



**The Impact of Corporate Governance on Earnings Quality of Public
Shareholding Companies listed in Amman Stock Exchange (ASE): Empirical
Study**

أثر حوكمة الشركات على جودة الأرباح في الشركات المساهمة العامة الأردنية المدرجة في سوق عمان
المالي: دراسة إختبارية

Prepared By

Shaden Sami Abu Nadi

Supervised By

Professor Mohammad Matar

This thesis is submitted as a requirement for Master's degree in Accounting

Accounting, Financial and Banking Services Department

Faculty of Business


November 2018

Authorization

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Name: Shaden Sami Abu Nadi

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This thesis of Shaden Sami Abu Nadi, which studied the Impact of Corporate Governance on Earnings Quality of Public Shareholding Companies listed in Amman Stock Exchange, has been defined accepted on/2018.

No.	Name	Title	Signature
1	Prof. Khaled Jaarat	Internal member and head of the committee.	
2	Prof. Mohammad Matar	Supervisor.	
3	Prof. Tawfiq AbdulJaleel	External member.	

Acknowledgment

To begin with, I would like to thank Allah for the strength and patience he had given me to finish this work. This study could not have been achieved without having faith that Allah is there to support and help me. May he bless everyone who was there for me during my studying period.

My words cannot describe how grateful I am to Professor **Mohammad Matar** for his endless support. He is a name that shines when accounting is mentioned, I cannot express how lucky I am having him to supervise my thesis. Without his continuous guidance, and vast knowledge, I would not be writing this. His recommendations, guidance, advocacy, expertise, patience and endless support has led me to finish this work. I am sure I would not have made it without him.

I must thank my family and friends for encouraging me in all of my pursuits and inspiring me to follow my dreams. I am especially grateful to my parents, who supported me emotionally and financially. Thank you to my mother, who had many sleepless nights supporting and encouraging me that I can make it. This accomplishment would not have been possible without them. Thank you!

Finally, many thanks go to the examination committee for devoting their time to review and discuss the material of this study.

Shaden Sami Abu Nadi

Dedication

This thesis is dedicated to my family, my precious father Sami, my main reason of support, my super mother Duha, and my lovely brothers Hamzeh and Mohammad. I can remember myself on the verge of breaking down under stress and pressure, and having them there to give me an emotional push that I can and will make it. Their faith and belief in me is what gave me the power and courage to make it to this point.

Finally, to my professors, friends and colleagues, thank you for being there for me along the way.

I really appreciate what every and each one of you have done to me.

Shaden Sami Abu Nadi

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List of Abbreviations

Abbreviation	Stands For
ASE	Amman Stock Exchange
CG	Corporate Governance
EQ	Earnings Quality
SEC	Securities Exchange Commission
WTO's	World's Trading Organizations
OECD	Organization for Economic Cooperation and Development
NBD	Number of Board of Directors Members
NMBD	Number of Board of Directors Meetings
NAC	Number of Audit Committee Members
NMAC	Number of Audit Committee Meetings
MENA	Middle East and North Africa
CEO	Chief Executive Officer
BOD	Board of Directors
IFRS	International Financial Reporting Standards
IOD	Thai Institute of Directors
SET	Stock Exchange of Thailand
IDX	Indonesia Stocks Exchange
MRA	Moderated Regression Analysis

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**The Impact of Corporate Governance on Earnings Quality of Public
Shareholding Companies listed in Amman Stock Exchange: Empirical Study**

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Abstract

The researcher examined the impact of corporate governance practices on the quality of reported earnings of public shareholding companies listed in ASE. It examined the impact of the four most important corporate governance variables of public shareholding companies listed in ASE; number of board of directors members, number of board of directors meetings, number of audit committee members, number of audit committee meetings. The study used the total accruals model by Richardson and applied it on a sample of 60 companies of the population which included 131 companies listed in ASE from the financial, industrial and services economic sectors in Jordanian ASE for the period 2013-2016.

The researcher used descriptive statistical analysis: through measuring mean, maximum, minimum values, and standard deviation, Smirnov and Shapiro Normality Tests, Multicollinearity through variance inflation factor (VIF) and tolerance, Pearson Correlation Matrix and Multiple regression to test the hypotheses of the study.

The researcher found a significant impact of CG practices when considered as a whole unit on earnings quality in public shareholding companies listed in ASE. It also revealed that there is a positive significant impact of the number of board of directors' members on earnings quality. The study also found no significant impact of the number of boards of directors' meetings, the number of audit committee members and the number of the audit committee's meetings on earnings quality.

Finally, the researcher recommended enforcing penalties on creative accounting policies, raising the awareness for the implementation of CG practices, focusing on the independence of the BOD members, setting a minimum requirement for the audit committee members and forming a CG committee and a risk management committee.

Key Words: corporate governance, earnings quality, Amman stock exchange, board of directors, audit committee.

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المالي: دراسة إختبارية

إعداد:

شادن سامي أبو النادي

إشراف:

الأستاذ الدكتور محمد مطر

الملخص

بحثت هذه الدراسة تأثير ممارسات حوكمة الشركات على جودة الأرباح للشركات المساهمة العامة الأردنية المدرجة في بورصة عمان. قامت الباحثة بدراسة أثر أربعة متغيرات تعتبر الأكثر أهمية بالنسبة لحوكمة الشركات وهي ؛ عدد أعضاء مجلس الإدارة ، عدد اجتماعات مجلس الإدارة ، عدد أعضاء لجنة التدقيق ، وعدد اجتماعات لجنة التدقيق.

استخدمت الدراسة نموذج الاستحقاق الكلي من قبل ريتشاردسون وطبقته على عينة من 60 شركة من مجتمع الدراسة الذي يشكل 131 شركات مدرجة في بورصة عمان من القطاعات الاقتصادية الصناعية والمالية والخدمية في البورصة الأردنية للفترة 2013-2016.

استخدمت الباحثة التحليل الإحصائي الوصفي: من خلال قياس المتوسط الحسابي ، الحد الأعلى ، الحد الأدنى ، و الإنحراف المعياري. و عدة اختبارات أخرى لفحص الفرضيات في هذه الدراسة.

كشفت الدراسة عن وجود أثر معنوي إيجابي بين متغيرات الحوكمة إذا ما أخذت معا كوحدة واحدة على جودة الأرباح. ولكن عند أخذ المتغيرات, كل على حدة, كشفت الدراسة عن وجود أثر معنوي إيجابي بين عدد أعضاء مجلس الإدارة وجودة الأرباح, بينما كانت المتغيرات الثلاثة الأخرى, وهي عدد اجتماعات مجلس الإدارة, عدد أعضاء لجنة التدقيق, وعدد إجتماعات لجنة التدقيق ذات أثر إيجابي ليس له دلالة إحصائية على جودة الأرباح.

وأخيرًا ، أوصت الباحثة بإلزام الشركات عن الكشف عن ممارسات حوكمة الشركات في جميع التقارير السنوية المنشورة في بورصة عمان ، وإجراء مزيد من الدراسات الأخرى ذات الصلة بالموضوع مع الأخذ في الاعتبار استقلالية أعضاء مجلس الإدارة وإستقلالية وخبرة أعضاء لجنة التدقيق.

الكلمات المفتاحية: حوكمة الشركات ، جودة الأرباح ، بورصة عمان ، مجلس الإدارة ، لجنة التدقيق.

Chapter One

The Study Background and Importance

Introduction

Shareholders trust in the board of directors, started declining after many incidents of corporate misconducts happened worldwide. It began with the Enron scandal, losing 78 billion dollars in the stock market, and followed with multiple other fraud cases on an individual level like Bernard Madoff, and on a multinational corporation level like WorldCom, Tyco, Lehman Brothers, that ended with the shareholders losing high percentages of their investments. Such cases arose concerns over the management of corporations, thus, it resulted in vast interest in corporate governance practices.

Corporate governance (CG) became the concern of the twentieth century were all multinational organizations aimed towards having a clear organizational structure in order to enhance both financial and managerial performance of the firms. Good (CG) gives investors and stakeholders the assurance that their money and interest are in safe hands. It increases the competitive advantage of the firm and gives it a stronger and more attractive position in the market. It boosts and enriches the concept of transparency in the financial information presented by the entity at the end of each reporting period, which increases the credibility and reliability of the firm. The attention for it in Jordan started growing lately, after many countries in the MENA area started trading on a global level, becoming a part of the World Trade Organizations (WTO's). Committees' and academic individuals started rising awareness, writing more papers, and assessing the current laws that could relate to it.

Transparency and credibility are both major factors representing the quality of earnings. Most companies' main goal is to make money, yet, the firm's earnings information is a key metric of its financial performance. Faithfully represented financial information implies adequate, precise and reliable earnings reported in the capital market and indicates the market value of the firm. Earnings quality is considered a strong basis for evaluation of a firm by current and potential investors. It helps them make right decisions about the risk associated with their investments. If that information is not accessible by the investors, they tend to have a red flag alert of potential risk, which will eventually affect the value of the firm as a whole. (Sarun, 2016)

The list of fundamental and enhancing qualitative characteristics mentioned in the conceptual framework of financial statements, including relevance, faithful representation, comparability, verifiability, timeliness, and understandability, are in my point of view, characteristics that must reflect on any financial information published by the firm, to reveal good quality of earnings.

It has been said that, in order to implement these characteristics and have high quality earnings, good corporate governance practices should be applied, to control the processes of producing and reporting financial and non-financial information. (Rankin, 2012)

The Study Problem

Poor CG practices contributed to the creation of the agency problem. It results from the separation between ownership and control. As managers have more inside information than the lenders and investors, managers might use that information to maximize their compensation, putting on the side the interest of current investors, which had led to many fraud and manipulation scenarios, not only in Jordan, but also worldwide, thus increased the fear of investment for many potential investors concerned of losing their wealth to bad selfish management. This study aimed to examine whether companies applying CG practices differ from others in their financial results. It debates if CG practices achieves the characteristics of faithful representation and verifiability in order to achieve a good quality of earnings.

The main problem of this study is to assess the impact of corporate governance on the quality of earnings in public shareholding companies listed on Amman Stock Exchange (ASE), and to imply whether there is a direct effect of the number of board of directors members, the number of audit committee members, number of board of director's meetings as well as the number of the audit committee meetings on the quality of reported earnings.

The Objectives of the Study

This study aimed to:

1. Identify the definitions and scope of corporate governance and earnings quality.
2. Identify principles and practices of corporate governance applied in Jordanian public shareholding companies.
3. Assessing the advantages of good governance, and the disadvantages of bad corporate governance.
4. Discuss the determinants of earnings quality.
5. Assess the factors affecting the quality of reported earnings.
6. Assessing the impact of corporate governance on the earnings quality of Jordanian public shareholding companies.

The Study Importance

Aiming to correct the misconduct of applying corporate governance in Jordanian public shareholding companies, this study is hoped to enhance the current papers written in the area, and be a point of reference to academics, firms, and government officials.

The researcher hopes that the results will help in reinforcing efforts to increase the quality of earnings for companies listed in ASE, and helping to serve related parties, stockholders and other stakeholders, such as the ministry of labor, security deposits center, income and sales tax department and the central bank. These parties are interested in the credibility of the financial information published by Jordanian public shareholding companies in their annual

reports, as well as help all these parties take the right economic decisions based on the quality of income rather than the quantity of profits generated.

The study will examine results in the period between 2013-2016, evaluating a sample of companies from the financial, industrial and services sectors .

Being in the era of financial indignities, and having earnings management through changing accounting policies, estimates, bad debt write-offs and much more to be mentioned, leading to a sharp decrease in the quality of earnings, a spotlight on the management of the corporations is drawn to attention, and this study intends to make a clear image of it, in a sample of companies selected from ASE, to examine if any impact drawn from corporate governance practices directly or indirectly affect earnings quality.

Main Questions the Study Aims to Answer

The study mainly aims to answer this main question:

Is there an impact of corporate governance on earnings quality of public shareholding companies listed in ASE?

That question is divided into many sub questions:

1. Is there an impact of the number of board of directors members on earnings quality?
2. Is there an impact of the number of meetings of board of directors on earnings quality?
3. Is there an impact of the number of audit committee members on earnings quality?
4. Is there an impact of the number of meetings of the audit committee on earnings quality?

Hypotheses of The Study

The main hypothesis is:

H0: There's no significant impact of corporate governance on the quality of earnings in public shareholding companies listed in ASE.

As an implication of that hypothesis, the following sub-hypotheses arise:

H01: There is no significant impact of the number of the board of directors members on earnings quality.

H02: There is no significant impact of the number of meetings held by the board of directors on earnings quality.

H03: There is no significant impact of the number of the audit committee members on earnings quality.

H04: There is no significant impact of the number of meetings held by the audit committee on earnings quality.

Frame of the Study

Time frame: it will cover the financial periods between 2013-2016.

Location: A sample of companies from three sectors; financial, services, and industrial, listed in ASE.

Limitations of the Study

One of the main limitations of the study, is the degree of the information presented by these companies on a public level. As well as their compliance with rules and regulations of reporting governance related information.

Definitions of Main Terms Used

Corporate governance: is the set of guidelines and principles applied to direct and control a corporation. (OECD, 2015)

Earnings quality: is a scale showing the level to which reported earnings are actual compared with the accounting policies used, actual operating income and management orientations. (Sepe et al, 2012)

Earnings Management: involves the intentional manipulation of the financial reporting processing, by altering the reported accounting numbers to obtain a private gain. (Marai, Pavlovic, 2013)

Transparency: offering a true, concise, and credible financial reports. (Rankin, 2012)

Credibility: the degree to which financial information is true and trustworthy to all stakeholders. (Rankin, 2012)

Earnings: reported profit or loss resulting from regular business operations after tax and interest deductions, also known as profit and loss. (Eccles, 2001)

Accruals: are earned revenues and incurred expenses that have an overall impact on income, assets, accounts payables, account receivables and other balance sheet items.

Chapter Two

Theoretical Framework and Previous Studies

This chapter aims to clarify the basic concepts associated with corporate governance and its effect on the quality of earnings presented by firms at the end of each reporting period. It will also go through a few previous studies revolving around the same.

First: Theoretical Framework

Corporate Governance

Introduction

Good corporate governance (CG) helps to secure investor confidence, enhance access to capital markets, promote growth and strengthen economies. This makes CG necessary, beneficial and useful for all sectors and types of companies whether they are multinationals, governmental, domestic firms, small businesses or family-owned operations.

Although CG frameworks differ from country to country based on the legal, regulatory and institutional environment, they all aim to identify the rights, responsibilities, and expected outcomes of owners and managers.

History and Development of Corporate Governance

The interest in corporate governance started since trade and money were invented, but was emphasized on immediately after World War II, the U.S. economy bloomed and large corporations started from scratch, especially in the industrial sector. Amongst the widespread prosperity, the phrase “corporate governance” was not in use, and corporate governance was

the least important issue to taken into consideration. All they had applied was that managers led, and directors and shareholders followed. In the 1970's, the discovery of widespread illegal payments by U.S. corporations to foreign officials drew the S.E.C further into the corporate governance realm. The extensive corporate bribery, assured that the managers only enjoyed the position and reflected the failure of the system of corporate accountability. With the government overseeing all that, managers main concern was then the prospect of unpreventable government supervision and control. It was not long until their concerns turned to reality and a majority started asking that corporate governance should be reformed through the enactment of federal laws returning the board to its historical role as internal auditor of the corporation responsible for constraining management from violations of law and breaches of trust. (Cheffins, 2012).

After that, many of laws and regulations calling for the implementation of CG practices arose. In 1999, the OECD published its Principles of Corporate Governance, the first international code of good corporate governance approved by governments. These principles are not prescriptive or binding, they are more advisory whereas each country could apply them the way that suits them the most.

The principles went through multiple developments and ended up calling for a stronger role for shareholders in a number of important areas, including executive remuneration and the hiring process of board members.

They ask companies to make sure they have mechanisms to address possible conflicts of interest, to recognize and protect the rights of stakeholder's, and implement open door policy to hear the voices of those who foresee any misconduct. They also identify the responsibilities of auditors to shareholders and the important role the institutional investors could play in monitoring company performance and in discussing their concerns to the boards. They can challenge or support the board through voting at the general meetings of shareholders and they are well placed to take their concerns directly to the board and to propose a course of action. The OECD developments and revision in 2010 and 2011 focused on risk management and sustainability, considered factors affecting CG in a material way.

