THE JOURNAL OF FINANCE, VOL. LVIII, NO. 6, DECEMBER 2003

Johl, S., Jackling, B. and Joshi, M., 2010. Family generation, leadership, and performance: The role of outside directors in Indian family firms. Corporate Ownership and Control, 8(1), pp.646-661.

Jensen, M. and Meckling, W., 1976 "Theory of The Firm: Managerial Behavior, Agency Costs And Ownership Structure". Journal of Financial Economics 3 (4), 305-360

Jackling, B. and Johl, S., 2009. Board Structure and Firm Performance: Evidence from India's Top Companies. Corporate Governance: An International Review, 17(4), pp.492-509.

Johnson, R., 2014. Equity Markets and Portfolio Analysis (Bloomberg Financial Book 618).

Johl, S., Kaur, S. and Cooper, B., 2015. Board Characteristics and Firm Performance: Evidence from Malaysian Public Listed Firms. Journal of Economics, Business and Management, 3(2), pp.239-243.

Khetsi, Q. and Mongale, I., 2015. The impact of capital markets on the economic growth in South Africa. Journal of Governance and Regulation, 4(1), pp.154-163.

Kandukuri, R.L., Memdani, L. and Raja Babu, P. (2015), "Effect of Corporate Governance on Firm Performance: A Study of Selected Indian Listed Companies", Overlaps of Private Sector with Public Sector around the Globe (Research in Finance, Vol. 31), Emerald Group Publishing Limited, pp. 47-64

Khidmat, W. and Rehman, M., 2014. The impact of free cash flows and agency costs on firm performance: An empirical analysis of KSE listed companies of Pakistan. Journal of Financial Engineering, 01(03), p.1450027.

Keay, A., 2017. Stewardship theory: is board accountability necessary? International Journal of Law and Management, 59(6), pp.1292-1314.

Kalsie, A. and Shrivastav, S., 2016. Analysis of Board Size and Firm Performance: Evidence from NSE Companies Using Panel Data Approach. Indian Journal of Corporate Governance, 9(2), pp.148-172.

Kiel, G. and Nicholson, G., 2003. Board Composition and Corporate Performance: how the Australian experience informs contrasting theories of corporate governance. Corporate Governance, 11(3), pp.189-205.

Kouki, M. and Guizani, M., 2015. Outside Directors and Firm Performance: The Moderating Effects of Ownership and Board Leadership Structure. International Business Research, 8(6).

Kuncová, M., Hedija, V. and Fiala, R., 2016. Firm Size as a Determinant of Firm Performance: The Case of Swine Raising. Agris on-line Papers in Economics and Informatics, 08(03), pp.77-89.

Kiradoo, G., 2019. Impact of Corporate Governance on the Profitability and the Financial Performance of the Organization. Journal of Management (JOM), 6 (3), pp. 192-16.

Krause, R.; Semadeni, M.; Cannella, A.A., Jr.,2014. CEO duality: A review and research agenda. J. Manag, 40, 256–286. Positive.

Khan, M, K., Nouman, M., and Imran., 2015. Determinants of financial performance of financial sectors (An assessment through economic value added). Published in: : pp. 1-32.

Kharatyan, D., Nunes, A., and Lopes C., C., 2016. Ratios and indicators that determine return on equity, http://hdl.handle.net/10198/13313.

Krause, R., Semadeni, M. and Cannella, A., 2013. CEO Duality. Journal of Management, 40(1), pp.256-286.

Kang, J. K., Liu, W. L., Low, A., and Zhang, L., 2018. Friendly boards and innovation. Journal of Empirical Finance, 45, 1-19.

Kirsch, A., 2018. The gender composition of corporate boards: A review and research agenda. The Leadership Quarterly, 29(2), 346-364.

Keynes, John M., 1930, Treatise on Money, London: Macmillan.

Khrawish, H., 2011. Determinants of Commercial Banks Performance: Evidence from Jordan. International Research Journal of Finance and Economics, 12(1).

Kosmas Papadopoulos. 2019. Independent and thoughtful analysis of the latest trends in corporate governance and shareholder voting. Institutional Shareholder Services 1 of 8 Corporate Governance in Emerging Markets

La Porta, R., Lopez-De-Silanes, F., Shleifer, A. and Vishny, R. W., 2002, “Investor Protection and Corporate Valuation”, the Journal of Finance, vol. 57, no. 3, pp. 1147-1170

Lee, P. M., & O’Neill, H. M.. 2003. Ownership structures and R&D investments of U.S. and Japanese firms: Agency and stewardship perspectives. Academy of Management Journal, 46(2), 212-225.

Laughlin, R., 1980. External Financial Control Systems: Theory and Application. Managerial Finance, 6(1), pp.32-51.

Lina Warrad and Rania Al Omari, 2015. The Impact of Turnover Ratios on Jordanian Services Sectors’ Performance. Journal of Modern Accounting and Auditing, 11(2).

La Porta, R., Lopez-De-Silanes, F. and Shleifer, A., 2000, “Investor protection and corporate governance”, Journal of Financial Economics, vol. 58, no. 1-2, pp. 3-27.

La Porta, R., Lopez de Silanes, F., Shleifer, A. and Vishny, R., 2000. Investor Protection and Corporate Governance. SSRN Electronic Journal.

Laing, D. and Weir, C., 1999. Governance structures, size and corporate performance in UK firms. Management Decision, 37(5), pp.457-464.

Lipton, M. and Lorsch, J.W. (1992), “A Modest Proposal for Improved Corporate Governance”, Business Lawyer, 48, 59-77.

La Porta, R., Lopez-De-Silanes, F., Shleifer, A. and Vishny, R. W., 2002, “Investor Protection and Corporate Valuation”, The Journal of Finance, vol. 57, no. 3, pp. 1147-1170

Lee, P. M., & O’Neill, H. M., 2003. Ownership structures and R&D investments of U.S. and Japanese firms: Agency and stewardship perspectives. Academy of Management Journal, 46(2), 212-225.

La Rocca, M. and Cambrea, D., 2018. The effect of cash holdings on firm performance in large Italian companies. Journal of International Financial Management & Accounting, 30(1), pp.30-59.

Larcker, D. and Tayan, B., 2015. Corporate Governance Matters: A Closer Look at Organizational Choices and Their Consequences

Marte Uadiale, O., 2010. The Impact of Board Structure on Corporate Financial Performance in Nigeria. International Journal of Business and Management, 5(10).

Madison, K. J., 2014. Agency Theory and Stewardship Theory Integrated, Expanded, and Bounded by Context: An Empirical Investigation of Structure, Behavior, and Performance within Family Firms. "PhD diss., University of Tennessee. https://trace.tennessee.edu/utk_graddiss/2711

Mallin, C., 2010 Corporate Governance. Oxford: Oxford University Press

Mallin, C. and Melis, A., 2010. Shareholder rights, shareholder voting, and corporate performance. Journal of Management & Governance, 16(2), pp.171-176.