In the past few decades, the importance of corporate governance was drawn after the Enron wreckage. Freed power in the hand of the CEO that led to unethical behavior within the Enron company that continued to come to light long after its downfall. Overall, corporate governance in Enron was weak in almost all aspects. Thus, the board of directors is composed of a number of people who lacks business ethics. Also, they are often willing to engage themselves in fraudulent activity. This was the genuine root of the company's corporate governance failure, and the reason behind the Sarbanes-Oxley act. (Dibra, 2016)

The OECD was a point of encouragement for the Middle Eastern countries in the application and practice of corporate governance practices. United Arab Emirates founded The Institute of Corporate Governance (Hawkamah) as a joint effort between Dubai International Financial Center, OECD and Arab Banks Union. (Matar, 2009, P. 459-476).

In Jordan, corporate governance was an ambiguous concept, until 2003, where Amman's Chamber of commerce started an individual department called The Companies Control Department, that observes and assures that corporations are implementing the right applicable CG practices, under the aim of increasing the competitive advantage of the national economy. (Jordanian Corporate Governance Guide, P: 04). That guide included the basic guidelines of corporate governance disclosure all companies are supposed to follow. The code has five parts; it enlists the board of directors' roles and responsibilities, the control environment, transparency and disclosure, rights of shareholders and stakeholders.

Board of directors should be competent to achieve their aligned responsibilities, and represent the organizations products and services to their target audiences. They should have the expertise in management, finance, business, national and international markets and applicable laws and regulations. They should be independent and their judgements should be free of bias to benefit the organization they represent. The code requires that the size of the board should be an odd number, and have a minimum of three, and maximum of thirteen members, based on the size of the firm they present.

When it comes to the number of meetings the board holds, the principle states that the BOD should meet at least once a quarter to discuss organization-related-issues.

The BOD should establish an audit committee to review the financial statements, ensure accountability, review internal audit department, guarantee the adherence to accounting policies and recommend an internal audit.

The committee shall be composed of a minimum three independent members, elected by the BOD, and shall meet at least once quarterly to assess the financial performance, and managerial decisions associated with the organization.

The application of these guidelines was voluntary until a new announcement was publicized making it obligatory starting 2017.

Definitions of Corporate Governance

CG is a very broad concept, it is viewed and interpreted differently by each part of the organization and the community. Stakeholders view it as the guidelines that protects their rights, while management views it as their code of business conduct. This clearly results that corporate governance does not have a shared definition in literature and it is not easy to describe. Sternberg (1998) defines it: “Corporate Governance describes ways of ensuring that corporate actions, assets and agents are directed at achieving the corporate objectives established by the corporation’s shareholders”. It is also defined as “the system by which business corporations are directed and controlled” (Rankin, 2012, P:188). The OECD Principles of Corporate Governance (2011) provides one of the most used broad definitions since it serves as a reference for all OECD member countries: “Corporate Governance defines a set of relationships between a company’s management, its board, its shareholders and other stakeholders. Corporate Governance also provides the structure through which the objectives (i.e. strategy) of the company are set, and the means of obtaining those objectives and monitoring performance are determined”.

Corporate Governance attracted a good deal of public interest because of its apparent importance for the economic health of corporations and society in general. The way companies are governed, their goals and the objectives they pursue, the rights they are entrusted for, the responsibilities they recognize, and the distribution of the value they create became highly significant, not only for their directors and shareholders, but also for the wider community. (Fiori, 2008)

The Importance of Corporate Governance

Good corporate governance allows the corporation to work smoothly due to the existence of a clear level of accountability and communication amongst the organization, as well as people understanding what their roles and responsibilities are. Accountability, being one of the most important characteristics in accounting practitioners, will clarify all involved parties' rights and responsibilities, through enhancing professional ethics.

To properly understand and exploit corporate governance, it is required to understand and apply its most important ideologies. The general principles of CG are generally related to the shareholders, board of directors, and stakeholders. In addition to that, corporate governance places a solid emphasis on the behavior of the corporation and the information it reports publicly.

The most basic corporate governance principles include: (OECD, 2011)

- Keep the Interest of Stakeholders in Mind
- Treating Shareholders Equally

- Identifying the Roles of the Board of Directors
- Ethical Behavior
- Transparency
- Accountability
- Disclosure
- Regulations
- Tax Effects
- Internal Audit
- Sustainability and Risk Management

A good CG has many advantages, starting from a better competitive advantage, which means that investors will prefer investing in the company applying CG, other than investing in others in the same industry. It will also gain a better reputation, attract qualified reputable employees, reduce perceived risk to investors which can reduce the cost of capital as well as facilitate economic growth. (Rankin, 2012)

CG is now moving towards a broader view, taking risk management and sustainability in consideration. The concern of proper corporate accountability is related to the need of an efficient risk management and internal control systems. Uncertainty regarding effect of voluntary corporate governance guidelines and risk management drew the attention towards the alleged relationship (Kwamboka, 2010).

The impact of CG elements on the different dimensions of corporate sustainability reporting is also an unexplored area, especially that sustainability is a point of concern for corporations nowadays. It's been argued that various corporate activities have a direct or indirect impact on the external environment, and that is why corporations should be held accountable to a wider audience than simply its shareholders. (Mahmoud, et al, 2018).

And after the Global Financial Crisis (GFC) the awareness increased and managements of companies were obliged to start two new committees, one for sustainability, and the other for risk management, and they asked the audit committee to put risk management on the top of its' priorities. (Rankin, 2012, P.200)

CG is also debated to affect the quality of reported earnings. Earnings quality is defined as "the presence of earnings, which reflect current performance, are useful for predicting future performance and correctly discount intrinsic firm value" (Black, 1998)

Earnings Quality (EQ)

Quality of earnings reflects in the usefulness of financial statements to both internal and external users including investors, creditors, managers and all other stakeholders contracting with the corporation. It includes much more than understatement or overstatement of profit and loss. Good earnings quality, which is said to improve capital market efficiency, is represented when fundamental characteristics, faithful representation and relevance appear. Faithful representation means that the information is verifiable, free from error and truly represents the actual events and transactions.

Relevance refers to timeliness, and helpfulness to predict and forecast the future outcomes, good earnings quality means it is repeatable over a series of reporting periods. It also refers to the stability of profit and loss statement components, maintaining capital and realization risk of assets. Other factors must apply in order to assure good quality of earnings including persistence, accruals quality, predictability, value relevance, timeliness, smoothness, and conservatism. Bad earnings, or poor earnings lack those fundamental qualities, and are deceiving for decision makers. These can be detected when there is an aggressive use of accounting rules, high inflation, and a known gain for sale of assets.

Investors like to see high-quality earnings, since these results tend to be continuously achieved in future periods and provide more cash flows for investors, as well as reduce their fear of keeping or expanding their investments. Thus, entities that have high-quality earnings are also more likely to have higher share prices, and a better competitive advantage.

Earnings quality, in a way or another, is associated with good corporate governance practices. Managements of firms have the control of the way accounting policies are chosen, reports are presented, information is disclosed, and can assess the degree to which that information is relevant and faithfully represented to decision makers and investors. In order to observe earnings quality, organizations should provide regular detailed reports regarding sources of earnings, and prediction of any changes in the future trends of these sources. They could also implement a conservative accounting approach, which is an approach that reduces the amount of accruals, in order to correctly recognize their revenues and expenses. (Katsuo, 2008)

To simplify it, managements follow CG guidelines and overview the sources of its' earnings, how they're presented and to what extent they are accurate or manipulated.

A very important question in relation to the assessment of earnings quality is to determine the factors influencing the quality of financial reports, these consist of the business plan and operating environment of the firm, the management's financial reporting decisions related to policies and estimates, the quality of the standards, the credibility and independence of the auditors, and governance activities. Other factors affecting the quality of earnings could be the size of the firm, diversity of cash flows and revenues sources, and length of the operating cycle.

Quality of earnings has many determinants, the main important are:

1. Firm Characteristics: these include firm's choice of accounting principles, properties of its earnings such as persistence and volatility, and accruals. Firm performance could indicate any possible scenarios of earnings management and manipulation. The company's debt indicates the degree of their financial leverage, and if their management is funding it's earnings and earnings generating assets by borrowing and increasing its liability. Such action could reduce the quality of earnings, where there is substantial evidence that debt levels are associated with various measures of earnings quality (Malmquist, 1990).

2. Financial reporting: is the presentation of financial information to meet the needs of various stakeholders about the financial performance of a firm. Accounting methods, principles and estimates, financial statement classification and disclosures affect the quality of earnings based on the amount of information shared with the public, and whether the managements have chosen the right practices or not.
3. Governance: internal controls including characteristics of the BOD, internal control procedures, and managerial share ownership has an impact on earnings quality. Internal control mechanisms are viewed as monitors of the financial reporting system that constrain a manager's opportunity or ability to manage earnings, while managerial share ownership and managerial compensation are generally predicted to affect earnings quality because they provide incentives for earnings management. It is debated that stronger internal control mechanisms lead to less manipulation and higher quality of earnings. When it comes to the BOD, Abott et al study had shown that independent boards, and higher audit committee quality are associated with less earnings management.

Managerial ownership also has an effect on decisions taken regarding accounting policies, methods and estimates chosen. Finally, internal control mechanisms should be assessed to reveal the impact on the various proxies for earnings quality.
4. Auditors: researchers hypothesize that auditors are a determinant of earnings quality because of their ability to detect a material misstatement and to adjust for or report it (DeAngelo, 1981).

5. Auditors are able to detect errors based on his effort and effectiveness, and has the freedom whether to report or correct errors based on factors such as litigation risk, reputation costs, and independence. Auditor's firm size and fees could affect the audit results, which in result affect the quality of reported earnings as well.
6. Capital market incentives: it hypothesized that the cost/benefit trade-offs of accounting choices change during periods when a firm raises capital, and thus its earnings quality, may differ when a firm is raising capital. One-time accounting choices can have long-term consequences, including a diminished reputation for reliable reporting, which in turn may negatively affect equity valuation due to decreased reporting credibility, creating an alarming alert to investors and stakeholders.

In order to keep the firms attractiveness, managements making decisions that affect reported earnings must be careful. They need to assess objectives related to their compensation, debt contract provisions, or incentives that could cause fluctuations in share prices.

Quality of earnings could mean the degree to which management's choices of accounting estimates can affect reported income (Weil, 2009). These estimates could be in vague areas, that do not have a certain way to measure it and needs judgement to quantify it, which leaves stakeholders with a concern that the opportunity of manipulation is there, which causes users to think earnings numbers have a low quality. Earnings management has a lot in common with earnings quality.

Earnings management occurs when managers use their personal judgement in financial reporting, altering the actual results that could mislead some shareholders, stakeholders and potential investors about the companies actual economic performance, and affect their decisions based on that information (Healy, Wahlen, 1998). Accounting for business operations requires judgement and estimates, as we cannot measure revenue without estimating the prices customers will pay, and forecasting the expected sales, the bad debt, credit terms, refunds and related costs of selling. In these cases, managements' has to choose a number, for example the percentage of uncollectable amounts, based on actual results of previous years. Anyhow, other economic and political factors affect them, and thus these percentages are not constant. The wider the range of reasonable estimates, the more management's choice will influence net income, and that could fall under earnings management. Other management decisions such as timing of transactions, inventory valuation methods, depreciation methods, fall under their sole judgement, in which they could use to manipulate earnings, and thus affect the quality of the reported earnings negatively. Earnings' management has many techniques and shapes, like "cookie jar reserve" technique, this technique deals with future estimates of future obligations to be paid as a result of transactions happening in the current period. In this case managements do not have a reasonable answer, and could use this technique to overestimate these expenses, and when these expenses are accrued, the difference between the actual and estimated are put in the "cookie jar" to be used later and boost the earnings of a not-really-good performance periods.

These results are misconceiving and does not represent the actual financial performance, which on the other hand, lower the quality of reported earnings. “Big Bath write-offs” is another practice used to manipulate earnings. This method is used to write-off bad debt, write-down assets or change an operating segment. In these cases, an expense is recorded against earnings, which will lower the profit, the quality of reported earnings and cause a drop in the share prices. A “Big Bet on the Future” that happens at acquisitions could open a door for manipulation, the companies could manipulate R&D (Research and Development) costs by matching them to the earnings occurring from that acquisition, which will increase the earnings for future periods, causing a false increase in reported earnings.

Another method to manage earnings is “Throw out” a problem child, selling a losing controlled entities equity will cause a gain in the reported earnings of that period. Many other methods like introducing new accounting standards, write off of long term operating assets, leaseback, early retirement of debt and use of derivatives are also used to manage the reported earnings (Rehman,2013).

To continue on the previous, we can actually say that earnings management is closely associated with manipulating accruals. An accountant makes adjustments for revenue earned but not reported in the accounts, and expenses that incurred and not reported in the accounts. These accruals are added through an adjusting entry and are reported in the financial statements.

Accruals could be both discretionary, which are non-obligatory expenses that are not realized but reported in the accounts books like bonuses of higher management.

Managements have full control over these and arise from normal business transactions. They lead to an increase in earnings and are based on the changes of the firms' performance. Non-discretionary accruals are mandatory expenses to be accrued in the future, and are recorded in the accounts books, like utilities and rent expenses. Such expenses are usually budgeted for based on past actual expenses accrued. Discretionary accruals are the point of debate as they are solely based on management's choices and flexibility, which can be easily tampered with, causing a decrease of the quality in reported earnings.

It is said that highly managed earnings have lower quality. Yet, not having earnings management, does not in fact guarantee high quality of earnings. Sometimes earnings management, or "income smoothing: could help firms in keeping it's good position in the financial markets in expected financial distresses.

The Study Model:

To examine the impact of corporate governance practices on earnings quality, where $EQ = TACC / \text{Total Assets}$. The researcher used total accruals model developed by Richardson. This model measures the total accruals that consists of three main variables: The change in working capital, the change in non-current operating assets and the change in net financial assets.

The model is represented by this mathematical formula:

Total Accruals Model: (Richardson, 2003)

TACC = $\Delta WC + \Delta NCO + \Delta FIN$, Where:

$\Delta WC = (\Delta \text{Current Assets} - \Delta \text{Cash \& Short Term Investment}) - (\Delta \text{Current Liability} - \Delta \text{Short Term Debt})$

$\Delta NCO = (\Delta \text{Total Assets} - \Delta \text{Current Assets} - \Delta \text{Investment and Advances}) - (\Delta \text{Total Liabilities} - \Delta \text{Current Liabilities} - \Delta \text{Long-Term Debt})$

$\Delta FIN = (\Delta \text{Short Term Investment} + \Delta \text{Long Term Investment}) - (\Delta \text{Long Term Debt Instruments} + \Delta \text{Short Term Debt Instruments} + \Delta \text{Preferred Stock})$

Where

TACC: absolute value of total accruals.

Δ WC: net change in working capital.

Δ NCO: net change in non-current operating assets – net change in non-operating liabilities.

Δ FIN: net change in financial assets – net change in financial liabilities.

Where **EQ = TACC/Total Assets**

This model was applied on data extracted from ASE, to test the quality of earnings in companies applying, and not applying corporate governance practices.

It helped the researcher to reach that earnings quality is measured as below:

EQ = $\beta_0 + \beta_1 * NBD + \beta_2 * NMBD + \beta_3 * NAC + \beta_4 * NMAC + \epsilon$, Where:

EQ: Earnings Quality and the measure of total accruals, as defined is the probability of having a sustainable current income in the future (Richardson, 2003)

NBD: Number of the board of directors members.

NMBD: Number of meetings held by the board of directors.

NAC: Number of the audit committee members.

NMAC: Number of meetings held by the audit committee.

The researcher assumed that the relationship between total accruals and quality of earnings is of a negative correlation, the higher the accruals are, the higher earnings management is, which as a result decreases the quality of earnings.