Matolcsy, Z. and Wright, A., 2011. CEO compensation structure and firm performance. Accounting & Finance, 51(3), pp.745-763.

Moscu, R., 2015. Empirical Evidences Regarding Correlation between Dividend Policy and the Performance of Companies Listed on the Bucharest Stock Exchange. International Journal of Academic Research in Business and Social Sciences, 4(12).

Molefe, B., & Muzindutsi, P. F. (2016). Effect of capital and liquidity management on profitability of major South African banks. In Proceedings of the 28th Conference of the South African Institute of Management Scientists.
Ministry of Industry and Trade of Jordan, access date: 07-2020, https://www.mit.gov.jo/En/List/Publications_and_Studies.

McColgan P., 2001, "Agency theory and corporate governance: a review of the literature from a UK perspective", Department of Accounting & Finance, University of Strathclyde,Glasgow.

Md Shamimul H, Normah Binti , and Morrison, S. 2012. The Importance of Corporate Governance in Promoting Business: Perception and Reality. Conference: International Conference on Islamic Economics, Governance and Social Enterprise, IConIGS.

Matar, A. and Eneizan, B., 2018. Determinants of Financial Performance in the Industrial Firms: Evidence from Jordan. Asian Journal of Agricultural Extension, Economics & Sociology, 22(1), pp.1-10.

Mishkin, F. and Eakins, S., 2018. Financial markets and institutions. 9th ed. British Library Cataloguing-in-Publication Data.

Mulili, B. and Wong, P., 2011. Corporate Governance Practices in Developing Countries: The Case for Kenya. International Journal of Business Administration, 2(1).

Mohamed Zerban, A. and Abdullateef Madani, A., 2017. Corporate Governance and Board of Directors Responsibility in Appointing Senior Managers: A Case in Saudi Arabia. International Journal of Business and Management, 13(1), p.183.

Mutlu, C.C.; Van Essen, M.; Peng, M.W.; Saleh, S.F.; Duran, P.,2018. Corporate Governance in China: Meta-Analysis. J. Manag. Stud, 55, 943–979.

Mishra, S. and EDUCREATION, S., 2017. Handbook of Research Methodology. 1st ed. Educreation.

Maher, M. and Andersson, T., 2000. Corporate Governance: Effects on Firm Performance and Economic Growth. SSRN Electronic Journal.

Mohamad, W. and Sulong, Z., 2010. Corporate governance mechanisms and extent of disclosure: Evidence from listed companies in Malaysia. International Business Research, 3(4).

Mirza, A,., 2013. Determinants of financial performance of a firm: Case of Pakistani stock market. Journal of Economics and International Finance, 5(2), pp.43-52.

Matar, A. and Eneizan, B., 2018. Determinants of Financial Performance in the Industrial Firms: Evidence from Jordan. Asian Journal of Agricultural Extension, Economics & Sociology, 22(1), pp.1-10.

Munshi Samaduzzaman, M., 2015. Literature Critique: "Competition Law, Enforcement and the Australian small business sector”. IOSR Journal of Business and Management, 6(5), pp.38-40.

Marashdeh, H. and Al-Malkawi, H., 2014. Financial Deepening and Economic Growth in Saudi Arabia. Journal of Emerging Market Finance, 13(2), pp.139-154.

Milgrom, P. and Roberts, J. (1992) Economics, Organization and Management. New Jersey: Prentice Hall.

Mishkin, F. 2017, Economics of Money, Banking and Financial Markets (What's New in Economics), 12th Edition

Madison, K. J., 2014. Agency Theory and Stewardship Theory Integrated, Expanded, and Bounded by Context: An Empirical Investigation of Structure, Behavior, and Performance within Family Firms. "PhD diss., University of Tennessee. https://trace.tennessee.edu/utk_graddiss/2711

Mashayekhi, B. and Bazaz, M., 2008. Corporate Governance and Firm Performance in Iran. Journal of Contemporary Accounting & Economics, 4(2), pp.156-172.

Mukaka, M.M, 2012, Statistics Corner: A guide to appropriate use of Correlation coefficient in medical research 1,2,3 1Malawi-Liverpool Wellcome Trust Clinical Research Program Department of Community Health, College of Medicine, University of Malawi, University of Liverpool. Malawi Medical Journal; 24(3): 69-71

Naz, F., Ijaz, F. and Naqvi, F., 2016. Financial Performance of Firms: Evidence from Pakistan Cement Industry. Journal of Teaching and Education, 05(01), pp.81-94.

Nyabwanga Robert Nyamao, 2012. Effect of working capital management practices on financial performance: A study of small scale enterprises in Kisii South District, Kenya. AFRICAN JOURNAL OF BUSINESS MANAGEMENT, 6(18).

Ntim, C. G., & Osei, K. A., 2013. The impact of corporate board meetings on corporate performance in South Africa. African Review of Economics and Finance, 2(2), 83-103.

Noor, A., 2019. Corporate Governance, Firm Attributes and Financial Performance: Evidence from Pakistan. Pakistan Social Sciences Review, 3(II), pp.435-447.

Nwokwu, T., Atapattu, A. and Athambawa, A., 2019. The Impact of Board Members Involvement on Return on Equity (ROE). Modern Economy, 10(04), pp.1334-1347.

Oehmichen, J 2018, 'East meets west -Corporate governance in Asian emerging markets: A literature review and research agenda', International Business Review, vol. 27, no. 2, pp. 465-480.

Oman, C. P., 2001, "Corporate Governance and National Development", An outgrowth of the OECD Development Centre s Experts Workshop in 2000 and Informal Policy Dialogue in 2001 sponsored in part by CIPE.

OECD (2019), OECD Survey of Corporate Governance Frameworks in the Middle East and North Africa, http://www.oecd.org/corporate/OECD-Survey-of-Corporate-Governance-Frameworks-in-MENA.htm.

OLAREWAJU, O. and ADEYEMI, O., 2015. Causal Relationship between Liquidity and Profitability of Nigerian Deposit Money Banks. International Journal of Academic Research in Accounting, Finance and Management Sciences, 5(2).

Olayiwola, W., 2010. Practice and Standard of Corporate Governance in the Nigerian Banking Industry. International Journal of Economics and Finance, 2(4).

Olumide, C. A (2010), The Relationship between Firm Experience and Growth in the Nigerian Food, Beverages and Tobacco Industry, Unpublished PhD Dissertation, University of Ilorin.

Onofrei , M., Firtescu, B., and Terinte, P., 2019. CEO Duality and Firm Profitability. Evidence from Emerging Europe. Romanian Statistical Review, 2.

Palaniappan G., 2017. Determinants of corporate financial performance relating to board characteristics of corporate governance in Indian manufacturing industry: An empirical study. European Journal of Management and Business Economics, 26 (1), pp. 67-85.