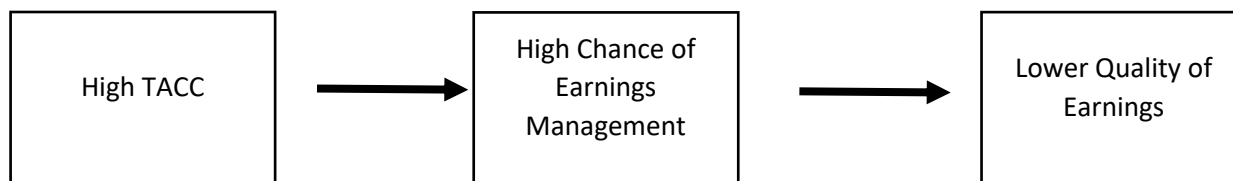


Figure (1): TACC effect on Quality of Earnings.

Total accruals (TACC) present both discretionary and non-discretionary accruals, which includes accounting principles and estimates that are affected by managements judgement, and are easily manipulated based on their own interest. This clearly shows a negative relationship between (TACC) and earnings quality, and thus, to determine if there is earnings' quality for each company in the sample, the researcher had calculated the arithmetic mean of (TACC) for all companies in the sample to be a benchmark.

That benchmark was taken to state that if (TACC) for a certain company is higher than the mean (0.1376), then there is earnings quality in that company and vice versa.

The Reason Behind Choosing Richardson Model:

1. This model can be used with all sectors, unlike Jones model and Jones modified model that can only be applicable on one sector.
2. It examines total accruals (discretionary and non-discretionary), while other models only examines only discretionary accruals.
3. It is considered the newest model as it was developed in 2003.

Second: Previous Studies

Here are some previous studies that the researcher found them most related to this study.

They are presented according to its publishing date from the oldest to newest.

1. (Dechow, Dichev, 2001) titled:

“The Quality of Accruals and Earnings: The Role of Accrual Estimation Errors”

This study suggested a new way of how which accruals could affected earnings quality. It assumed that the quality of earnings is decreased because of estimation errors. They have developed a working capital model to assess their assumption, and found that accruals quality are negatively related to total accruals, length of operating cycle, standard deviation of sales, cash flows and earnings. They had also found a positive relationship between accruals quality and earnings persistence.

2. (Hwang, Lin, 2010) titled:

“Audit Quality, Corporate Governance, and Earnings Management: A Meta-Analysis”

The purpose of this study was to use meta-analysis techniques to assess the outcomes of existing studies on the causes of earnings management. The main focus was on the impact of the effectiveness of corporate governance and audit quality on earnings management. The study's findings had shown that the independence of the board of directors and its expertise, the audit committee's independence, its size, expertise, and the number of meetings have a negative relationship with earnings management. It was also found that the audit committee's share ownership has a positive relationship with earnings management.

3. (Islam et al, 2011) titled:

"Is Modified Jones Model Effective in Detecting Earnings Management? Evidence from A Developing Economy"

The study examined the effectiveness of Modified Jones Model in detecting earnings management among all public companies that are listed in the Dhaka Stock Exchange (DSE), for the period covering between 1985 – 2005. The researchers employed the modified Jones model to detect earning management in context of Bangladesh capital market and found out that it was not very effective, and attempted to extend the modified Jones model by adding factors like revenue, depreciation expenses, retirement benefit expenses, asset disposal gains/losses and found it to be very successful.

4. (Ismail, 2011) titled:

"Earnings Quality, Family Influence and Corporate Governance: Empirical Evidence from Malaysia"

This study had taken place in Malaysia. It aimed to examine the association between family firms and earnings quality in Malaysia, to examine the association between corporate governance and earnings quality in Malaysia and to assess whether the existence of family firms mitigates the relationship between corporate governance and earnings quality. The sample of the study was taken from all non-financial firms listed in the Malaysian Stock Exchange. The results of the study shown that firms with significant family ownership and control have much higher quality of earnings compared to public firms.

The results support the notion that family firms have special features that substitute for the monitoring role of governance over the firm's activities. The higher earnings quality of family firms could be a result of the family firm's selflessness and long-term orientation that reduces the motivations for earnings manipulation. The results could also be due to the fact that family firms have lower agency costs and greater expertise relating to the firm's operations.

5. (Hollemans, 2011) titled:

“Earnings Quality: Accounting Conservatism in Public and Private Firms in the Netherlands”

This study aimed to test the difference of accounting conservatism policies used in public and private firms in Netherlands, where financial conservatism is debated to increase the quality of earnings. It also tested the difference of the companies' characteristics and the degree of the implementation of IFRS and how that affects accounting conservatism.

The quality of earnings was measured using Ball and Shivakumar model. The results indicated that Private companies are less conservative than the public companies due to having internal communication represented by their financial reports, before and after applying IFRS, and that means that private Dutch companies, not voluntarily applying IFRS, exhibit less conditionally conservative financial accounting than public Dutch companies, which do apply IFRS.

6. (Abu Ali et al, 2011) titled:

“The Impact of Earnings Quality on the Cost of Equity based on the International Financial Reporting Standards”

This study aimed to identify the characteristics of earnings and their quality on the cost of capital, through the cost of equity for the public shareholding services and industrial companies listed in ASE. The study assumed that the quality of earnings leads to getting economic gains through decreasing the information risk which leads to decreasing the cost of capital. A sample composed of (57) industrial companies and (27) services companies was tested through examining the qualitative characteristics of accounting information for the period covering (1993-1997).

The study found that there is an impact of earnings quality on the cost of equity, and that there is a relationship between the qualitative characteristics of financial information on the cost of equity. It also found that accounting factors are more attributing to decreasing the cost of capital than the financial factors.

7. (Bistrova et al 2012) titled:

“Quality of Corporate Governance System and Quality of Reported Earnings: Evidence from CEE Companies”

This study had taken place in Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Romania, Poland, Slovakia, and Slovenia. The data was extracted from annual reports published on their stock exchanges, and the analysis was for the period of four years (2007-2010).

It aimed to look into the quality of the corporate governance and the quality of earnings of the CEE companies and clarify how the relationship between these two determinants affects the sustainable shareholder value. Earnings quality was assessed based on the widely-accepted measures to detect creative accounting practices: level of accruals and comparison of net income level to operating cash flow. The most important findings of the study were that there is less risk to face financial results manipulation if the high quality corporate governance applies, meaning that its board and management team act according to the best practice, information on the company is transparent and publicly available, and that well-managed companies are the best in improving quality of the reported earnings during the study's timeframe. The analysis of the overall earnings management in CEE region implied that the market is favorable to investors whereas manipulation is low, based on the accruals analysis and comparison of net income to operating cash flow.

8. (Bonetti et al 2012) titled:

“The Influence of Country- and Firm-Level Governance on Financial Reporting Quality: Revisiting the Evidence”

This paper aimed to revisit the joint effect of country-level legal enforcement and firm-level governance on the quality of financial reporting. The sample was a group of companies implementing IFRS. The main results implied that firms operating in weak legal enforcement countries enhance their earnings quality by having strong efficient CG practices. This finding suggested that in strong enforcement countries, CG is a voluntary process and the main finding was that IFRS adoption by itself does not much affect earnings quality and that any such effect is conditional upon firm- and country-level governance.

9. (Hamdan, Allam, 2012)

“The Factors Affecting the Quality of Earnings: Evidence from Jordanian Industrial Companies”

This study aimed to check the quality of earnings for public shareholding industrial companies listed in ASE, as well as testing the factors that affect the level of quality such as: accounting discretion, debt contracts, company size, return on investment, quality of the audit and audit committees. The sample of 50 companies covering the period 2004-2009 was examined. The top results indicated high quality of earnings in the industrial sector, as well as a positive relationship between the company's size, audit quality and debt contracts with the quality of earnings.

10. (Meeampol et al, 2013) titled:

“The Relationship between Corporate Governance and Earnings Quality: Case Study of Listed Companies in the Stock Exchange of Thailand (SET)”

The objective of this study was to investigate the practices of corporate governance of listed companies in SET in the period 2006-2008, and assessed the quality of their earnings. The most important results of this study had reached that there is a relationship between IOD score and standard deviation of net income. It also found that if there is a standard deviation for firms listed in (SET) has IOD scores at 5 percent significance level, then the relationship between governance and earnings quality is positive and the firm has high quality CG, lower earnings management, and higher quality of earnings.

11. (Basilico, 2013) titled:**“The Quality of Earnings, Governance and Future Stock Returns in Europe. An Empirical Study.”**

This study aimed to investigate the practice of inappropriate devious behavior of managers in compiling financial reports and its impact on investors through the links between the quality of earnings, corporate governance and future stocks returns. It reviewed the impact of IFRS on the quality of earnings to determine in which European countries it is possible to exploit the accruals mispricing to build outperforming stocks portfolios. The study assessed the relationship between manipulating accruals and industry affiliation across different European countries and studied the importance of corporate governance characteristics to add value to the quality of earnings.

The results were that earnings management decreased, but the accruals mispricing is still present in some European countries. The accruals misrepresentation is not present in all industries within the European sample studied. It was also found that CG quality matters and is linked to higher quality and higher future stock returns in the Netherlands.

12. (Zgarni et al, 2014) titled:

“Do the Characteristics of Board of Directors Constrain Real Earnings Management in Emerging Markets? – Evidence from the Tunisian Context”

This study aimed to test the effect of the board of director’s independence, size and number of annual meetings on lowering the levels of earnings management. A sample of (29) non-financial companies listed in the Tunisian financial market was tested using Roychowdhury model.

The results had shown that the independence of the board decreases the percentage of earnings management, and that the implementation of the financial instruments law led to decreasing earnings management. It had also shown a negative relationship between the number of the board’s annuals meetings and the percentage of earnings management.

13. (Al Areeni, Al Juaidi, 2014) titled:

“The Modified Jones and Yoon Models in Detecting Earnings Management in Palestine Exchange (PEX)”

This study aimed to investigate the effectiveness of the Modified Jones (1995) and Yoon et al., (2006) model in Palestine Exchange, and how well these models are efficient in detecting earnings management practiced by Palestinian listed companies in the PEX in period between 2006 - 2011. The population of the study included all listed companies in the PEX in all sectors such as banking, industry, insurance, investments and services.

The results indicated that the Yoon et al., (2006) model is better than the Modified Jones (1995) model in detecting earnings management practiced by targeted companies in PEX.

14. (Matar et al, 2014) titled:

“Earnings Management Methods and their Impact on the Reliability of the Published Financial Statements of Jordanian Public Shareholding Companies”

The study’s objective was to reveal the extent to which managements manipulate and manage earnings, and how that could reflect on the credibility of its published financial statements. The researchers implemented a descriptive analytical methodology and found that any earnings management techniques have a direct or indirect effect on the trustworthiness of the financial statements published. It has also reached that companies with fraudulent managements are considered the most significant, while those using income smoothing are considered the least significant, when it comes to the reliability of the information reported.

15. (Hashmi et al, 2016) titled:

“Impact of Corporate Governance Measures on Earnings Quality: Evidence from Pakistan”

The purpose of this study was to examine the impact of corporate governance on earnings quality on a sample taken from Karachi Stock Exchange of 100 index including 70 non-financial listed firms. Whereas, earning quality of the firm has been addressed by earnings management and discretionary accruals used to measure the level of earnings management.

The Study's main results had shown a negative impact of audit quality and board size on earnings management, while the relationship between firm size and earnings management is positively significant. And as a result, a negative relationship is drawn between earnings management and earnings quality.

16. (Abdul-Hamid et al, 2016) titled:

“The Impact of Disclosure Quality on Corporate Governance and Earnings Management: Evidence from Companies in Indonesia”

This research studied the quality of disclosure and its relationship with CG and earnings management. The study's sample was 175 listed manufacturing firms on Indonesia Stocks Exchange (IDX) during period 2009-2013. The analysis methodology used was Moderated Regression Analysis (MRA). The results indicated that there is a significant effect on disclosure quality on the relationship between corporate governance practices such as number of members in the board of directors, their compensations, and earnings management. The results indicated that disclosure quality and good corporate governance can reduce earnings management and manipulation. This study also found insignificant moderation effect of disclosure quality on the relationship between independence of the audit committee and earnings management variables.

17. (Machdar et al, 2017) titled:

“The Effects of Earnings Quality, Conservatism, and Real Earnings Management on the Company's Performance and Information Asymmetry as a Moderating Variable”

This study researched the deviation of information and its effect on the strength or weakness of earnings quality. It was conducted in Indonesia and Singapore and covered the period

from 2004-2013. The main findings of the research included that the impact of earnings quality on the company's financial performance is varying. Accruals quality can significantly affect the company's financial performance, while income smoothing does not affect the company's financial performance. Information asymmetry weakens the effect of earnings management and accruals quality on stock returns. On the other hand, it strengthens the real earnings management influence on company's financial performance.

18. (Al-Attar et al, 2017) titled:

“The Effect of Earnings Quality on the Predictability of Accruals and Cash Flow Models In Forecasting Future Cash Flows”

This study answered two main questions, the first was, “is the superiority of aggregate earnings over aggregate cash flows affected by the level of earnings quality?” In addition, the second was, “Is the superiority of aggregate earnings over the main components of earnings (i.e. operating cash flows, accounts receivable, inventory, accounts payable, and depreciation) affected by the level of earnings quality?”. The Study took place in Jordan and examined a sample of Industrial and services firms. The main findings of the study were that the quality of earnings affect the predictability of cash flow and earnings, as well as providing evidence of using all accounting information reported in the financial statements to enhance the predictability of future cash flows.

The Difference between Previous Studies and this Study

Corporate governance became a hot research topic in this era, and caught the attention of many researchers to study its practices and effects on many things including sustainability, stock prices, market value, earnings management, risk management, organizational structure and foremost, the quality of earnings.

The researcher aimed to determine the impact of CG practices on the quality of earnings for public shareholding companies listed in ASE. This study comes to follow those efforts and aims to differ from the previous by studying a sample from all industries of public shareholding companies listed in ASE. It will study the CG factors that might affect quality of earnings such as number of the board of directors' members, and the number of their meetings. It will also assess number of the audit committee members, and the number of their meetings. The period of the study will cover a more recent period than previous studies, covering the period between 2013-2016, and covering a wider span than previous studies. The purposive sample will have a bigger oversight on the market as a whole, which will make the implementation and retesting of this study easier for future studies, and more accurate to base results and recommendations upon.

What differs the study from previous studies is mainly:

1. It is a modern study, covering the period from 2013-2016.
2. The sample of the study was inclusive of all sectors: industrial, financial and services.
3. It used the most important variables of corporate governance: the set-up of the Board of directors and the set-up of the audit committee. (Jordanian Corporate Governance Code, 2003)
4. The researcher used the Total Accruals model by Richardson (2003), which is more modern compared with other models used in other previous studies such as Jones Model or Jones Modified Model.

Chapter Three

Methodology

Introduction

This chapter will present the methodology, the population, the sample of the study, its' variables, and the statistical analysis techniques which were used to test it, as well as the resources of the data gathered.

Methodology of the Study

This study used a descriptive analytical methodology based on an empirical study using actual financial information published in ASE for the period 2013-2016, as it is considered the most efficient way to get the most accurate results possible regarding the impact of CG on quality of earnings in public shareholding companies listed in ASE.

Population of the Study

This study's population is the public shareholding companies listed in ASE from three sectors: financial, services and industrial. As reported during the period 2013-2016, the number of the public shareholding companies listed are 131 companies in the three economic sectors.

Sample of the Study

The study will examine a sample composed of 60 public shareholding companies, selected from a population of 131 companies in ASE based on the data disclosed by these firms, from the ASE database. The study will cover their financials reported in the period 2013-2016. The sample was selected randomly from the disclosed financial statements of companies listed in ASE.

Table (1): Sample of the Study

Industry	No. of Companies	% from Population	% from Sample
Financial	13	76%	22%
Industrial	37	55%	61%
Services	10	22%	17%
	60		100%

Sources of Information

Three sources of information used in the study were:

1. Primary source of information; which was the financial statements and financial information of the sample disclosed on ASE website.
2. Secondary source of information: previous literature, books, magazines, journals, articles and any other sources of information that might be relevant.
3. The researcher also contacted many of the companies in the industrial sector, while only one provided the required information.