Pervan, M., Pervan, I. and Curak, M., 2017. The Influence of Age on Firm Performance: Evidence from the Croatian Food Industry. Journal of Eastern Europe Research in Business and Economics, pp.1-9.

Pástor, L. and Stambaugh, R., 2001. Mutual Fund Performance and Seemingly Unrelated Assets. SSRN Electronic Journal.

Pervan, M., Pervan, I. and Ćurak, M., 2017. The Influence of Age on Firm Performance: Evidence from the Croatian Food Industry. Journal of Eastern Europe Research in Business and Economics, pp.1-9.

Panda, B. and Leepsa, N., 2017. Agency theory: Review of Theory and Evidence on Problems and Perspectives. Indian Journal of Corporate Governance, 10(1), pp.74-95.

Pearce, J. and Zahra, S., 1991. The relative power of ceos and boards of directors: Associations with corporate performance. Strategic Management Journal, 12(2), pp.135-153.

Petchsakulwong, P., and Jansakul, N., 2018. Board of directors and profitability ratio of Thai non-life insurers. Kasetsart Journal of Social Sciences, 39(1), 123-127.

Paul, J. 2017. Board activity and firm performance. Indian Journal of Corporate Governance, 10(1).

Petchsakulwong, P., and Jansakul, N., 2018. Board of directors and profitability ratio of Thai non-life insurers. Kasetsart Journal of Social Sciences, 39(1), 122-128.

Pearce, J. and Zahra, S., 1992. BOARD COMPOSITION FROM A STRATEGIC CONTINGENCY PERSPECTIVE. Journal of Management Studies, 29(4), pp.411-438.

Piesse, J., Strange, R. and Toonsi, F., 2011. Is there a distinctive MENA model of corporate governance?. Journal of Management & Governance, 16(4), pp.645-681.

Pordea, D., David, D. and Mateș, D., 2020. The Impact of Operating Cash Flow and Current Ratio on the Profitability in Construction Industry. Studia Universitatis „Vasile Goldis" Arad – Economics Series, 30(1), pp.22-32.

Pigou, A., 1936. Mr. J. M. Keynes' General Theory of Employment, Interest and Money. Economica, 3(10), p.115.
Rungtusanatham, M. et al.., 2007. Vendor-Owned Inventory Management Arrangements in Retail: An Agency Theory Perspective. Journal of Business Logistics, 28(1), pp.111–135.

Ryan, Gemma., (2018. Introduction to positivism, interpretivism and critical theory. Nurse Researcher, 25(4) pp. 41–49 DOI: https://doi.org/10.7748/nr.2018.e1466

Ryan, R. M., &Deci, E. L., 2000. Intrinsic and extrinsic motivations: Classic definitions and new directions. Contemporary Educational Psychology, 25, 54–67.

Rehman, M. Z., Khan, M. N., and Khokhar, I., 2015. Investigating liquidity-profitability relationship : Evidence from companies listed in Saudi stock exchange (Tadawul). Journal of Applied Finance & Banking, 5(3), 159–173.

Roberts, D., 2012. Designing a results framework for achieving results: a how-to guide. Independent Evaluation Group, International Bank for Reconstruction and Development/World Bank, Washington, D.C.

Raheja, C., 2005. Determinants of Board Size and Composition: A Theory of Corporate Boards. Journal of Financial and Quantitative Analysis, 40(2), pp.283-306

Robin Thakur et al., R., 2017. Correlation Development for Erosive Wear Rate on Pelton Turbine Buckets. International Journal of Mechanical and Production Engineering Research and Development, 7 (3).

Rungtusanatham, M. et al., 2007. Vendor-Owned Inventory Management Arrangements in Retail: An Agency Theory Perspective. Journal of Business Logistics, 28(1), pp.111–135.

Rejeb, JB., Missaoui, I., 2019. The Impact of Corporate Governance on Firm Performance: Evidence From Bahrain Bourse. Journal of Business & Financial Affairs, 8 (1), pp2-7.

Sun, J. and Cahan, S., 2009. The Effect of Compensation Committee Quality on the Association between CEO Cash Compensation and Accounting Performance. Corporate Governance: An International Review, 17(2), pp.193-207.

Sanford, J. Grossman, and Oliver, D. Hart; Implicit contracts under asymmetric information; The Quarterly Journal of Economics 98(Supplement):123–156; 1983.

Saunders, A. and Cornett, M., 2012. Financial Markets and Institutions. New York: McGraw-Hill/Irwin.

Shankman, Neil. 1999. "Reframing the Debate Between Agency And Stakeholder Theories Of The Firm". Journal of Business Ethics 319-334

Sthapit,A. B.,Yadav,R. P.,Khanal, S. P.,& Dangol, P.M., 2017. Fundamentals of Statistics. Kathmandu: Asmita Publication.

Stahel, Christof W., 2004, "Is there a Global Liquidity Factor," Mimeo. Ohio State University.

Siddhartha, G 2017, Capital Markets and Investments: Essential Insights and Concepts for Professionals

Solomon, J., 2010. Corporate Governance and Accountability. 2nd edition. Chichester: John Wiley & Sons.

Saunders, R., 2012. Companion interview. BSAVA Companion, 2012(1), pp.30-31.

Sorana, V., 2015. Determinants of Return on Assets in Romania: A Principal Component Analysis. Timisoara Journal of Economics and Business, 8(s1), pp.32-47.

Salim, M. and Yadav, R., 2012. Capital Structure and Firm Performance: Evidence from Malaysian Listed Companies. Procedia - Social and Behavioral Sciences, 65, pp.156-166.

Solomon, J., 2011. Corporate Governance and Accountability. 3rd edition. Chichester: John Wiley & Sons

Samiloglu, F. and Demirgunes, K., 2008. The Effect of Working Capital Management on Firm Profitability: Evidence from Turkey. The International Journal of Applied Economics and Finance, 2(1), pp.44-50.

Shen, N, Au, K & Yi, L 2018, 'Diversification strategy, ownership structure, and financial crisis: Performance of Chinese private firms', Asia-Pacific Journal of Financial Studies, vol. 47, no. 1, pp. 54-80.

Singh, S., Tabassum, N., Darwish, T. K., and Batsakis, G., 2018. Corporate governance and Tobin's Q as a measure of organizational performance. British Journal of Management, 29(1), 171-190.

Saha, K., N., 2018. Corporate Governance and Firm Performance: The Role of the Board and Audit Committee. Asian Journal of Finance & Accounting, 10 (1).

Sonmez, D. and Yildırım, S., 2015. A Theoretical Aspect on Corporate Governance and Its Fundamental Problems: Is It a Cure or Another Problem in the Financial Markets?. Journal of Business Law and Ethics, 3(1).

Singh, S.; Tabassum, N.; Darwish, T.K.; Batsakis, G., 2018. Corporate Governance and Tobin'sQas a Measure of Organizational Performance. Br. J. Manag, 29, 171–190.

Silva, C., 2017. Research Design - The New Perspective of Research Methodology. British Journal of Education, Society & Behavioural Science, 19(2), pp.1-12.

Shrivastav, S. and Kalsie, A., 2018. The Relationship between Corporate Governance, Ownership Concentration and Firm Performance: Empirical Evidence from India. IIMS Journal of Management Science, 9(1), p.1.

Shleifer, A. and Vishny, R., 1997. A Survey of Corporate Governance. The Journal of Finance, 52(2), pp.737-783.

Shamshuddin M Nadaf, and Bhimappa S Navi. 2017. Corporate Governance: Issues, Opportunities and Challenges

Sumon, H., Abu Naser, Mohammad, S. 2016. Impact of Firm Size on Financial Performance of Banking Companies in Bangladesh.

Hasan Mansur and Anita Tangl. (2018). "The Effect of Corporate Governance on the Financial Performance of Listed Companies in Amman Stock Exchange (Jordan)" Journal of Advanced Management Science, Vol. 6, No. 2, pp. 97-102, June 2018. doi: 10.18178/joams.6.2.97-10

Tomasic, R. and Akinbami, F., 2013. The Role of Trust in Maintaining the Resilience of Financial Markets. SSRN Electronic Journal.

Triki, M. and Bouaziz, Z., 2012. The Impact of the Board of Directors on the Financial Performance of Tunisian Companies. SSRN Electronic Journal.

Tomasic, Roman & Akinbami, Folarin., 2013. Trust and Public Companies: Beginning to Reconceptualise Corporate Law in a Networked World. Australian Journal of Corporate Law 27: 233-261.

Tarek A. Elsharif,m., 2017, "The impact of Liquidity Management on Profitability", Graduate School of Social Sciences, Research Gate.

Tehranian, H., Cornett, M., Marcus, A. and Saunders, A., 2006. Earnings Management, Corporate Governance, and True Financial Performance. SSRN Electronic Journal.

Toumar, S.J. 2008 "Corporate governance and bank performance: evidence from Jordanian banking industry," M.A. thesis, School of business, The University of Jordan, Amman, Jordan.

Tang, J.,2017. CEO duality and firm performance: The moderating roles of other executives and blockholding outside directors. Eur. Manag. J, 35, 362–372.

Thibaut Mastrolia, Zhenjie Ren., 2018. Principal-Agent Problem with Common Agency without Communication. 01534611v2f.

Taherdoost, H., 2016. Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research.

Ting, I., Hanh, L., Kweh, Q. and Hoanh, L., 2018. Board meeting frequency and financial performance: a case of listed firms in Vietnam. International Journal of Business and Society, 19(2).

Ujunwa, A., 2012. Board characteristics and the financial performance of Nigerian quoted firms. Corporate Governance: The international journal of business in society, 12(5), pp.656-674.

Uyar, A., 2009. Quality performance measurement practices in manufacturing companies. The TQM Journal, 21(1), pp.72-86.
Marte Uadiale, O., 2010. The Impact of Board Structure on Corporate Financial Performance in Nigeria. International Journal of Business and Management, 5(10).

Vasudev, P. M. and Watson, ., 2012. Corporate Governance after the Financial Crisis eds., Edward Elgar Ltd.

Van den Berghe, L. and Levrau, A., 2004. Evaluating Boards of Directors: what constitutes a good corporate board?. Corporate Governance, 12(4), pp.461-478.

Vallejo, M. C., 2009. The effects of commitment of non-family employees of family firms from the perspective of stewardship theory. Journal of business ethics, 87(3), 379-390.

Veal, A., 2005. RIBA symposium encourages new links between design and research. Architectural Research Quarterly, 9(1), pp.17-19.

Vătavu, S., 2015. The Impact of Capital Structure on Financial Performance in Romanian Listed Companies. Procedia Economics and Finance, 32, pp.1314-1322.

Williamson, K. and Johanson, G., 2017. Research methods. 2nd ed. United States: Chandos Publishing.

Wyss, R., 2004. Measuring and Predicting Liquidity in the Stock Market. PhD Dissertation, University St. Gallen.

Wang, Y., Abbasi, K., Babajide, B. and Yekini, K., 2019. Corporate governance mechanisms and firm performance: evidence from the emerging market following the revised CG code. Corporate Governance: The International Journal of Business in Society, 20(1), pp.158-174.

Wondem, B. and Singh Batra, G., 2019. The Impact of Corporate Governance Practices on Corporate Financial Performance in Ethiopia. International Journal of Accounting Research, 07(01).

Yasser, Q.R., Entebang, H. & Mansor, S.A., 2011. Corporate governance and firm performance in Pakistan: The case of Karachi stock exchange (KSE)-30. Journal of Economics and International Finance, 3(8), 482-491

Yermack, D., 1996. Higher market valuation of companies with a small board of directors. Journal of Financial Economics, 40(2), pp.185-211.

Yazdanfar, D. and Öhman, P., 2014. The impact of cash conversion cycle on firm profitability. International Journal of Managerial Finance, 10(4), pp.442-452.

Yameen, M., Farhan, N. H., Tabash, M. I. (2019). The impact of corporate governance practices on firm's performance: An empirical evidence from Indian tourism sector. Journal of International Studies, 12(1), 208-228. doi:10.14254/2071- 8330.2019/12-1/14.

Yang, T.; Zhao, S.; Yang, T.; Zhao, S.,2014. CEO duality and firm performance: Evidence from an exogenous shock to the competitive environment. J. Bank. Financ, 49, 534–552. Positive.

Yu, M & Wang, Y 2018, 'Firm-specific corporate governance and analysts' earnings forecast characteristics: Evidence from Asian Stock markets', International Journal of Accounting & Information Management, vol. 26, no. 3, pp. 335-361.

Zulfiqar Ali Shah, S. and Ali Butt, S., 2009. The Impact of Corporate Governance on the Cost of Equity: Empirical Evidence from Pakistani Listed Companies. THE LAHORE JOURNAL OF ECONOMICS, 14(1), pp.139-171.

Zedan, H. and Abu Nassar, M., 2014. The Effect of Corporate Governance on Operating Performance of Jordanian Manufacturing Companies: Evidence from Amman Stock Exchange. Dirasat Administrative Sciences, 41(2), pp.465-481

Zaman, M., Hudaib, M. and Haniffa, R., 2011. Corporate Governance Quality, Audit Fees and Non-Audit Services Fees. SSRN Electronic Journal.

Zeitun, R. and Tian, G., 2007. Capital structure and corporate performance: evidence from Jordan. Australasian Accounting, Business and Finance Journal, 1(4), pp.40-61.

Zaid Mohamed Ahmed, 2015. Correlation and Regression Analysis; Statistical Economic and Research and Training Centre for islamic countries.