Variables of the Study

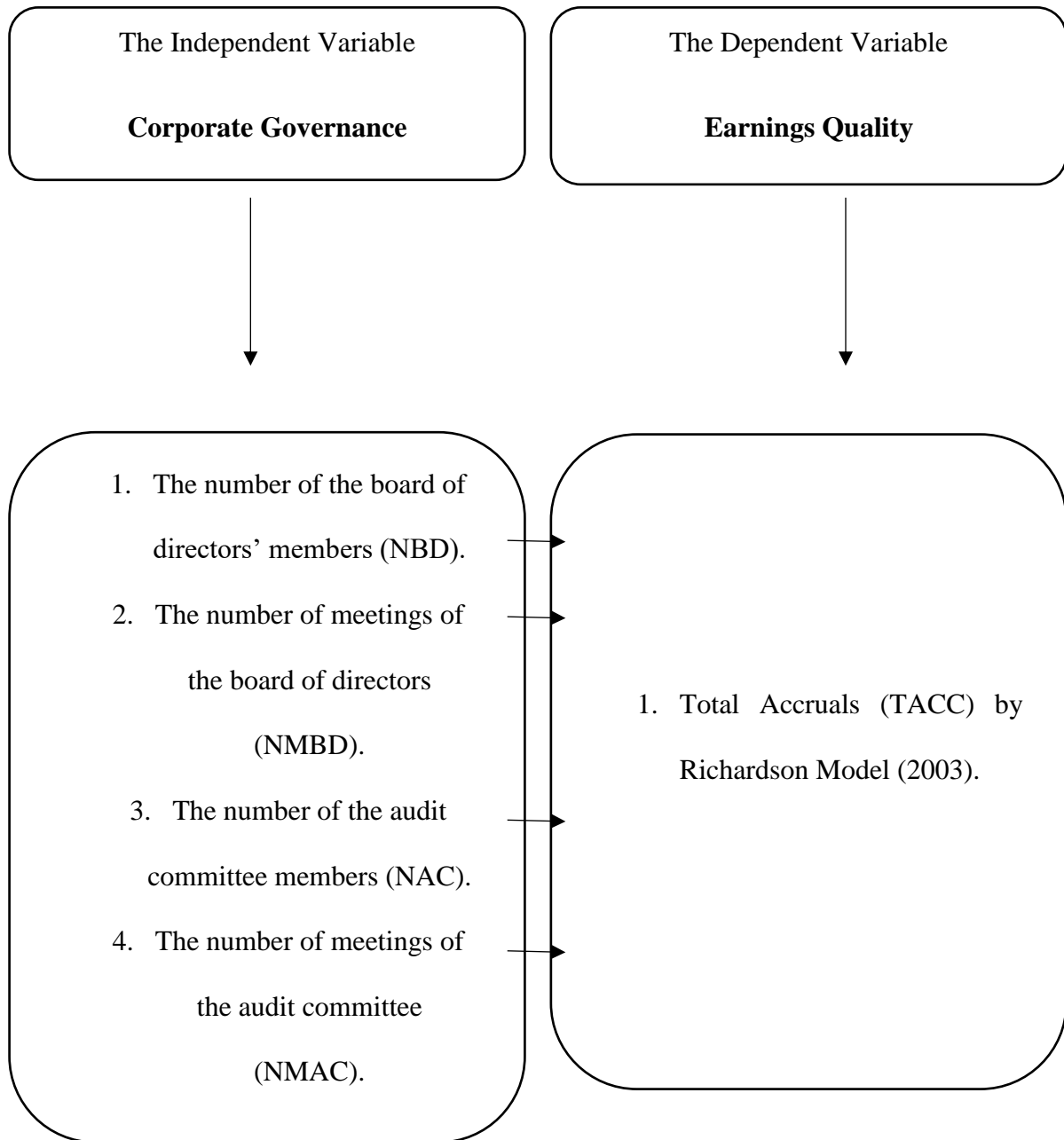


Figure (2): The Study Model

$$EQ = \beta_0 + \beta_1 * NBD + \beta_2 * NMBD + \beta_3 * NAC + \beta_4 * NMAC + \epsilon$$

Designed by the researcher.

Statistical Techniques Used:

The study used the data collected from the annual reports of the sample in order to test the hypotheses through five methods:

1. Descriptive statistical analysis: through measuring mean, maximum, minimum, and standard deviation.
2. Smirnov and Shapiro Normality Tests.
3. Multicollinearity through variance inflation factor (VIF) and tolerance.
4. Pearson Correlation Matrix, to assure the results of the Normality Tests used earlier.
5. Multiple regression.

Chapter Four

Statistical Analysis and Hypotheses Testing

Introduction

The data collected from the sample companies were analyzed in order to examine the hypotheses and obtain the results of the study. This chapter contains four main sections. The first section includes descriptive analysis of the study data to describe the sample depending on the descriptive statistical measures. The second section contains the verification and validation of the study data for the statistical analysis. In addition, to ensure that they are compatible with the normal distribution hypotheses and Multicollinearity Test. The third section examined the correlation between the variables of the study together, and the final section examined the hypotheses of this study depending on multiple regression models.

The Descriptive Statistics of the Study and its Variables

In the analysis of the descriptive data of the independent and dependent variables of this study, the researcher examined the published financial statements of the companies included in the study sample which consists of (60) companies and published in the annexes. These data have been divided into two parts:

The First Part:

After collecting data associated with Corporate Governance which represented by (NBD), (NMBD), (NAC), (NMAC) from the financial reports of the sample companies presented in appendix 1, the descriptive analysis of the independent variables was measured as follows:

Table (2): Results of descriptive analysis of the independent study variables

Measurements - variables	NBD	NMBD	NAC	NMAC
Maximum	19	19	7	20
Minimum	4	0	0	0
Mean	9	7	3	4
Std. Deviation	2.739	2.454	1.483	3.148
Kurtosis	-0.029	2.425	1.256	1.461
Skewness	0.539	0.334	-0.193	0.744

Table (2) includes the results of descriptive analysis of the independent study variables represented by (NBD), (NMBD), (NAC), (NMAC), it is noted from the table that the arithmetic mean of number of members of the board of directors is (9) which means that the average number of members of the board of directors in the study sample companies is nine members. The largest number of members of the board of directors in the sample companies was (19) members, where it was in the Arab Potash Company in 2016, while the lowest number of members of the board of directors was (4) members, where it was in a number of companies such as Sheba Metal Casting Company in 2014 and Jordanian Dairy Company in 2014 and 2015. The value of the standard deviation of the number of directors reached (2.739), where this value indicates the dispersion of the study sample from its arithmetic mean. The table above also shows the arithmetic mean number of meetings held by the board of directors which is (7), it indicates that the average of number of meetings held by the board of directors in the sample companies is seven during the year. The largest number of meetings was held by the members of the board of directors in the sample companies was (19) meetings, where

they were held at the Commercial Bank of Jordan in 2015 and the Jordanian Free Markets Company in 2014, while the lowest number of meetings of the board of directors was (0) meeting, where it was in Jordan Pipes Manufacturing company. As for the number of the audit committee members, its arithmetic mean in the study sample companies was (3) members, the largest number of the audit committee members in the study sample companies was (7) members, while the lowest number of the audit committee members was (0) member, where it was in more than one company such as National Steel Industry Company and National Aluminum Industrial Company, the standard deviation reached (1.483) which indicates the extent of dispersion of the study sample data.

The table above shows the arithmetic mean of the number of meetings held by the audit committee was (4), which indicates that the average number of meetings held by the audit committee in the study sample companies. The largest number of meetings was held by the audit committees in the sample companies was (20) meetings where it was in the Jordanian Capital Bank in 2014., while the lowest number of meetings was held by the audit committees was (0) meeting such as the Jordanian Chemical Industries company, and the National Poultry. It should be noted that all the sample companies comply with the Corporate Governance Law in terms of the number of members of the Board of Directors and the number of meetings, which is a minimum of one meeting quarterly, while it was found that many companies do not comply with the law in terms of the number of members of the Audit Committee and the number of their meetings.

Also it is noted that the indicators of Skewness and Kurtosis of all the variables are within the appropriate range. According to (Kamiya et al., 2014), the decision rule is that the value of Skewness should be between (-1.3) and (+1.3), and the value of Kurtosis should be between (-3.75) and (3.75) in order for the data to be suitable for normal distribution conditions. According to each of the values in the above table, it is clear that they meet the requirements of normal distribution.

The Second Part:

After collecting the financial statements of the dependent variable which is Earnings Quality depending on (Richardson, 2003), from the financial statements of the sample companies presented in annex 2, the descriptive analysis of the earnings management method was measured as follows:

Table (3): Results of descriptive analysis of earnings quality variable

Years- Measurements	Minimum	Maximum	Mean	Std. Deviation
2014	0.0024	0.9061	0.1445	0.1622
2015	0.0001	0.7702	0.1404	0.1493
2016	0.0007	1.0866	0.1279	0.1846
All Years	0.0001	1.0866	0.1376	0.1653
Skewness : 1.081			Kurtosis : 3.293	

Table (3) shows the results of the descriptive test of the dependent study variable represented by Earnings Quality and measured by the size of the total accruals. When the total accruals increase, this means that the earnings quality decrease, and vice versa. According to the above table, it is noted that the highest average of earnings quality was in 2016, where the total

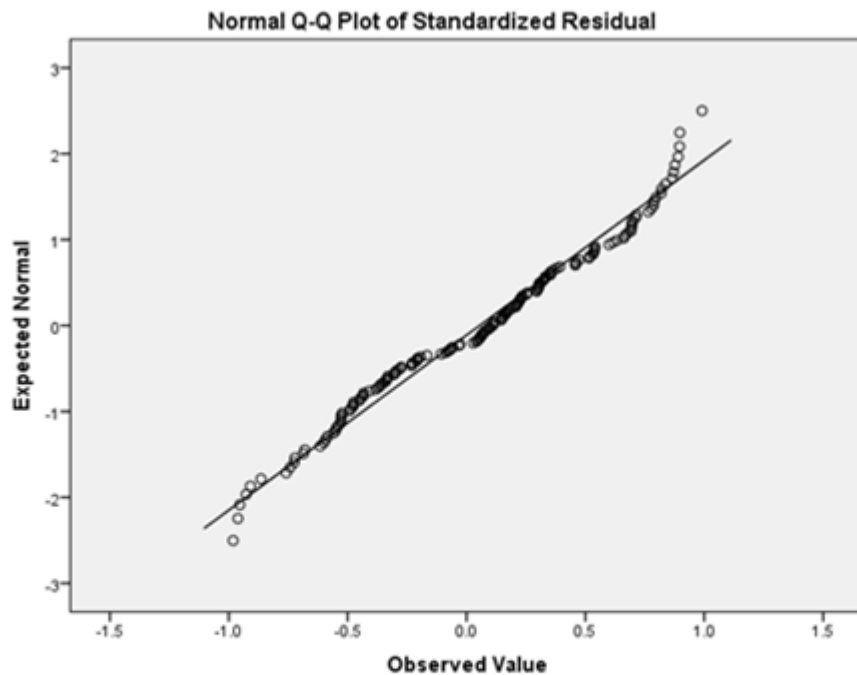
accruals reached (0.1279), while the lowest average of earnings quality was in 2014, where the total accruals reached (0.1445). Also, as for the arithmetic mean of the total accruals of the sample companies in all the years which reached (0.1376), it is noted that it became lower than the average of total accruals in 2014 and 2015, and higher than the average of total accruals in 2016, which indicates that the earnings quality decreased in 2014 and 2015 from the average of the study years, and the earnings quality increased in 2016 from the average of the study years. Moreover, it is noted that the highest value of earnings quality was in 2015, where it was in the National Oil and Electricity Production from Oil Shale Company, its total accruals in that year reached (0.0001), while the lowest value of earnings quality was in 2016, where it was in Comprehensive Multiple Projects Company, its total accruals in that year reached (1.0866).

Also it is noted from table number (3) that the indicators of Skewness and Kurtosis of all the variables are within the appropriate range. According to Kamiya et al., 2014, the decision rule is that the value of Skewness should be between (-1.3) and (+1.3), and the value of Kurtosis should be between (-3.75) and (3.75) in order for the data to be suitable for normal distribution conditions. According to each of the values in the above table, it is clear that they meet the requirements of normal distribution.

The Verification of the Validity of Data for the Statistical Analysis

It is important to ensure that the study data meet the conditions that confirm that it is suitable for the hypothesis analysis tests by conducting the normal distribution test of the Standardized Residual. The linear regression hypotheses confirm the need to distribute the residuals naturally (Babbie et al., 2018), where it is important to follow the residuals of natural distribution. In the case of non-compliance with the normal distribution conditions, a non-parametric statistical analysis should be conducted for data that is characterized by abnormal distribution. The results of the verification tests of the study data will be presented as follows: testing the normal distribution of the residuals and linear interference tests:

Normal Distribution Test



Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual	.067	161	.072	.974	161	.004

a. Lilliefors Significance Correction

Figure (3): Normal distribution of residuals in the study model

Figure (3) presents the results of normal distribution verification of the residuals using the Kolmogorov-Smirnov test. According to this test, the decision rule indicates that the residuals follow normal distribution if the P-value is greater than (0.05) (Hayduk et al., 2007), in contrast, the distribution is considered abnormal for the residuals. According to figure 1, the residuals follow the normal distribution, where the P-value of this test reached (0.072), therefore, it is possible to use the parametric tests of data related to finding the impact of Corporate Governance on the Earnings Quality in Public Shareholding Companies which represent the study sample.

Linear Interference Test

Multicollinearity Test was used to test the validity of study data for statistical analysis, where the researchers Luo et al., (2007) defined Multicollinearity Test as a phenomenon that occurs when there is a high correlation between two or more independent variables in the multiple regression models. This leads to negative effects on analysis by eliminating the ability to clarify the results and conclusions of this study, which in turn will affect the generalization and accuracy of the study model. In order to ensure that there is no problem in linear interference, variance inflation factor (VIF) and tolerance coefficient will be used. Results are as shown in table (4) as follows:

Table (4) The validity of the study data for statistical analysis

<i>Multicollinearity</i>		
<i>Tolerance</i>	<i>Variable's</i>	<i>VIF</i>
0.775	Number of the board of directors members (NBD)	1.290
0.716	Number of meetings held by the board of directors (NMBD)	1.396
0.658	Number of the audit committee members (NAC)	1.520
0.462	Number of meetings held by the audit committee (NMAC)	2.165

Variance inflation factor (VIF) is used to determine interference between variables and the general rule of VIF. There is inflation according to this indicator when the value is greater than 10, thus, the regression coefficients are poorly determined due to increased inflation between independent variables (Schreiber & Jackson, 2017). According to Table (4), all values were less than 10 in relation to the inflation coefficient.

As for tolerance coefficient, it is another test that used to detect the self-correlation problem. It can be determined that there is a problem of self-correlation if the tolerance factor value is less than (0.20). As for table (4), all values were greater than (0.20) in relation to the inflation coefficient. Based on the results of the two previous indicators, it is clear that all study variables exceeded these two indicators, which means that there is no problem of linear interference and self-correlation in the study model.

Correlation Matrix for Study Variables

Pearson correlation matrix was adopted to find the correlation between independent variables and between each of them with the dependent variable as follows:

Table (5): Results of correlation matrix between the study variables

<i>Correlation Prob</i>	<i>EQ</i>	<i>NBD</i>	<i>NMBD</i>	<i>NAC</i>	<i>NMAC</i>
<i>EQ</i>	1				

<i>NBD</i>	-0.216**	1			
	0.004	-----			
<i>NMBD</i>	-0.043	0.128	1		
	0.568	0.086	-----		
<i>NAC</i>	-0.151*	0.362**	0.123	1	
	0.000	0.000	0.099	-----	
<i>NMAC</i>	-0.165*	0.445**	0.496**	0.548**	1
	0.027	0.000	0.000	0.000	-----

According to statistical data in Table (5), it is clear that:

1. There is statistically significant relationships between earnings quality and each of the independent variables except for the number of meetings held by the board of directors, where the significance value and correlation coefficients were respectively: ($R = -0.043$, $Sig = 0.568$), at a significant level (0.05), which means that there is no significant correlation between the number of meetings held by the board of directors and earnings quality.
2. As for the relationship between the dependent variable and the remaining independent variables, it is clear that the strongest correlation coefficient is the coefficient which correlates between earnings quality and number of the board of directors members, where the correlation value reached ($R = -0.216$, $Sig = 0.004$), at a significant level (0.01), which means that there is a statistically significant negative correlation, which means that total accruals decrease with the increase of number of the board of directors members, which is reflected positively on earnings quality, followed by the correlation value which reached ($R = -0.165$, $Sig = 0.027$), at a significant level (0.05), between earnings quality and number of meetings held by the audit committee, which indicates that there is a statistically significant negative correlation, which means that total accruals decrease with the increase of number of meetings held by the audit committee, which is reflected positively on earnings quality. While the lowest correlation coefficient was between earnings quality and number of the audit committee members, where the correlation value which reached ($R = -0.151$, $Sig = 0.000$), at a significant level (0.05), indicating that there is a statistically significant negative correlation, which means that total accruals decrease with the increase of number of the audit committee members, which is reflected positively on earnings quality.