Appendices:

Appendix (1):

General view of the Amman Stock Exchange from 1999 to 2017:

Year	No. of listed companies	No. of shares	Trading value (JD)	No. of transactions	Market capitalisation (JD)
1999	151	271,100,000	389,430,783	154,600	4,137,711,690
2000	163	178,300,000	334,724,633	133,100	3,509,640,709
2001	163	332,400,000	668,652,674	293,200	4,476,364,817
2002	163	455,600,000	950,272,994	446,400	5,028,953,990
2003	163	1,008,564620	1,855,176,028	786,208	7,772,750,866
2004	163	1,338,703,981	3,793,251,050	1,178,163	13,033,833,515
2005	163	2,581,744,423	16,871,051,948	2,392,509	26,667,097,118
2006	163	4,104,285,135	14,209,870,592	3,442,558	21,078,237,222
2007	163	4,479,369,609	12,348,101,910	3,457,915	29,217,202,327
2008	262	5,442,267,689	20,318,014,547	3,780,934	25,406,265,528
2009	272	6,022,471,335	9,665,310,642	2,964,610	22,526,919,428
2010	277	6,988,858,431	6,689,987,155	1,880,219	21,858,181,603
2011	247	4,072,337,760	2,850,252,628	1,318,278	19,272,757,327
2012	243	2,384,058,415	1,978,813,878	975,016	19,141,521,210
2013	240	2,705,796,950	3,027,255,186	1,074,438	18,233,491,417
2014	236	2,321,802,789	2,263,404,594	955,987	18,082,617,433
2015	228	2,585,816,584	3,417,079,026	898,982	17,984,673,970
2016	224	1,836,711,983	2,329,466,130	786,156	17,339,384,851
2017	194	1,716,744,042	2,926,233,590	717,494	16,962,550,802

Appendix (2): General view of the Amman Stock Exchange from 1999 to 2017, Al-Msiedeen, (2019).

Appendix (2):

The corporate governance assessment report of European Bank for Reconstruction and Development (EBRD):

Key Areas and Rating	Strengths and Weaknesses
1. Structure and Functioning of the Board *Weak*	*In Jordan, companies are organised under a one-tier board system, while banks are required to be organized under a two-tier system. The average size of the board is 11 members. All board members are required to be shareholders and legal entities may serve on boards, an observed common practice. Gender diversity at the board is very low.* *Banks must comply with the Central Bank's Corporate Governance Instructions ("CG Instructions for Banks") which require them to have independent directors, whereas non-financial companies are only recommended to have them. There are at least three definitions of independence: one in the Corporate Governance Code for Unlisted Companies, one in the Corporate Governance Code for Listed Companies and one in the CG Instructions for Banks. According to the CG Instructions for Banks, directors owning less than 5% of the company's capital may still be considered independent; the Code for Listed Companies sets this limit to 10%. The Code for Unlisted Companies allows the board to determine this threshold.* *Listed companies are required to establish an audit committee, whereas banks are additionally required to establish Nomination and Remuneration, and Risk Management committees. It does not seem that these provisions are well implemented. Disclosure on boards and committees' meetings and activities is very limited, and reports cannot unveil whether governing bodies are playing a strategic role on a company's performance.* *The law entrusts the board with the power to manage the company; however, it seems that shareholders can set limits to such powers in the Articles of Association.* *Board evaluation practices do not appear to be common. Only a minority of companies have established a corporate secretary position.* *Liability for board members and conflicts of interest are addressed by the law, but these regulations do not appear to be comprehensive. Fiduciary duties are not explicitly defined.*

1.1. Board Composition *Fair/Weak*	***Strengths:*** • *Boards are well-sized, with an average of 11 board members.* • *In banks, the roles of Chairman and CEO are split. In non-banking companies, the law does not forbid the combination of such roles, but the Code for Listed Companies states that this practice is not allowed. Only two out of the ten largest listed companies (one is a bank) have the same person performing both roles.* • *The Codes for Listed and for Unlisted Companies recommend that board members should have adequate knowledge and experience. Board members in banking institutions are required to hold expertise in the banking sector, or any other related areas of expertise.* • *In banks, at least 4 members must be independent. It is also recommended for at least 1/3 of the members in listed companies' boards to be independent; whereas unlisted companies are suggested to have at least 2 independent directors (see more details on independence below). These provisions do not seem to be well implemented, as only two companies in our sample disclose having independent directors.* • *Listed companies and banks are required to set up an audit committee composed of non-executive members with knowledge and experience in finance and accounting. In the case of banks, the majority of these members must be independent; for other companies, this is only recommended. Banks are further required to establish nomination and compensation committees, composed in their majority by independent directors. Listed and unlisted companies are also suggested to set up these committees. Only five among the ten largest listed companies disclose having an audit committee in place.* • *Banks are additionally required to set up governance and risk committees, which should be at least partially comprised of independent directors.* ***Weaknesses:*** • *Legal entities may serve as board members and six out of the ten largest listed companies have corporations, represented by individuals, sitting on their boards.* • *Board members are required to be shareholders and the companies' Articles of Association may specify their minimum share requirement. This is not in line with best practices, since it reduces the pool of potential board candidates and may prompt fictitious transfers of shares to fulfil this condition. Additionally, it weakens the framework of fiduciary duties.* • *Listed companies must disclose the names and qualifications of their board members. Nevertheless, only six out of the ten largest listed companies disclose their members' qualifications.* • *Only two among the ten largest listed companies (both banks) disclose having independent directors in their boards.*
1.2. Gender Diversity at the Board (6.46%) *Very Weak*	• *Nine among the ten largest listed companies disclose the board composition.* • *Four companies of our sample count women among their board members: two women in the boards of two companies; and one woman in the boards of other two companies. For these four companies, the female representation averages 14.55%.* • *In total, there are 6 women out of 112 board members. For the ten largest listed companies, the female board representation averages 6.46%.*