3. Also, there is some statistically significant relationships with different values of the correlation coefficient among the independent variables, the strongest correlation coefficient is the coefficient which correlates between number of the audit committee members and number of meetings held by the audit committee, where the correlation value which reached ($R = 0.548$, $Sig = 0.000$), at a significant level (0.01), which means that there is a very strong positive correlation with statistical significance, which means that the number of meetings held by the audit committee increases with the increase of the number of the audit committee members, while the lowest correlation coefficient was between number of the board of directors members and number of meetings held by the board of directors, where the correlation value which reached ($R = 0.362$, $Sig = 0.000$), at a significant level (0.01), which means that there is a very strong positive correlation with statistical significance, which means that number of meetings held by the board of directors increases with the increase of number of the board of directors members.
4. Moreover, the results of correlation test analysis indicated that there is no correlation higher than 80% among the independent study variables, which indicates that there is no high correlation problem among the independent study variables, and this finding is consistent with what was previously achieved through the linear interference test.

Test of Study Hypotheses

Ho1: There's no significant impact of corporate governance on the earnings quality in public shareholding companies listed in ASE.

In order to determine the result of the main null hypothesis, the study used multiple regression analysis. The Sig F value was adopted to accept or reject the study model and to determine the extent of its suitability to represent the relationship between the independent variables and the dependent variable, where the decision rule indicates that the model is accepted when the Sig F value is less than 0.05. In order to determine the impact of each one of the independent variable separately on the dependent variable, the T Sig value was adopted in this study, where the decision rule indicates that there is an effect when the value of T Sig is less than (0.05) in order to accept the alternative hypothesis and reject the null hypothesis, and in order to indicate the accuracy of the explanation of the independent variables to the dependent variable, the adjusted R Square value was adopted.

The next section presents the results of multiple regression analysis with an explanation of these results for the study model, and then the results will be compared with previous literature and studies.

The Study Model

$$EQ = \beta_0 + \beta_1 * NBD + \beta_2 * NMBD + \beta_3 * NAC + \beta_4 * NMAC + \epsilon$$

The study model is designed to examine the impact of corporate governance practices on the earnings quality of the sample companies listed on the ASE, table (6) shows the results of the multiple regression test of the study model as follows:

Table (6) Multiple regression test results of the study

Variable	Prob. (T-statistic)	T-Statistic	Coefficient	β	Std. Error
Constant	0.000	4.383	-----	0.249	0.057
NBD	0.046	-2.013	-0.168	-0.010	0.005
NMBD	0.816	0.233	0.020	0.001	0.006
NAC	0.552	-0.597	-0.054	-0.006	0.010
NMAC	0.517	-0.649	-0.070	-0.004	0.006
Prob(F-statistic)	0.041				
S.E. of regression	0.162				
F-statistic	2.553				
Adjusted R-square	0.034				
R	0.235				
R-squared	0.055				

Table (6) shows the results of the multiple regression tests of the independent study variables represented by corporate governance with (number of the board of directors members, number of meetings held by the board of directors, number of the audit committee members, and number of meetings held by the audit committee) and their impact on the dependent variable (earnings quality) for the Public Shareholding sample companies. It is noted from the table that the value of F calculated reached (2.553), at a significant level (0.05), indicating that the

first proposed model of the study has very little suitable and has the explanatory power. The results of regression analysis showed that the value of Sig F reached (0.041), which is less than the significance of the test which is (0.05). Therefore, the main null hypothesis should be rejected and the alternative hypothesis should be accepted, which means that there's a significant impact of corporate governance on the earnings quality in public shareholding companies listed in ASE.

The results indicated that the adjusted R^2 value reached (0.034), which means that only about 3.4% of the fluctuations in the earnings quality of the sample companies can be explained by the changes that occur in one part of the dimensions of the corporate governance represented by number of the board of director's members. It is noted that the value of the Adjusted R^2 should be between 0-1 and, if its value is greater than 30%, it is possible to construct a mathematical equation to predict the earnings quality through corporate governance. The significant decrease in the adjusted R^2 value indicates that there are other factors outside the interrelationship between these two variables may mutually affect each other. Therefore, the researcher will not be able to formulate the multiple linear regression equation in mathematical form to indicate this prediction.

In order to determine the impact of each variable of corporate governance on earnings quality, the multiple regression test results were adopted as follows:

- **Ho1-1: There is no significant impact of the number of the board of directors members on earnings quality.**

It is noted from table (6) that the value of T Sig which was less than (0.05) reached (0.046), and according to the decision rule that indicates to reject the null hypothesis and accept the alternative hypothesis if the T Sig is less than (5%), and thus the number of the board of directors members impact on earnings quality in companies. Accordingly, it was found that there is an impact of the number of the board of director's members on earnings quality. As for the coefficient value which reached (-0.168), there is a negative impact of the number of the boards of directors members on total accruals, which is reflected positively on earnings quality, which indicates that the number of the board of directors members is the only dimension that impact on earnings quality between the corporate governance dimensions of the study.

- **Ho1-2: There is no significant impact of the number of meetings held by the board of directors on earnings quality.**

It is noted from the results of the analysis that T Sig value which was greater than (0.05) reached (0.816), and according to the decision rule that indicates to accept the null hypothesis if T Sig value is greater than (5%), and thus the number of meetings held by the board of directors has no statistically significant impact on earnings quality.

In addition, it has a weak positive impact on total accruals, which is reflected negatively on earnings quality, where the value of the coefficient reached (0.020), at significance level greater than 5%.

- **Ho1-3: There is no significant impact of the number of the audit committee members on earnings quality.**

It is noted from the results of the analysis that T Sig value which was greater than (0.05) reached (0.552), and according to the decision rule that indicates to accept the null hypothesis if T Sig value is greater than (5%), and thus the number of the audit committee members has no statistically significant impact on earnings quality. Thus, it has a weak negative impact on total accruals, which is reflected positively on earnings quality, where the value of the coefficient reached (-0.054), at significance level greater than 5%.

- **Ho1-4: There is no significant impact of the number of meetings held by the audit committee on earnings quality.**

It is noted from the results of the analysis that T Sig value which was greater than (0.05) reached (0.517), and according to the decision rule that indicates to accept the null hypothesis if T Sig value is greater than (5%), and thus the number of meetings held by the audit committee has no statistically significant impact on earnings quality. In addition, it has a weak negative impact on total accruals, which is reflected positively on earnings quality, where the value of the coefficient reached (-0.070), at significance level greater than 5%.

On the other hand, the stepwise regression analysis shows that although the test revealed that there is a statistically significant effect between independent variables each with the dependent variable, the relative weight of these variables varies in the formation of the new regression equation.

The largest weight in this equation is the number of the board of directors members. While the lowest weight is the number of the audit committee members. Therefore, taking into account the value of Constant (0.249), the linear gradient equation, which represents the model of predicting the earnings quality for the Jordanian public shareholding companies, was formulated. If only four independent variables were adopted as a function of this prediction:

$$EQ = 0.249 - 0.010 * NBD + 0.001 * NMBD - 0.006 * NAC - 0.004 * NMAC + \text{¥}, \text{ Where:}$$

EQ: Earnings Quality and the measure of total accruals.

NBD: Number of the board of directors members.

NMBD: Number of meetings held by the board of directors.

NAC: Number of the audit committee members.

NMAC: Number of meetings held by the audit committee.

¥: Margin of error.

Chapter Five

Results and Recommendations

Results

The study reached many results; the most important of which are:-

1. There is a significant impact of corporate governance practices when considered together as a unit on earnings quality in public shareholding companies listed on ASE. According to the researcher, this is due to the important role of corporate governance mechanisms which are mainly concerned with maintaining transparency, disclosure, and accountability beside the protection and guarantee of the rights of shareholders and all stakeholders involved in the company's business. This is done by carefully controlling and supervising the performance of the company's management. Moreover, corporate governance also plays a significant role in preventing the collusion of auditors with those who have relations and interests in the company such as the management and investors. This result agrees with the findings reached by (Bistrova et al 2012); (Bonetti et al 2012); (Meeampol et al 2013); (Basilico, 2013); and (Abdul-Hamid et al, 2016).

The following outcomes are derived from the above mentioned result:

- a) There is a significant impact of the number of the board of directors' members on earnings quality. According to the researcher, this is due to the business nature of the board of directors which is considered one of the main mechanism governing the performance of managers CEO through controlling their performance to reduce the undesired behavior in a manner that enables the development of the company's strategies which aim at preventing earnings management.

As well, the number of the board of directors' members is also seen an important factor in the effectiveness of the board of directors because of the diversity of its members' expertise and their ability to better deal with the environment. Thus, this explains the important role of the number of the board of directors' members in achieving earnings quality. This outcome is found consistent with the findings of (Hashmi et al, 2016).

- b) There is no significant impact of the number of meetings held by the board of directors on earnings quality. According to the researcher, this is due to the fact that the efficiency of the board of directors in implementing governance does not come from the number of rout in meetings held by the board, but rather from the efficiency of its members by having the appropriate expertise as well as their ability to deal with all problems effectively. This outcome contradicts the findings of (Zgarni et al, 2014).
- c) There is no significant impact of the number of the audit committee members on earnings quality. According to the researcher, this is due to the fact that role of the audit committees in ensuring the quality of financial reports and achieving confidence in accounting information is the result of their supervision of internal and external audits as well as their resistance of pressures and interventions by management on the audit process. Basically, the audit committee enjoys independence and it has the necessary powers. Therefore, the efficiency of the work of the audit committee is not related to the number of its members as much as it is related to its integrity and independence from management; thus, explaining the fact that there is no significant of impact the number of the audit committee members on earnings quality,

- d) In addition to the reference to the condition that the formation of the audit committees in the Jordanian public shareholding companies is relatively recent and the conditions for the formation of these committees have not yet become entrenched, especially in terms of conditions that provide the element of independence and the financial and professional expertise of its members. This outcome contradicts the findings of the study of (Hwang, Lin, 2010) due to differences in environment and time.
- e) There is no significant impact of the number of meetings held by the audit committee on earnings quality. According to the researcher, this goes to the fact that the efficiency of the audit committee does not come from the number of meetings held by the committee; rather, it stems from the efficiency of its members through their possession of appropriate expertise, in addition to having necessary independence and powers. This outcome contradicts the findings of (Hwang, Lin, 2010) due to differences in environment and time.
- f) With regard to the impact of corporate governance, the researcher derived the following mathematical model, yet, based on the statistical analysis, this model cannot be used as a tool to predict its impact on the quality of profits of public shareholding companies listed on ASE.

$$EQ = 0.249 - 0.010 * NBD + 0.001 * NMBD - 0.006 * NAC - 0.004 * NMAC + \text{¥}$$

Where:

EQ: Earnings Quality and the measure of total accruals.

NBD: Number of the board of directors members.

NMBD: Number of meetings held by the board of directors.

NAC: Number of the audit committee members.

NMAC: Number of meetings held by the audit committee.

¥: Margin of error.

On the other hand, and to emphasis the relationship between public shareholding company's commitment to governance and the quality of its' earnings in each economic sector, the researcher analyzed the data in appendices 1 and 2, and the results where as below:

Table (7): Comparison of the Level of Commitment in Applying Corporate Governance and its Impact on Earnings Quality on each Economic Sector.

Sector	No. of Companies	Governance			Earnings Quality		
		Commitment	%	Rating	EQ	%	Rating
Financial	13	13	100%	1	12	92%	1
Industrial	37	34	92%	2	24	65%	2
Services	10	5	50%	3	3	30%	3
Total	60	52	87%		39	70%	

Based on the above data, using appendices 1 and 2, the researcher have found that:

1. When the three economic sectors are taken as a whole unit, 52 companies, or 87% of the sample apply CG principles, and this reflects on the nature of their earnings quality as only 39 companies, or 70% of the sample achieved good quality of earnings.
2. When we take each sector individually, the compliance with CG principles vary, and its effect on earnings quality varies as well. As for the Financial sector, it achieved the first place in complying 100 % with CG principles. The second was the industrial sector which complied by 92%, while the services sector came third and committed by 50%. Same applies for earnings quality, whereas the financial sector came first and scored 92%, following it came the industrial sector with a 67% and finally, 30% of earnings quality was found in the third and final sector; the services sector.
3. Comparing the level of CG practices compliance of multiple companies in different sectors, and its' implication on earnings quality, a positive relationship is found between both. And thus, the three economic sectors are sorted descending based on the level of compliance and the degree of earnings quality.

The First was the Financial sector, the second was the Industrial and the third and last was the Services sector.

4. The researcher justifies the variance between the sectors in their commitment to comply with CG principles and practices, with their earnings quality is due to:

Firstly: the first variable, corporate governance, was measured used four main components, the number of board of directors members and the number of their meetings, and the number of the audit committee members and the number of their meetings.

Other significant factors like independence of the board of directors, and family relationships between owners and the board of directors, as well as independence and financial background of the audit committee members were left out due to lack of disclosure for such variables, which caused a problem in collecting data related to them. Noting that the services sector did not meet the minimal requirements of corporate governance practices disclosure.

The second variable was earnings quality, which was predicted using Richardson model, and mainly relays on (TACC), which makes its' level of predictability and accuracy very limited. Remarking that (TACC) probability is usually concerned with the managements' level of earnings' management, which negatively affects earnings quality.

Recommendations

In light of the results found by the study, the researcher recommends the following:-

1. Urging competent parties as well as boards of directors in public shareholding companies to pay more attention to the development of more legislation pertaining to earnings quality through reducing creative accounting practices. This can be done by setting dissuasive penalties in cases of manipulation and misrepresentation of financial statements in a manner that limits the use of illegal techniques, in addition to raising awareness amongst companies on the importance of earnings quality in attracting investors and gaining their trust.
2. Playing a more effective role by governmental supervisory bodies and organizations to raise the implementation level of governance rules especially in regards of the number of the board of directors' members and in accordance with the provisions and laws thereto. This will be also significant in establishing a good reputation for the companies listed on Amman Stock Exchange (ASE); thereby, attracting more foreign investments to this market which suffers of economic recession.
3. Achieving the independence of the majority of the board of directors' members from any executive functions, and eliminating the inheritance of the family factor in family owned organizations, through the implementation of governance rules issued by the ASE for the year 2017. In addition, they should be holding seminars for raising awareness of the companies' boards of directors on the importance of the independence of these members and the significance of the role they play in detecting cases of manipulation, which may take place in the company.

4. Increasing the number of the board of directors' members in many of the public shareholding companies listed on ASE as this study revealed it to have a positive effect on increasing earnings quality in companies.
5. Raising awareness amongst financial statements' users, especially investors, regarding the importance of corporate governance in companies and its role in protecting their investment interests, in addition to urging them to invest in the companies applying governance rules.
6. Developing and adopting a model for measuring earnings quality such as the model presented by (Richardson, 2003) to be used as an indicator for investors and users to reflect the quality and credibility of profits of public shareholding companies announced in the annual reports. This will be actually important in directing the investments of such investors towards the ideal place.
7. Conducting more studies and researches, which take into consideration many other aspects not covered in this study including liquidity risks as well as systematic and unsystematic risks of the company. Furthermore, these studies should also include a bigger sample or cover more years to get a more comprehensive earnings quality results.
8. Encouraging all public shareholding companies, especially the services sector, to put more efforts into applying CG practices and complying with CG guidelines and rules set by The Companies' Control Department.
9. Setting a minimum requirement for the academic and professional expertise in the audit committee.

10. Forming a corporate governance committee and a risk management committee in companies.
11. Encourage companies to use the developed earnings quality model in predicting earnings quality in future studies.

References:

1. Abdul-Hamid, M.A., Jatiningrum, C., Popoola, O.M.J. (2016) The impact of disclosure quality on corporate governance and earnings management: evidence from companies in Indonesia. *International Journal of Economics and Financial Issues*, 6 (S4).
2. Abu Ali, S., Al-Debi'e, M., and Abu Nassar, M. (2011) The Impact of earnings quality on the cost of equity based on the international financial reporting standards. *Jordan Journal of Business Administration*, 7 (1).
3. Alareeni, B., Aljuaidi, O. (2014) The modified Jones and Yoon models in detecting earnings management in Palestine Exchange (PEX). *International Journal of Innovation and Applied Studies*, 9(1), pp. 1472-1484.
4. Ali Mohammad Al-Attar & Bassam Mohammad Maali, (2017). The Effect of Earnings Quality on the Predictability of Accruals and Cash Flow Models in Forecasting Future Cash Flows. *Journal of Developing Areas* 51(2). Pp 45-58.
5. Babbie, E., Wagner III, W. E., & Zaino, J. (2018). **Adventures in social research: Data analysis using IBM® SPSS® Statistics**. Sage Publications.
6. Basilico, Elisabetta (2013). **The quality of earnings, governance and future stock returns in Europe. An empirical study** (unpublished doctoral dissertation), St. Gallen University, St.Gallen: Switzerland.
7. Bistrova, J., Lace, N. (2012) Quality of corporate governance system and quality of reported earnings: evidence from CEE companies. *Jordan of Economics and Management*, 17 (1).
8. Black, B. and Bhafat, S. (1998). **The uncertain relationship between board composition and firm performance** (unpublished masters thesis), Columbia Law School, Columbia: USA.

9. Bonetti, P., Magnan, M. Parbonetti, A (2012). **The influence of country and firm-level governance on financial reporting quality: revisiting the evidence** (unpublished doctoral dissertation), University of Padova, Padova: Italy.
10. Cheffins, Brian R., (2011) The History of Corporate Governance. **Oxford Handbook of Corporate Governance** (54).
11. Chipper, Katherine. (1989) Commentary on Earnings Management. *Accounting Horizons* (December): pp. 91–102.
12. Companies Control Department, (2003). **Jordanian Corporate Governance Code**. Amman: Jordan.
13. Dechow, P. M., & Dichev, I. D. (2001). The quality of accruals and earnings: The role of accrual estimation errors. *The accounting review*, 77(s-1), pp. 35-59.
14. Dibra, R. (2016) The role of corporate governance failure in the banking sector. *European Scientific Journal*, 12 (34), 7.
15. Eccles, Robert G, Herz, Robert H, Keegan, Mary, Phillips, David M.H., (2001). *The Value Reporting Revolution: Moving Beyond the Earnings Game; Price-Waterhouse-Coopers*
16. European Corporate Governance Institute, (2012). **The history of corporate governance**. University of Cambridge.
17. Ferlauto, K., McGowan, S., Rankin, M., Stanton, P., and Tilling, M. (2012). **Contemporary issues in accounting**, (1st ed.) Australia: John Wiley and Sons Australia, Ltd.
18. Fiori, Roberta (2008). **The evolution of corporate governance systems: an analysis based on cross border M&A deals** (unpublished masters thesis), Bocconi University, Milan: Italy.

19. Hamdan, Allam (2012) The factors affecting the quality of earnings: evidence from Jordanian industrial companies. *Islamic University Journal for Managerial and Economic Studies*, 20 (1).
20. Hashmi, S.H., Younis, S.A., and Khalid, G.K. (2016) Impact of corporate governance measures on earnings quality: evidence from Pakistan. *Research Journal of Finance and Accounting*, 7 (3).
21. Hayduk, L., Cummings, G., Boadu, K., Pazderka-Robinson, H., & Boulianne, S. (2007). **Testing! testing! one, two, three—Testing the theory in structural equation models!. Personality and Individual Differences**, 42(5), pp. 841-850.
22. Hollemans, K.G.A.C. (2011). **Earnings quality: accounting conservatism in public and private firms in the Netherlands** (unpublished masters thesis), Tilburg University, Tilburg: Netherlands.
23. Islam, A., Ali, R., Ahmad, Z. (2011) Is modified Jones model effective in detecting earnings management? Evidence from a Developing Economy. *International Journal of Economics and Finance*, 3 (2).
24. Ismail, Adibah (2011). **Earnings quality, family influence and corporate governance: Empirical evidence from Malaysia** (unpublished masters thesis), Victoria University, Wellington: New Zealand.
25. JW Lin, MI Hwang. (2010). Audit quality, corporate governance, and earnings management: A meta-analysis. *International Journal of Auditing*. 14(1). Pp 57-77.
26. Kamiya, A., Murayama, S., Kamiya, H., Yamashiro, T., Oshiro, Y., & Tanaka, N. (2014). Kurtosis and skewness assessments of solid lung nodule density histograms: differentiating malignant from benign nodules on CT. *Japanese journal of radiology*, 32(1), pp. 14-21.

27. Katsuo, Yuko, 2008. "**Earnings quality, accruals and subjective goodwill accounting**," LSE Research Online Documents on Economics 6912, London School of Economics and Political Science, LSE Library
28. Kwamboka, Nyakoe (2010). **The relationship between corporate governance and risk management practices among commercial banks in Kenya** (unpublished masters thesis), University of Nairobi, Nairobi: Kenya.
29. Lin, J.W., Hwang, M.I. (2010) Audit quality, corporate governance, and earnings management: A meta-analysis. *International Journal of Auditing* 14(1), pp. 57-77.
30. Lawrence J. Abbott, Susan Parker, and Gary F. Peters (2004) Audit Committee Characteristics and Restatements. *AUDITING: A Journal of Practice & Theory: March 2004*, Vol. 23, No. 1, pp. 69-87
31. Luo, B., Groenke, K., Takors, R., Wandrey, C., & Oldiges, M. (2007). Simultaneous determination of multiple intracellular metabolites in glycolysis, pentose phosphate pathway and tricarboxylic acid cycle by liquid chromatography–mass spectrometry. *Journal of chromatography A*, 1147(2), pp. 153-164.
32. Machdar, N , D.R.M., A , Murwaningsari, E . (2017). The Effects of Earnings Quality, Conservatism, and Real Earnings Management on the Company's Performance and Information Asymmetry as a Moderating Variable. *International Journal of Economics and Financial Issues*, 7 (2), 309-318
33. Mahmood, Z., Kouser, R., Ali, W., Ahmad, Z., and Salman, T. (2018) Does corporate governance affect sustainability disclosure? A mixed methods study. *Sustainability Journal*, 10 (207), 20.

34. Man, C., Wong, B. (2013) Corporate governance and earnings management: a survey of literature. *The Journal of Applied Business Research*, 2 (29), 28.
35. Management, Knowledge and Learning International Conference (2013). **The relationship between corporate governance and earnings quality: a case study of listed companies in the stock exchange of Thailand (SET)**, Zadar: Croatia.
36. Marai, Awidat, Pavlovic, Valdan. (2013). Earnings Management versus Financial Reporting Fraud-Key Features for Distinguishing. *Economics and Organization Journal*, 10(1), pp 39-47.
37. Matar, M. (2009) The Impact of Accounting Systems and Professional Standards in Enhancing Effectiveness and Efficiency of Corporate Governance Systems of Jordanian Public Shareholding Companies. *Dirasat Journal of Administrative Sciences*, 36(2), pp. 459-476.
38. Matar, M., Da'as, A., and Nour, A.A. (2014) Earnings management methods and their impact on the reliability of the published financial statements of Jordanian public shareholding companies. *Irbid Journal for Research and Studies*, 19(1), pp. 137-173.
39. OECD corporate governance committee, (2011). **OECD Principles of Corporate Governance**, Paris: France.
40. Patricia M. Dechow and Ilia D. Dichev (2002) The Quality of Accruals and Earnings: The Role of Accrual Estimation Errors. *The Accounting Review: Supplement* 2002, Vol. 77, No. s-1, pp. 35-59.
41. Paul M. Healy and James M. Wahlen (1999) A Review of the Earnings Management Literature and Its Implications for Standard Setting. *Accounting Horizons*: December 1999, Vol. 13, No. 4, pp. 365-383

42. Rahman, M. M., Moniruzzaman, M., & Sharif, M. J. (2013). Techniques, motives and controls of earnings management. *International Journal of Information Technology and Business Management*, 11(1), pp. 22-34.
43. Richardson, S., (2003). Earnings Quality and Short Sellers. *Accounting Horizons*, Supplement, Vol. 17. Pp. 49-61.
44. Sasivimol Meeampol & Vimol Rodpetch & Phanthipa Srinammuang & AUSA Wongsorntham. (2013). **Relationship between Corporate Governance and Earnings Quality: Case Study of Listed Companies in the Thailand Stock Exchange**. Active Citizenship by Knowledge Management & Innovation: Proceedings of the Management, Knowledge and Learning International Conference 2013,
45. Sepe, Jim, Nelson, Mark, Tan, Tomassini, Spiceland, David. (2012) **Intermediate Accounting IFRS Global Edition**. Pp 22.
46. Sarun, Anuar (2016). **Corporate governance, earnings quality and firm value: evidence from Malaysia**, (unpublished doctoral dissertation), Victoria University, Footscray: Australia.
47. Schreiber-Gregory, D. N., & Jackson, H. M. (2017). **Multicollinearity: what is it, why should we care, and how can it be controlled?** Pp. 1-12.
48. Suntory and Toyota International Centres For Economics and Related Disciplines (2008). **Earnings Quality, Accruals and Subjective Goodwill Accounting**, The Suntory Centre, London: UK.
49. WeiL, R. L. (2009). Quality of Earnings and Earnings management. AICPA monograph, available at <http://www>.

aicpa.org/download/audcommctr/Audit_Committee_Quality_of_Earnings. pdf,(February 2009).

50. Zgarni, I., Halioui, K., Zehri, F. (2014) Do the Characteristics of Board of Directors Constrain Real Earnings Management in Emerging Markets? – Evidence from the Tunisian Context. *The IUP Journal of Accounting Research & Audit Practices*, 8 (1), pp. 46-61.

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Appendix (1): Corporate governance data

Financial Sector	Year	# of BOD Members	# of Audit Committee Members	# of BOD Meetings	# of Audit Committee Meetings	Corporate Governance
<u>البنك الاردنى الكويتى</u>	2014	9	3	6	4	Applied
	2015	9	3	6	5	
	2016	14	3	6	6	
	Mean	10.67	3.00	6.00	5.00	
	Result	Applied	Applied	Applied	Applied	
<u>البنك التجارى الأردنى</u>	2014	7	3	18	19	Applied
	2015	11	5	19	16	
	2016	11	4	16	11	
	Mean	9.67	4.00	17.67	15.33	
	Result	Applied	Applied	Applied	Applied	
<u>بنك الاسكان للتجارة والتمويل</u>	2014	13	6	7	5	Applied
	2015	13	6	7	5	
	2016	13	6	7	5	
	Mean	13.00	6.00	7.00	5.00	
	Result	Applied	Applied	Applied	Applied	
<u>بنك الاستثمار العربى الاردنى</u>	2014	11	3	6	6	Applied
	2015	11	3	6	6	
	2016	13	3	8	5	
	Mean	11.67	3.00	6.67	5.67	
	Result	Applied	Applied	Applied	Applied	
<u>بنك الإتحاد</u>	2014	11	3	6	4	Applied
	2015	13	6	7	7	

	2016	12	6	7	10	
	Mean	12.00	5.00	6.67	7.00	
	Result	Applied	Applied	Applied	Applied	
<u>بنك المؤسسة العربية المصرفية/الأردن</u>	2014	8	5	7	5	Applied
	2015	11	5	6	4	
	2016	11	5	7	4	
	Mean	10.00	5.00	6.67	4.33	
	Result	Applied	Applied	Applied	Applied	
<u>البنك الاستثماري</u>	2014	13	4	9	7	Applied
	2015	11	4	7	7	
	2016	11	3	7	6	
	Mean	11.67	3.67	7.67	6.67	
	Result	Applied	Applied	Applied	Applied	
<u>بنك المال الأردني</u>	2014	11	3	8	20	Applied
	2015	13	3	7	14	
	2016	14	3	8	12	
	Mean	12.67	3.00	7.67	15.33	
	Result	Applied	Applied	Applied	Applied	
<u>بنك سوسيته جنرال – الأردن</u>	2014	13	3	6	4	Applied
	2015	11	5	8	5	
	2016	12	6	8	5	
	Mean	12.00	4.67	7.33	4.67	
	Result	Applied	Applied	Applied	Applied	
<u>بنك القاهرة عمان</u>	2014	13	3	6	5	Applied
	2015	15	5	7	5	
	2016	13	3	6	7	
	Mean	13.67	3.67	6.33	5.67	

	Result	Applied	Applied	Applied	Applied	
<u>بنك الاردن</u>	2014	12	4	8	9	Applied
	2015	12	4	8	8	
	2016	12	4	9	9	
	Mean	12.00	4.00	8.33	8.67	
	Result	Applied	Applied	Applied	Applied	
<u>البنك الاهلي الاردني</u>	2014	13	3	10	6	Applied
	2015	13	4	10	12	
	2016	13	3	12	12	
	Mean	13.00	3.33	10.67	10.00	
	Result	Applied	Applied	Applied	Applied	
<u>البنك العربي</u>	2014	10	4	6	6	Applied
	2015	11	4	6	6	
	2016	12	4	6	5	
	Mean	11.00	4.00	6.00	5.67	
	Result	Applied	Applied	Applied	Applied	
Industrial Sector	Year	# of BOD Members	# of Audit Committee Members	# of BOD Meetings	# of Audit Committee Meetings	Corporate Governance
<u>الصناعية التجارية</u> <u>الزراعية / الانتاج</u>	2014	6	3	2	2	Applied
	2015	5	3	6	6	
	2016	5	3	6	6	
	Mean	5.33	3.00	4.67	4.67	
	Result	Applied	Applied	Applied	Applied	
<u>المتصدرة للأعمال</u> <u>والمشاريع</u>	2014	9	3	6	6	Applied
	2015	10	3	6	6	

	2016	9	3	6	6	
	Mean	9.33	3.00	6.00	6.00	
	Result	Applied	Applied	Applied	Applied	
<u>الصناعات الكيماوية</u> <u>الأردنية</u>	2014	7	0	7	0	Not Applied
	2015	7	0	6	0	
	2016	7	0	6	0	
	Mean	7.00	0.00	6.33	0.00	
	Result	Applied	Not Applied	Applied	Not Applied	
<u>الوطنية لصناعة الكلورين</u>	2014	12	3	6	4	Applied
	2015	12	3	6	4	
	2016	12	3	10	4	
	Mean	12.00	3.00	7.33	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>الموارد الصناعية</u> <u>الأردنية</u>	2014	8	3	9	4	Applied
	2015	5	3	7	4	
	2016	5	3	6	4	
	Mean	6.00	3.00	7.33	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>المتكاملة للمشاريع</u> <u>المتعددة</u>	2014	5	3	6	4	Applied
	2015	5	3	6	4	
	2016	5	3	6	4	
	Mean	5.00	3.00	6.00	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>العربية لصناعة المبيدات</u> <u>والأدوية البيطرية</u>	2014	9	3	9	4	Applied
	2015	9	3	9	4	
	2016	9	3	9	4	
	Mean	9.00	3.00	9.00	4.00	

	Result	Applied	Applied	Applied	Applied	
<u>الوطنية لصناعة الكوابل والأسلاك الكهربائية</u>	2014	11	3	6	4	Applied
	2015	11	3	6	4	
	2016	11	3	6	4	
	Mean	11.00	3.00	6.00	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>العربية للصناعات الكهربائية</u>	2014	7	3	6	4	Applied
	2015	7	3	6	4	
	2016	7	3	6	4	
	Mean	7.00	3.00	6.00	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>مصانع الكابلات المتحدة</u>	2014	9	3	5	4	Applied
	2015	7	3	6	4	
	2016	7	3	8	4	
	Mean	7.67	3.00	6.33	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>الأردنية لصناعة الأتابيب</u>	2014	7	3	0	0	Applied
	2015	7	3	4	3	
	2016	7	3	4	3	
	Mean	7.00	3.00	2.67	2.00	
	Result	Applied	Applied	Applied	Applied	
<u>الأردنية للصناعات الخشبية / جوايكو</u>	2014	10	3	6	4	Applied
	2015	9	3	6	4	
	2016	14	3	6	4	
	Mean	11.00	3.00	6.00	4.00	
	Result	Applied	Applied	Applied	Applied	
	2014	7	3	6	4	