1.3. Independent Directors *Weak*	***Strengths:*** • *Listed companies' boards are recommended to be composed of least 1/3 of independent members. Unlisted companies are suggested to have at least 2 independent directors.* • *In banks, at least 4 members must be independent.* • *The majority of members in bank's audit committees must be independent directors. In the case of listed companies, members are required to be non-executive directors. Additionally, the Codes for Listed and Unlisted Companies recommend that boards should be composed in their majority by independent directors. The majority or part of the members in the other committees should be independent.* ***Weaknesses:*** • *There are three different definitions of independence (one in the CG Instructions for Banks, one in the Code for Listed Companies and one in the Code for Unlisted Companies). As companies do not clearly disclose which definition applies, disclosure appears confuse. Further, all three definitions concentrate on negative criteria only, without stating what it is expected in practice from independent directors (i.e., objective character and mind). It should be pointed out that the concepts of "non-affiliation" and "independence" are different. While non-affiliation can be established by negative criteria, independence necessarily needs objectivity of mind and character, which is a positive character that should be demonstrated, disclosed and explained in practice.* • *The requirement for all directors to be shareholders seems to conflict with the independence of directors. It might be difficult for a shareholder sitting in the board to take aside its particular interests and have an objective mind. This coupled with the weak definition of independence and the absence of fiduciary duties, raise some concerns.* • *Only two of the ten largest listed companies —both banks— disclose the identity of their independent board members.* • *Only one company —a bank— discloses the identity of the independent directors forming part of its audit committee.*
1.4. Board Effectiveness *Weak*	***Weaknesses:*** • *The law generally entrusts the board with the power to manage the company; however, it seems that shareholders may set limits to such powers in the Articles of Association. This approach is not fully convincing. Shareholders should not be allowed to retain those functions which should typically be performed by the board (such as the authority to approve the company's strategy, budget and risk profile and provide management oversight). If shareholders have the possibility to interfere directly in the company's direction and control, then the system of check and balances between the various corporate bodies is undermined (the board is significantly undermined for instance). This can cause the creation of unclear accountability lines within the company and weaken the whole governance system.* • *The law requires the board to appoint a company secretary. The Code for Unlisted Companies describes the position in a rather comprehensive way, including her/his role with respect to compliance. Only four of the ten largest listed companies disclose having a company secretary.* • *The CG Instruction for Banks requires boards to undertake annual evaluation. This practice is also recommended by the Code for Unlisted Companies; conversely, the Code for Listed Companies is silent on this matter. In practice, none of the companies in our sample discloses performing board evaluation.* • *The law does not specify a minimum number of board and committees' meetings. The Code for Listed Companies recommends that the board should meet at least once every two months and not less than six times per year, while the audit committee should meet regularly, not less than four times a year. The Code for Unlisted Companies recommends the board to meet at least quarterly. None of the companies in our sample discloses the number of times its board and committees meet.* • *Notwithstanding the law requirement, only five of the ten largest listed companies disclose having an audit committee. The same companies also have a remuneration and a nomination committee (in one case, the latter two committees are combined).*
1.5. Responsibilities of the Board *Fair*	***Strengths:*** • *The law designates the board as the body responsible for appointing and dismissing the CEO.* • *The Code for Listed Companies recommends that the board should be responsible for evaluating executive management, ensuring compliance, and setting strategies and risk management policies.* • *Conflicts of interest are regulated by law – a member of the board who has a conflict of interest with regard to any issue under discussion must inform the board about his interests and abstain from voting. Board members are prohibited from receiving advanced cash loans.* • *The Company Law describes directors' liability in case of violation of the Articles, company default, negligence, insider information disclosure, position abuse, and fraud.*
	Weaknesses: • *Fiduciary duties are not explicitly defined by law. The Civil Code, however, establishes directors' general duty to act in the best interest of the company. Nevertheless, there is no strong jurisprudence on this subject. The lack of well detailed fiduciary duties coupled with the requirement for directors to be shareholders raises some concern as it might be difficult for a shareholder to take aside its particular interests and defend only the company's one, especially if there are no legislative requirement in this respect.* • *As mentioned above, the law does not clearly assign to the board the authority to approve the company's strategy, budget and risk profile and provide management oversight.*

Key Areas and Rating	Strengths and Weaknesses
2. Transparency and Disclosure *Fair*	*Disclosure of listed companies is regulated by the Jordan Securities Commission. The stock exchanges' website provides a fair amount of information. Disclosure requirement mostly focus on financial reporting and on the relationship with the external auditor. Listed companies must disclose their annual reports and prepare their financial statements in accordance with the IFRS. Companies seem to comply with these requirements.* *Annual reports should include a report of the board of directors describing strategy, risk exposure, important developments occurred during the year, board composition and remuneration. However, it appears that sometimes this information is not disclosed.* *Listed companies are, additionally, required to comply with the Code for Listed Companies, or explain the reasons for deviations. However, only one of the ten largest listed companies publishes a 'comply or explain' statement in English.* *The ten largest listed companies disclose information on their board composition, general shareholders' meetings' minutes and share capital. However, disclosure on the composition of committees, board's and committee's activities, Articles of Association, and beneficial ownership is very limited. Company websites are not well updated.* *Companies are required to have external auditors and disclose their names. All the ten largest companies comply with this requirement and declare that their auditors are independent.*
2.1. Non-Financial Information Disclosure *Fair/Weak*	***Strengths:*** • *All listed companies are required to prepare annual reports, which should include a statement from the chairman, descriptions of risks, financial statements, personnel qualifying programmes, organisational charts, the current number of employees and the auditors' report.* • *Listed companies are required to submit a report documenting the election of board members and any changes to their composition. Nine among the ten largest listed companies disclose the names of their board members.* • *The website of the stock exchange displays a set of non-financial information for each company, including number of shares and capital, the general shareholders' meetings' decisions, significant shareholdings transactions and transactions executed by directors.* ***Weaknesses:*** • *There is no requirement to publish information on the company's website; this is only recommended.* • *The ten largest listed companies disclose non-financial information to different extents. Beyond the information presented in annual reports, the non-financial details disclosed by banks in our sample are poor.* • *Disclosure on committees' composition, board's and committee's meetings, beneficial ownership and Articles of Association is limited or non-existent.* • *Listed companies are required to comply with the Code for Listed Companies or explain the reasons for deviations; however, only one of the ten largest listed companies publishes a corporate governance statement in English as part of its annual report.*
2.2. Financial Information Disclosure *Strong*	***Strengths:*** • *All companies are required to disclose their audited financial statements. Listed companies are further required to prepare their statements according to the IFRS and to publish them with the auditor's opinion.* • *All ten largest listed companies comply with these requirements.*
2.3. Reporting to the Market and to Shareholders *Fair*	***Strengths:*** • *All ten largest companies publish their annual reports on the stock exchange's and/or on their website.* • *Listed companies are required to make timely disclosures when material facts occur.* • *Companies failing to publish their annual reports are subject to fines.* • *Companies seem to adequately disclose their general shareholders' meeting's minutes, board composition and share capital information.* ***Weaknesses:*** • *The websites of the ten largest listed companies do not disclose updated financial information.* • *Disclosure on committee composition, board and committee meetings, Articles of Association and beneficial ownership is limited or non-existent. Only one of the ten largest listed companies publishes a corporate governance statement in English as part of its annual report.*
2.4. Disclosure on the External Audit *Fair*	***Strengths:*** • *Companies are required to disclose the names of their external auditors. All ten largest listed companies disclose their auditors' names and opinion. Auditors declare them to be independent.* ***Weaknesses:*** • *Provision of non-auditing services by the external auditor appear to be somehow restricted, however the extent of monitoring is not clear as we found very little information is disclosed on this matter.*