<u>العربية لصناعة المواسير المعدنية</u>	2015	7	3	6	4	Applied
	2016	8	3	6	4	
	Mean	7.33	3.00	6.00	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>القدس للصناعات الخرسانية</u>	2014	10	3	6	4	Applied
	2015	9	3	7	4	
	2016	9	3	4	4	
	Mean	9.33	3.00	5.67	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>أساس للصناعات الخرسانية</u>	2014	9	3	6	4	Applied
	2015	9	3	6	5	
	2016	9	3	6	4	
	Mean	9.00	3.00	6.00	4.33	
	Result	Applied	Applied	Applied	Applied	
<u>سبأ لسكب المعادن</u>	2014	4	3	6	4	Applied
	2015	5	3	6	4	
	2016	6	3	6	4	
	Mean	5.00	3.00	6.00	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>الأردنية لتجهيز وتسويق الدواجن ومنتجاتها</u>	2014	7	3	6	4	Applied
	2015	7	3	6	4	
	2016	5	3	6	4	
	Mean	6.33	3.00	6.00	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>الألبان الأردنية</u>	2014	4	3	12	4	Applied
	2015	4	3	10	4	
	2016	5	3	8	4	

	Mean	4.33	3.00	10.00	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>الاستثمارات العامة</u>	2014	8	3	6	4	Applied
	2015	7	3	6	4	
	2016	7	3	6	4	
	Mean	7.33	3.00	6.00	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>القرية للصناعات الغذائية والزيوت النباتية</u>	2014	5	3	6	4	Applied
	2015	8	3	6	4	
	2016	8	3	6	4	
	Mean	7.00	3.00	6.00	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>العالمية الحديثة للزيوت النباتية</u>	2014	8	3	7	4	Applied
	2015	8	3	7	4	
	2016	10	3	6	4	
	Mean	8.67	3.00	6.67	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>الوطنية للدواجن</u>	2014	6	0	6	0	Not Applied
	2015	6	0	5	0	
	2016	6	0	5	0	
	Mean	6.00	0.00	5.33	0.00	
	Result	Applied	Not Applied	Applied	Not Applied	
<u>المصانع العربية الدولية للأغذية والاستثمار</u>	2014	7	3	6	4	Applied
	2015	9	3	7	4	
	2016	10	3	8	4	
	Mean	8.67	3.00	7.00	4.00	
	Result	Applied	Applied	Applied	Applied	

<u>دار الغذاء</u>	2014	5	0	6	0	Not Applied
	2015	5	0	10	0	
	2016	5	0	8	0	
	Mean	5.00	0.00	8.00	0.00	
	Result	Applied	Not Applied	Applied	Not Applied	
<u>مصانع الزيوت النباتية الأردنية</u>	2014	7	3	8	4	Applied
	2015	7	3	9	4	
	2016	7	3	10	4	
	Mean	7.00	3.00	9.00	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>سنيورة للصناعات الغذائية</u>	2014	5	3	9	4	Applied
	2015	5	3	6	4	
	2016	5	3	9	4	
	Mean	5.00	3.00	8.00	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>العامية للتعبئة</u>	2014	9	3	8	4	Applied
	2015	9	3	7	4	
	2016	9	3	9	4	
	Mean	9.00	3.00	8.00	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>العربية لصناعة الالمنيوم/ارال</u>	2014	6	3	7	6	Applied
	2015	6	3	8	5	
	2016	6	3	8	6	
	Mean	6.00	3.00	7.67	5.67	
	Result	Applied	Applied	Applied	Applied	
<u>الوطنية لصناعة الصلب</u>	2014	5	0	6	0	Applied
	2015	5	0	6	0	

	2016	5	0	6	0	
	Mean	5.00	0.00	6.00	0.00	
	Result	Applied	Applied	Applied	Applied	
<u>مناجم الفوسفات الأردنية</u>	2014	11	3	6	4	Applied
	2015	10	3	6	4	
	2016	9	3	6	4	
	Mean	10.00	3.00	6.00	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>مصانع الاسمنت الأردنية</u>	2014	7	7	6	6	Applied
	2015	7	7	6	6	
	2016	7	7	6	6	
	Mean	7.00	7.00	6.00	6.00	
	Result	Applied	Applied	Applied	Applied	
<u>البوتاس العربية</u>	2014	12	3	6	7	Applied
	2015	13	3	6	7	
	2016	19	3	6	8	
	Mean	14.67	3.00	6.00	7.33	
	Result	Applied	Applied	Applied	Applied	
<u>حديد الأردن</u>	2014	13	3	6	3	Applied
	2015	9	6	6	3	
	2016	7	6	6	3	
	Mean	9.67	5.00	6.00	3.00	
	Result	Applied	Applied	Applied	Applied	
<u>الوطنية لصناعات الالمنيوم</u>	2014	9	0	6	0	Applied
	2015	9	0	8	0	
	2016	9	0	7	0	
	Mean	9.00	0.00	7.00	0.00	

	Result	Applied	Applied	Applied	Applied	
<u>الاستثمارات والصناعات المتكاملة</u>	2014	5	3	8	4	Applied
	2015	6	3	6	4	
	2016	6	3	7	4	
	Mean	5.67	3.00	7.00	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>شركة الترافرتين</u>	2014	8	3	6	4	Applied
	2015	7	3	6	4	
	2016	7	3	6	4	
	Mean	7.33	3.00	6.00	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>الوطنية لإنتاج النفط والطاقة الكهربائية من الصخر الزيتي</u>	2014	11	3	6	4	Applied
	2015	11	3	6	4	
	2016	11	3	6	5	
	Mean	11.00	3.00	6.00	4.33	
	Result	Applied	Applied	Applied	Applied	
Service Sector	Year	# of BOD Members	# of Audit Committee Members	# of BOD Meetings	# of Audit Committee Meetings	Corporate Governance
<u>الاسواق الحرة الاردنية</u>	2014	9	3	19	8	Applied
	2015	10	3	13	10	
	2016	9	3	13	8	
	Mean	9.33	3.00	15.00	8.67	
	Result	Applied	Applied	Applied	Applied	
<u>المركز الاردني للتجارة الدولية</u>	2014	7	3	6	4	Applied
	2015	7	3	6	4	

	2016	7	3	6	4	
	Mean	7.00	3.00	6.00	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>التسهيلات التجارية الاردنية</u>	2014	7	3	6	0	Not Applied
	2015	7	3	6	0	
	2016	7	3	6	0	
	Mean	7.00	3.00	6.00	0.00	
	Result	Applied	Applied	Applied	Not Applied	
<u>المتخصصة للتجارة والاستثمارات</u>	2014	7	3	7	4	Applied
	2015	7	3	8	4	
	2016	7	3	7	4	
	Mean	7.00	3.00	7.33	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>بندار للتجارة والاستثمار</u>	2014	9	0	5	0	Not Applied
	2015	7	0	5	0	
	2016	8	0	6	0	
	Mean	8.00	0.00	5.33	0.00	
	Result	Applied	Not Applied	Applied	Not Applied	
<u>مجموعة أوفتك القابضة</u>	2014	7	0	8	0	Not Applied
	2015	7	0	7	0	
	2016	8	0	9	0	
	Mean	7.33	0.00	8.00	0.00	
	Result	Applied	Not Applied	Applied	Not Applied	
<u>الجنوب للإلكترونيات</u>	2014	8	0	5	0	Not Applied
	2015	9	0	4	0	
	2016	8	0	6	0	
	Mean	8.33	0.00	5.00	0.00	

	Result	Applied	Not Applied	Applied	Not Applied	
<u>أفاق للطاقة</u>	2014	5	0	6	0	Not Applied
	2015	5	0	6	0	
	2016	5	0	6	0	
	Mean	5.00	0.00	6.00	0.00	
	Result	Applied	Not Applied	Applied	Not Applied	
<u>انجاز للتنمية والمشاريع المتعددة</u>	2014	7	3	8	4	Applied
	2015	7	3	7	4	
	2016	8	3	13	4	
	Mean	7.33	3.00	9.33	4.00	
	Result	Applied	Applied	Applied	Applied	
<u>الزرقاء للتعليم والاستثمار</u>	2014	11	3	12	4	Applied
	2015	11	3	12	4	
	2016	11	3	13	4	
	Mean	11.00	3.00	12.33	4.00	
	Result	Applied	Applied	Applied	Applied	

Appendix (2): Earnings quality data

Financial Sector	Year	TACC	Average of TACC	Result
<u>البنك الاردني الكويتي</u>	2014	0.0299	0.0283	There is earnings quality
	2015	0.0158		
	2016	0.0392		
<u>البنك التجاري الأردني</u>	2014	0.0728	0.1174	There is earnings quality
	2015	0.1280		
	2016	0.1515		
<u>بنك الاسكان للتجارة والتمويل</u>	2014	0.0476	0.0283	There is earnings quality
	2015	0.0182		
	2016	0.0190		
<u>بنك الاستثمار العربي الاردني</u>	2014	0.2751	0.1033	There is earnings quality
	2015	0.0178		
	2016	0.0169		
<u>بنك الإتحاد</u>	2014	0.1251	0.0589	There is earnings quality
	2015	0.0153		
	2016	0.0362		
<u>بنك المؤسسة العربية المصرفية/الاردن</u>	2014	0.1387	0.0994	There is earnings quality
	2015	0.1149		
	2016	0.0446		
<u>البنك الاستثماري</u>	2014	0.0046	0.0232	There is earnings quality
	2015	0.0448		
	2016	0.0202		
<u>بنك المال الأردني</u>	2014	0.0921	0.0554	There is earnings quality
	2015	0.0681		

	2016	0.0060		
<u>بنك سوسيته جنرال - الأردن</u>	2014	0.2346	0.1578	There is no earnings quality
	2015	0.1864		
	2016	0.0524		
<u>بنك القاهرة عمان</u>	2014	0.0625	0.0352	There is earnings quality
	2015	0.0193		
	2016	0.0238		
<u>بنك الاردن</u>	2014	0.0316	0.0480	There is earnings quality
	2015	0.0889		
	2016	0.0234		
<u>البنك الاهلي الاردني</u>	2014	0.2615	0.1198	There is earnings quality
	2015	0.0168		
	2016	0.0811		
<u>البنك العربي</u>	2014	0.0622	0.0612	There is earnings quality
	2015	0.0622		
	2016	0.0593		
Industrial Sector	Year	TACC	Average of TACC	Result
<u>الصناعية التجارية الزراعية / الانتاج</u>	2014	0.0792	0.1016	There is earnings quality
	2015	0.1323		
	2016	0.0932		
<u>المتصدرة للأعمال والمشاريع</u>	2014	0.1111	0.2696	There is no earnings quality
	2015	0.0652		
	2016	0.6327		
<u>الصناعات الكيماوية الاردنية</u>	2014	0.1036	0.1631	There is no earnings quality
	2015	0.3406		
	2016	0.0453		

<u>الوطنية لصناعة الكلورين</u>	2014	0.1402	0.1370	There is earnings quality
	2015	0.2267		
	2016	0.0440		
<u>الموارد الصناعية الأردنية</u>	2014	0.1835	0.1187	There is earnings quality
	2015	0.1450		
	2016	0.0276		
<u>المتكاملة للمشاريع المتعددة</u>	2014	0.0857	0.4650	There is no earnings quality
	2015	0.2227		
	2016	1.0866		
<u>العربية لصناعة المبيدات والأدوية البيطرية</u>	2014	0.3739	0.1772	There is no earnings quality
	2015	0.0577		
	2016	0.1000		
<u>الوطنية لصناعة الكوابل والأسلاك الكهربائية</u>	2014	0.0268	0.0492	There is earnings quality
	2015	0.0459		
	2016	0.0750		
<u>العربية للصناعات الكهربائية</u>	2014	0.0054	0.0978	There is earnings quality
	2015	0.1159		
	2016	0.1721		
<u>مصانع الكابلات المتحدة</u>	2014	0.0539	0.1245	There is earnings quality
	2015	0.0796		
	2016	0.2400		
<u>الأردنية لصناعة الأنابيب</u>	2014	0.0192	0.1301	There is earnings quality
	2015	0.2514		
	2016	0.1198		
<u>الأردنية للصناعات الخشبية / جوايكو</u>	2014	0.1122	0.1594	There is no earnings quality
	2015	0.2607		
	2016	0.1054		

<u>العربية لصناعة المواسير المعدنية</u>	2014	0.0024	0.0301	There is earnings quality
	2015	0.0425		
	2016	0.0454		
<u>القدس للصناعات الخرسانية</u>	2014	0.0623	0.1630	There is no earnings quality
	2015	0.2788		
	2016	0.1481		
<u>أساس للصناعات الخرسانية</u>	2014	0.0849	0.0548	There is earnings quality
	2015	0.0417		
	2016	0.0379		
<u>سبأ لسكب المعادن</u>	2014	0.0662	0.0649	There is earnings quality
	2015	0.0501		
	2016	0.0784		
<u>الأردنية لتجهيز وتسويق الدواجن ومنتجاتها</u>	2014	0.0675	0.0819	There is earnings quality
	2015	0.0939		
	2016	0.0844		
<u>الأليان الأردنية</u>	2014	0.1039	0.0486	There is earnings quality
	2015	0.0326		
	2016	0.0092		
<u>الاستثمارات العامة</u>	2014	0.0466	0.0950	There is earnings quality
	2015	0.1710		
	2016	0.0673		
<u>القرية للصناعات الغذائية والزيت النباتية</u>	2014	0.0840	0.3758	There is no earnings quality
	2015	0.4150		
	2016	0.6285		
<u>العالمية الحديثة للزيوت النباتية</u>	2014	0.1268	0.1750	There is no earnings quality
	2015	0.2598		
	2016	0.1385		

<u>الوطنية للدواجن</u>	2014	0.1185	0.1142	There is earnings quality
	2015	0.0741		
	2016	0.1501		
<u>المصانع العربية الدولية للأغذية والاستثمار</u>	2014	0.3238	0.1125	There is earnings quality
	2015	0.0046		
	2016	0.0092		
<u>دار الغذاء</u>	2014	0.2339	0.1311	There is earnings quality
	2015	0.0072		
	2016	0.1521		
<u>مصانع الزيوت النباتية الأردنية</u>	2014	0.1896	0.2029	There is no earnings quality
	2015	0.2697		
	2016	0.1494		
<u>سنيورة للصناعات الغذائية</u>	2014	0.0360	0.0807	There is earnings quality
	2015	0.0989		
	2016	0.1071		
<u>العامّة للتعبدين</u>	2014	0.1604	0.4075	There is no earnings quality
	2015	0.4902		
	2016	0.5717		
<u>العربية لصناعة الالمنيوم/ارال</u>	2014	0.0948	0.0707	There is earnings quality
	2015	0.1138		
	2016	0.0036		
<u>الوطنية لصناعة الصلب</u>	2014	0.7618	0.3364	There is no earnings quality
	2015	0.2006		
	2016	0.0466		
<u>مناجم الفوسفات الاردنية</u>	2014	0.1315	0.0803	There is earnings quality
	2015	0.0316		
	2016	0.0777		