Key Areas and Rating	Strengths and Weaknesses
3. Internal Control *Weak*	*Listed companies are required to have an internal auditor. Banks must have a separate compliance function. Listed companies and banks are also required to have an audit committee composed of three non-executive board members. The CG Instruction for Banks requires that the majority of banks' audit committee's members is independent. The Code for Listed Companies recommends that two audit committee's members should be independent, and that one of them should be appointed as the committee chairperson.* *Companies' disclosure on their audit committees is very limited. Only half of the ten largest listed companies disclose having such committee, and only one of them discloses the number of times the committee has met. None of these companies discloses the qualification of the audit committee members or the activities of the committee and only one company discloses having independent directors in the committee. Thus, it is not possible to assess the extent to which audit committees ensure external and internal auditors' independence and effectiveness.* *Listed companies are required to have their financial statements examined by an independent auditor, appointed by the general shareholders' meeting. Auditor's independence must be evaluated by the audit committee. The Code for Listed Companies recommends companies to disclose fees paid to auditors in their annual reports, as well as take measures to ensure their external auditors do not perform non-auditing services. Disclosure on this point appears limited.* *External auditors are subject to rotation obligations.* *Whistleblowing protection is granted by law.* *Companies are not required to have a code of ethics in place; a minority of the ten largest listed companies discloses having one in place.* *Related party transactions are regulated by law, but it is not clear if the regulation is implemented in practice.*
3.1. Quality of the Internal Control Framework *Fair*	***Strengths:*** • *Listed companies and banks are required to set up an audit committee; unlisted companies are recommended to do so. In banks, the majority of audit committee's members must be independent. In other companies, this is recommended.* • *Listed companies are required to have an internal auditor nominated by the audit committee.* • *Banks must have an independent compliance function.* • *Whistleblowing protection is granted by the Anti-Corruption Commission Law.* ***Weaknesses:*** • *Only half of the ten largest listed companies disclose having an audit committee and only one disclose having independent members in the committee.* • *Only four of the ten largest listed companies disclose having an internal audit function.* • *There is no requirement for the adoption of a code of ethics. Only the Code for Unlisted Companies recommends having one, and only a small minority seems to follow this recommendation.*
3.2. Quality of Internal and External Audit *Fair/Weak*	***Strengths:*** • *Listed companies are required to have their financial statements examined by an independent auditor. Companies must submit their annual financial statements for his review. All ten largest listed companies comply with this requirement and disclose the auditors' name. The majority of these companies are audited by international audit firms. All of these companies have disclosed the auditors' opinion with their financial statements.* • *Amongst others, audit committees are responsible for examining internal audit procedures and reviewing the auditor's work and independence.* • *External auditors of listed companies are subject to rotation obligations. The Code for Listed Companies further recommends a 1-year cooling off period during which a company is not allowed to appoint any recently terminated external auditor employees to upper level management positions.* • *The external auditor is appointed by the general shareholders meeting. All Codes recommend that the audit committee should nominate the name of the external auditor. However, it is not clear if this recommendation is well implemented in practice.* ***Weaknesses:*** • *Only four of the ten largest listed companies (three are banks) disclose having an internal audit function, and five disclose having an audit committee, despite them being mandatory.* • *The Code for Listed Companies recommends that companies should ensure the external auditor does not provide*

Key Areas and Rating	Strengths and Weaknesses
	non-auditing services. Listed companies are further required to disclose information on the fees paid or payable to their external auditor in their annual reports. Nevertheless, none of the then largest listed companies explicitly confirmed whether its auditor performed any type of non-auditing services.
3.3. Functioning and Independence of the Audit Committee Weak	**Strengths:** • Listed companies and banks are required to set up an audit committee composed of three non-executive board members. The Code for Listed Companies further requires that the majority of the committee should be independent and that one of the independent directors should chair this committee. The Code for Unlisted Companies recommends all companies — even relatively small ones— to set up an audit committee composed in its majority by independent directors. • The Code for Listed Companies requires audit committee members to have knowledge and experience in finance and accounting, and at least one person must have an academic or professional certificate in accounting, finance or any other related fields. • Audit committees of listed companies are required to meet at least four times a year. **Weaknesses:** • Only five of the ten largest listed companies disclose having an audit committee in place. Among these companies, only one —a bank— discloses the identity of the independent directors composing the audit committee; in this case only half of the members are independent. • None of the companies in our sample discloses the qualification of the audit committee members. • Only one of the companies in our sample discloses the number of meetings held by the audit committee.
3.4. Control over Related Party Transactions and Conflict of Interest Weak	**Strengths:** • Audit committees are responsible for ensuring the absence of conflicts of interest stemming from related party transactions and the Code for Listed Companies recommends companies to disclose them. • All ten largest listed companies disclose their related party transactions in their annual reports. **Weaknesses:** • A member of the board who has a conflict of interest with regard to any issue under discussion must inform the board about his interests and abstain from voting. The conditions agreed for related party transactions involving board members must be similar to those prevailing in an arm's length transaction, but the law only requires approval of the board, which is not a clearly independent body. • It appears that there is no extensive case law and judicial practice concerning related party transactions. • The limited disclosure on audit committee and independent directors raises some doubts about the objectivity of the related party transaction's approval process.

Appendix (2), corporate governance in Jordan evaluation, Snapshot from the European Bank for Reconstruction and Development (EBRD) (2017).

Appendix (3):

Corporate governance theories:

Theory	Discussion:
Stewardship Theory	Contrariwise to the agency theory, an entirely dissimilar argument is provided by the stewardship theory. The core assumption of stewardship theory is that managers are seen as a "steward" of shareholders` funds, therefore, managers should be given high level of trust to behave independently, dutifully, and honestly, hence improving wealth of shareholders. It emphasizes on that the self-interest of managers does not overcome the objectives of maximizing shareholders` wealth in believe of that achieving shareholders` utility will inevitably led to manager`s interest

	increment (Donaldson and Davis 1992; Donaldson, Davis and Schoorman 1997). It is furthermore added by Dobbin & Jung (2010) that improving a firm`s performance is the ultimate objective of steward`s managers, where this theory suggests principles and agents agree to perform as stewards. By that, both parties work in accordance to same goals, in turn, positively impacting a performance of a company consistently with shareholders` wealth maximization (Davis et. al. 1997, and Eddleston and Kellermanns, 2007). It was also suggested by Donaldson and Davis (1991) that along with financial motivations there are also none financial motivations which make managers to work properly on behalf shareholders` interests. To name few of these motivations but not limited to, managers also ultimately aim to enhance their reputation through performing effectively and being accountable and responsible for the company success in addition to achieve high level of satisfaction and be proud when inherently challenging work being accomplished. As noticed by Madison (2014) that several literature such as Corbetta and Salvato, (2004), Davis et al. (1997), Vallejo (2009) indicate that there are situational and psychological factors impact the stewardship behavior choice. The situational factors reflect a structure of an organization such as culture and philosophy of firm`s management. He moreover states that "theory suggests that involvement-oriented, collectivist, low power distance cultures help influence the choice of stewardship behavior". Management philosophy of an involvement-oriented achieved through a situation which insure trusted employees with challenges, accountability, and chances. In line with Vallejo (2009) that existence of social framework employees` loyalty, identification, and belonging, which consequently, employees insist on the collective objectives rather than their own personal goals. Furthermore, a presence of such a situation lowers power distance, in turn, equality is attained sequentially between dissimilar levels of an institution (Davis et.al, 1997). On the same hand, psychological factors can command and direct the stewardship behavioral choice, such as, high level of appreciation, authentic

	inspiration and motivation, effective identification, and strong personal power (Davis et al., 1997; Zahra et al., 2008). As stated by Ryan and Deci (2000) that Appreciation is a significant element which enhances the feeling of belonging toward company. Additionally, they mentioned that authentic inspiration and motivation result in adequate satisfaction between individuals, where it is a psychological characteristic of the theory of stewardship and not measureable, as managers are encouraged through intangible rewards (Davis et al., 1997; Lee and O'Neill, 2003). Along with Zahra et al. (2008) and Vallejo (2009) that employees and managers are most likely to follow stewardship when they are identified highly by their organization, this is due to effective feeling of loyalty toward organization. As stated by Davis et al. (1997) that Stewardship theory takes into consideration individual power based on assumption that relationships is improved as the time pass, as a consequence, empower steward managers. These previously mentioned psychological factors ease the stewardship choice that eventually lead to a positive implication on firm`s performance. (Madison, 2014). Conversely to agency theory, reward characteristic is vary, where stewardship theory claims intrinsic reward such as identification and self-actualization, belonging sense, promotions. Whereas on the other side, agency theory focuses more on measureable incentives e.g. bonus scheme. Moreover, these theory show diverse structure of corporation empowerment, while stewardship theory claims that unchallenged authorization by letting CEO off monitoring and giving him superior appreciation and authority, hence, management will be efficacy. Furthermore, the additional costs which is occurred as a consequence of agency cost are mitigated by empowerment of company`s structure (Mallin, 2010). Consistent with Donaldson, Davis and Schoorman (1997) that as stewards` managers seek to attain greater benefits by maximizing shareholders` fortune, managers seem to be long-term focused conversely to agency theory managers as their focus is limited on short –term interests. Furthermore, as proved by culture and environment that there are a structural variances by both theories, in regard organizational environment

	can be from orientation control to orientation involvement whereas organizational culture can be to collectivistic from individualistic. As agency theory limits individualistic self-interest by applying restricted monitoring procedures on agents` activities by principals, this suggests control-oriented and individualistic environment are reflected by structure of agency. Contrariwise, perspective of stewardship is penetrated in involvement-oriented and collectivistic culture (Madison, 2014). Regardless of both theories perspectives, according to Solomon (2010) that a very well instance was introduced by Enron scandal and others of 2010 explain the rationale behind distrusting managers. Unregulated given authority may be diverse managers` interest to their personal utility, for instance humble interior monitors, absence of independency between Enron and auditors, and uncontrolled forgery practices are few facts behind Enron`s collapse. In the matter of this fact, agency theory has a strong conception and by its application codes and principles of corporate governance are derived.
Stakeholder Theory:	Unlike agency and stewardship theories, stakeholder theory considers a wider perspective of accountability than narrow perspective of agency and stewardship theories. This assumption based on the view that company`s goals achievement is connected with a network of associations working together in a circle for that end. In 1984, Freeman developed and enhanced the corporate accountability and responsibility comprehension by expanding stakeholders` range to newly contain government agencies, suppliers, consumers, employees, financial institutions, and business associations at large (Ang, Cole, and Lin, 2000). It was likewise added by Parmar et al. (2010) that the society at large is impacted by a company`s corporations and these implications are not exclusively on shareholders and managers. In 1997, Mitchell et al. introduced three main criteria that attribute the relative stakeholders, which are ability to impact firm, legality of firm`s relation with, and claim urgency from firm. This theory identifies that due to various relations between firm and several groups, these groups as a whole have interests to be fulfilled (Altonen et al, 2008). Consistent

	with claim of Donaldson and Preston (1995), observe that whether internal or external parties require satisfying their selves-interest. Hill and Jones (1992) state valid reasons of stakeholders extension, shareholders fund an investment for purposes to get return and profit, employees including managers acquire fair salary and income for providing their efforts and skills, creditors finance firm with expectation to get their loans back, while customers pay for products and expect get value of paid amount, etc (Choi and Wang, 2009). Stakeholder theory enhances the role of managers through fair interests balancing, in turn, guarantee to some extent firm`s existence and objectives achievement. Therefore, this indicates that interests` alignment should not be concentrated on shareholders and mangers than considering other stakeholders into account. In addition, the growth of stakeholder theory brings a new awareness of corporate social responsibilities. Ethical acts on behalf all is the derived idea from stakeholder theory, where it argues that while managers have firstly to take into account the basic moral duties towards human beings as a whole before their responsibilities for shareholder wealth maximization (Solomon, 2010). Corporate governance considers all aforementioned stakeholders due to negative association of neglecting their interests. Irresponsible behavior against society at a large brings undesirable situation which in turn create a negative implication on shareholders, for example, environmental violation might lead to penalties and charges in addition to social engagement by not buying products by customer, while also raise capital can be challenging (Ang, Cole, and Lin, 2000). One good example can be exploited, Guardian (2015) states that spill of British Petroleum`s oil incurred it to fulfil fines of almost 15 billion pounds for environment damage, therefore shareholders` wealth reduced and company value affected. Hence, stakeholders group should be considered as a crucial objective for maximizing shareholders` wealth achievement (Jaimes-Valdez, Jacobo-Hernandez, and Jimenez, 2015).

Resource Dependence Theory:	The premise of this idea is that a company's success is strongly influenced when the board of directors has crucial connections to key resources and constituents. This implies that the performance of the board of directors is inextricably related to the ability to establish relationships with the company's primary resources (Blair, 2007). According to Nicholson & Kiel (2007), they looked at seven cases and found little consistency in resource reliance patterns among the cases. In five situations, there was no match to a pattern, while one case supplied the lone match to a pattern, in which the directors had limited external connections, provided little or no resources to the corporation, and the company was in serious financial trouble. Another scenario was a partly matching to pattern one, which linked poor performance to poor environmental connections and resource accessibility. Five of the board members were farmers with significant ties to other farmers who supplied the company. They, on the other hand, have minimal ties to the broader public or to significant clients. Fieldwork revealed that the organization had focused much of its attention on farmer supplier issues at the expense of more general company challenges, which was one of the reasons for the organization's poor performance. Some connections to the environment may have led to a misalignment of governance and business activity, while a shortage of other connections may have resulted in the effects anticipated by resource dependency theory (Hillman, 2009).

Appendix (3), corporate governance theories.

Appendix (4):
The final sample:

	Banks	Insurance firms	Financial services	Total
Firms number in 2009	15	26	39	81
Firms number in 2018	15	29	43	88
Firms that lasted from 2009 to 2018	15	24	38	77
Number of firms that lack required data, Sold, or merged	1	13	24	38
The final sample	14	11	14	39

Appendix (1): First model sample, Author.