<u>مصانع الاسمنت الأردنية</u>	2014	0.1123	0.0906	There is earnings quality
	2015	0.0505		
	2016	0.1090		
<u>البوتاس العربية</u>	2014	0.0799	0.0726	There is earnings quality
	2015	0.0969		
	2016	0.0411		
<u>حديد الأردن</u>	2014	0.2223	0.1809	There is no earnings quality
	2015	0.2315		
	2016	0.0888		
<u>الوطنية لصناعات الالمنيوم</u>	2014	0.0046	0.1059	There is earnings quality
	2015	0.1802		
	2016	0.1330		
<u>الاستثمارات والصناعات المتكاملة</u>	2014	0.3090	0.3982	There is no earnings quality
	2015	0.5878		
	2016	0.2979		
<u>شركة الترافرتين</u>	2014	0.0815	0.0587	There is earnings quality
	2015	0.0531		
	2016	0.0415		
<u>الوطنية لإنتاج النفط والطاقة الكهربائية من الصخر الزيتي</u>	2014	0.0421	0.0143	There is earnings quality
	2015	0.0001		
	2016	0.0007		
Service Sector	Year	TACC	Average of TACC	Result
<u>الاسواق الحرة الاردنية</u>	2014	0.0357	0.0596	There is earnings quality
	2015	0.0565		
	2016	0.0867		
<u>المركز الاردني للتجارة الدولية</u>	2014	0.0250	0.0335	There is earnings quality

	2015	0.0402		
	2016	0.0353		
<u>التسهيلات التجارية الاردنية</u>	2014	0.1949	0.1484	There is no earnings quality
	2015	0.1140		
	2016	0.1365		
<u>المتخصصة للتجارة والاستثمارات</u>	2014	0.4387	0.2772	There is no earnings quality
	2015	0.3157		
	2016	0.0772		
<u>بندار للتجارة والاستثمار</u>	2014	0.1710	0.3365	There is no earnings quality
	2015	0.7702		
	2016	0.0684		
<u>مجموعة أوفتك القابضة</u>	2014	0.0171	0.0221	There is earnings quality
	2015	0.0056		
	2016	0.0438		
<u>الجنوب للإلكترونيات</u>	2014	0.1195	0.1725	There is no earnings quality
	2015	0.0173		
	2016	0.3808		
<u>أفاق للطاقة</u>	2014	0.1571	0.1968	There is no earnings quality
	2015	0.2541		
	2016	0.1791		
<u>انجاز للتنمية والمشاريع المتعددة</u>	2014	0.9061	0.3520	There is no earnings quality
	2015	0.0774		
	2016	0.0724		
<u>الزرقاء للتعليم والاستثمار</u>	2014	0.3245	0.1808	There is no earnings quality
	2015	0.1551		
	2016	0.0626		

Appendix (3): Components of the equation of earnings quality data

Financial Sector	السنة	WC	ΔWC	NCO	ΔNCO	FIN	ΔFIN
<u>البنك الاردني</u> <u>الكويتي</u>	2014	-1,712,377,352	46,926,927	- 52,151,475	23,564,74 3	11,107,72 5	7545000
	2015	-1,743,980,375	31,603,023	- 36,841,376	15,310,09 9	9,107,715	-2000010
	2016	-1,641,815,082	102,165,294	- 36,749,468	91,908	14,166,62 7	5058912
<u>البنك</u> <u>التجاري</u> <u>الأردني</u>	2014	-845,223,646	82,936,263	4,077,977	1,893,921	0	0
	2015	-1,017,408,126	172,184,479	-6,982,894	11,060,87 1	7,090,000	7090000
	2016	-826,013,089	191,395,037	462,545	7,445,439	0	-7090000
<u>بنك الإسكان</u> <u>للتجارة</u> <u>والتمويل</u>	2014	-5,184,742,343	332,810,200	- 92,093,928	27,087,35 2	23,147,56 1	1335561
	2015	-5,064,483,118	120,259,225	- 69,356,858	22,737,07 0	24,624,58 9	1477028
	2016	-4,928,342,373	136,140,745	- 83,720,006	14,363,14 8	22,795,89 4	-1828695
<u>بنك</u> <u>الاستثمار</u> <u>العربي</u> <u>الاردني</u>	2014	-1,225,412,484	468,425,103	23,095,804	5,673,208	19,925,16 4	7314075
	2015	-1,205,050,212	20,362,272	32,473,422	9,377,618	22,021,78 3	2096619
	2016	-1,225,886,632	20,836,419	37,013,477	4,540,055	27,312,11 4	5290331

<u>بنك الاتحاد</u>	2014	-1,589,030,421	265,037,686	1,105,428	17,235,987	0	0
	2015	-1,555,272,054	33,758,367	3,848,529	2,743,101	0	0
	2016	-1,644,096,952	88,824,898	7,648,623	3,800,094	0	0
<u>بنك المؤسسة العربية المصرفية/الأردن</u>	2014	-759,551,507	130,389,736	-20,614,949	12,277,752	9,910,585	9910585
	2015	-651,069,672	108,481,835	-18,671,653	1,943,296	17,725,000	7814415
	2016	-687,180,647	36,110,975	-15,722,934	2,948,719	28,360,000	10635000
<u>البنك الاستثماري</u>	2014	-493,520,569	348,814	3,603,828	3,392,022	1,378,847	-39153
	2015	-461,168,059	32,352,511	5,528,240	1,924,412	5,000,000	3621153
	2016	-478,929,234	17,761,175	6,474,343	946,103	5,500,000	500000
<u>بنك المال الأردني</u>	2014	-1,249,038,162	177,552,344	-48,734,958	6,325,682	12,168,358	6008358
	2015	-1,125,336,684	123,701,478	-40,076,398	8,658,560	15,158,414	2990056
	2016	-1,111,008,362	14,328,323	-52,919,294	12,842,896	0	-15158414
<u>بنك سوسيتيه جنرال - الأردن</u>	2014	-596,625,773	210,384,715	6,548,563	4,654,523	16,109,873	-11705783
	2015	-820,781,490	224,155,717	6,596,215	47,652	17,459,133	1349260
	2016	-888,169,028	67,387,538	3,508,099	3,088,116	15,215,196	-2243937
	2014	-1,685,276,031	169,787,732	-51,376,599	7,995,884	107,399,984	-30800016

<u>بنك القاهرة</u>	2015	-1,646,201,158	39,074,872	-	4,034,393	113,199,98	5800000
				47,342,206		4	
<u>عمان</u>	2016	-1,563,186,610	83,014,548	-	15,849,62	73,543,06	-39656916
				31,492,579	7	8	
<u>بنك الاردن</u>	2014	-1,476,482,867	73,251,677	-	4,480,628	0	-8508000
				17,545,274			
	2015	-1,513,402,770	36,919,903	-	4,211,911	155,000,00	15500000
				13,333,363		0	0
	2016	-1,439,126,877	74,275,893	-	975,068	25,000,00	-13000000
				14,308,431		0	
<u>البنك الاهلى</u>	2014	-1,585,471,812	124,936,101	11,200,017	509,726,28	0	-26661835
					8		
	2015	-1,607,773,282	22,301,471	16,251,073	5,051,056	14,647,51	14647510
<u>الاردنى</u>						0	
	2016	-1,827,465,628	219,692,346	3,030,022	13,221,05	10,037,79	-4609717
					1	3	
<u>البنك العربى</u>	2014	-17,620,492,450	1062937250	-888,366,000	503,895,00	283,639,00	41696000
					0	0	
	2015	-16,075,218,600	1545273850	-	177,096,00	170,397,00	-113242000
				1,065,462,000	0	0	
	2016	-14,917,405,800	1157812800	-666,149,000	399,313,00	50,450,00	-119947000
					0	0	
Industria	السنة	WC	ΔWC	NCO	ΔNCO	FIN	ΔFIN
I Sector							
<u>الصناعية</u>	2014	1,719,115	1,852,022	12,496,473	353,537	-255	16131
	2015	4,741,339	3,022,224	12,904,719	408,246	-3,105	-2850
	2016	2,610,953	2,130,386	13,263,174	358,455	318	3423
<u>التجارية</u>							

<u>الزراعية /</u> <u>الانتاج</u>							
<u>المتصدرة</u>	2014	-1,080,570	518,820	-3,363,833	520,448	2,506,814	-192848
<u>للأعمال</u>	2015	-847,593	232,977	-2,435,745	928,088	1,789,793	-717021
<u>والمشاريع</u>	2016	-502,749	344,844	-3,296,135	860,390	3,522,098	1732305
<u>الصناعات</u>	2014	2,178,191	730,774	1,605,731	113,550	-974,374	-42878
<u>الكيمائية</u>	2015	1,095,515	1,082,676	1,449,900	155,831	19,741	994115
<u>الأردنية</u>	2016	1,722,615	627,100	1,579,217	129,317	-426,828	-446569
<u>الوطنية</u>	2014	3,417,731	203,169	11,264,504	3,498,449	-2,022,179	-1446270
<u>لصناعة</u>	2015	1,954,525	1,463,206	15,120,773	3,856,269	-3,025,232	-1003053
<u>الكالورين</u>	2016	2,195,995	241,470	16,571,475	1,450,702	-5,632,977	-2607745
<u>الموارد</u>	2014	5,576,389	1,962,335	8,604,775	2,121,269	3,120,679	-16065
<u>الصناعية</u>	2015	2,852,306	2,724,083	8,531,974	72,801	3,120,679	0
<u>الأردنية</u>	2016	2,542,839	309,467	8,499,969	32,005	3,303,859	183180
<u>المتكاملة</u>	2014	7,967,779	540,084	3,165,917	244,423	-7,917,445	409144
<u>للمشاريع</u>	2015	6,352,533	1,615,246	3,096,326	69,591	-6,925,536	991909
<u>المتعددة</u>	2016	-4,350	6,356,883	-5,637,331	8,733,657	5,637,331	12562867
<u>العربية</u>	2014	11,142,511	5,719,972	5,437,871	106,405	810,447	5253537
<u>لصناعة</u>	2015	12,018,955	876,444	4,941,988	495,883	1,083,590	273143
<u>المبيدات</u> <u>والأدوية</u> <u>البيطرية</u>	2016	14,050,283	2,031,328	4,423,626	518,362	1,424,544	340954
<u>الوطنية</u>	2014	8,404,340	291,389	12,612,111	637,331	42,958	0
<u>لصناعة</u>	2015	9,356,358	952,018	11,996,954	615,157	42,958	0
<u>الكوابل</u>	2016	8,073,843	1,282,515	11,184,628	812,326	42,958	0

<u>والأسلاك</u> <u>الكهربائية</u>							
<u>العربية</u>	2014	3,599,115	163,649	3,004,641	44,567	-909,985	-262876
<u>للصناعات</u>	2015	2,845,074	754,041	2,861,716	142,925	-788,430	121555
<u>الكهربائية</u>	2016	3,374,928	529,854	2,734,280	127,436	-163,420	625010
<u>مصانع</u>	2014	23,312,833	399,651	18,125,363	1,671,608	-10,459,703	781438
<u>الكابلات</u>	2015	24,576,538	1,263,705	16,586,680	1,538,683	-9,115,494	1344209
<u>المتحدة</u>	2016	19,203,209	5,373,329	15,515,098	1,071,582	-4,256,597	4858897
<u>الأردنية</u>	2014	5,873,177	896,831	1,234,452	137,004	-2,041,200	-1189447
<u>لصناعة</u>	2015	5,042,104	831,073	884,071	350,381	-1,370,107	671093
<u>الأنابيب</u>	2016	4,642,969	399,135	776,950	107,121	-1,029,481	340626
<u>الأردنية</u>	2014	3,365,149	249,694	7,960,785	727,131	-120,687	756558
<u>للصناعات</u>	2015	513,842	2,851,307	7,305,160	655,625	0	120687
<u>الخشبية /</u> <u>جوايكو</u>	2016	1,036,941	523,099	6,597,937	707,223	0	0
<u>العربية</u>	2014	8,855,632	55,096	3,833,359	376,705	814,284	-482058
<u>لصناعة</u>	2015	8,352,601	503,031	3,603,553	229,806	852,044	37760
<u>المواسير</u> <u>المعدنية</u>	2016	7,839,864	512,737	3,302,997	300,556	784,215	-67829
<u>القدس</u>	2014	1,990,212	108,933	959,621	187,125	1,839,922	305491
<u>للصناعات</u>	2015	1,630,098	360,114	5,200,679	4,241,058	27,687	-1812235
<u>الخرسانية</u>	2016	329,489	1,300,609	5,049,162	151,517	268,712	241025
	2014	138,624	480,476	8,633,518	1,103,682	621,562	-213502
	2015	-255,066	393,690	8,160,834	472,684	413,741	-207821

<u>أساس</u> <u>للصناعات</u> <u>الخرسانية</u>	2016	103,255	358,321	7,768,462	392,372	260,411	-153330
<u>سبا لسكب</u>	2014	447,712	80,466	512,216	27,740	-34,979	-32544
<u>المعادن</u>	2015	372,708	75,004	516,964	4,748	-63,403	-28424
	2016	308,333	64,375	521,519	4,555	-56,331	7072
<u>الأردنية</u> <u>لتجهيز</u> <u>وتسويق</u> <u>الدواجن</u> <u>ومنتجاتها</u>	2014	6,221,152	513,350	43,667,772	4,240,053	-5,658,433	-938249
	2015	9,441,831	3,220,679	46,796,024	3,128,252	-6,118,525	-460092
	2016	8,620,017	821,814	52,486,799	5,690,775	-6,859,336	-740811
<u>الأليان</u> <u>الأردنية</u>	2014	2,172,186	437,813	3,703,947	74,646	574,835	698460
	2015	2,618,629	446,443	3,464,289	239,658	267,489	-307346
	2016	3,099,354	480,725	3,619,154	154,865	-245,032	-512521
<u>الاستثمارات</u> <u>العامة</u>	2014	4,427,635	897,068	-3,871,129	142,394	10,531,05 4	171390
	2015	1,521,214	2,906,421	-4,509,007	637,878	11,579,25 7	1048203
	2016	2,022,600	501,386	-5,170,103	661,096	12,257,42 2	678165
<u>القرية</u> <u>للصناعات</u> <u>الغذائية</u> <u>والزيوت</u> <u>النباتية</u>	2014	439,326	410,419	2,035,916	74,928	-1,245,317	-880537
	2015	-390,557	829,883	1,919,143	116,773	-908,633	336684
	2016	-1,232,943	842,386	1,833,844	85,299	-337,620	571013
	2014	8,077,138	1,404,852	1,319,369	156,041	23,148	-99483

<u>العالمية</u>	2015	5,641,731	2,435,407	952,794	366,575	116,574	93426
<u>الحديثة</u>							
<u>للزيوت</u>	2016	7,133,610	1,491,879	807,888	144,906	108,862	-7712
<u>النباتية</u>							
<u>الوطنية</u>	2014	35,883,723	9,117,421	41,495,521	1,664,220	0	0
<u>للدواجن</u>	2015	39,374,501	3,490,778	38,652,811	2,842,710	0	0
	2016	31,168,695	8,205,806	35,562,635	3,090,176	0	0
<u>المصانع</u>	2014	-129,409	7,826	-	5,839,792	35,605,75	5839490
<u>العربية</u>				35,353,127		5	
<u>الدولية</u>	2015	-154,743	25,334	-	2,829,345	32,907,82	-2697929
<u>للأغذية</u>				32,523,782		6	
<u>والاستثمار</u>	2016	-164,700	9,957	-	5,040,059	27,601,67	-5306150
				27,483,723		6	
<u>دار الغذاء</u>	2014	5,513,481	3,203,724	3,815,067	461,217	-2,808,031	-362471
	2015	5,858,491	345,010	3,311,658	503,409	-3,560,908	-752877
	2016	7,169,676	1,311,185	2,936,235	375,423	-3,117,835	443073
<u>مصانع</u>	2014	3,862,820	342,969	520,869	71,778	283,796	769671
<u>الزيوت</u>	2015	2,764,185	1,098,635	295,116	225,753	680,357	396561
<u>النباتية</u>	2016	2,005,718	758,467	138,393	156,723	794,519	114162
<u>الأردنية</u>							
<u>سنيورة</u>	2014	9,443,656	2,074,480	19,346,822	69,625	-1,936,662	-651890
<u>للصناعات</u>	2015	9,759,658	316,002	24,292,783	4,945,961	-2,313,207	-376545
<u>الغذائية</u>	2016	14,145,614	4,385,956	27,957,224	3,664,441	-4,018,973	-1705766
<u>العامة</u>	2014	638,216	269,275	500,678	113,552	283,940	-80161
<u>للتعدين</u>	2015	354,580	283,636	248,619	252,059	334,618	50678
	2016	-80,890	435,470	213,873	34,746	90,126	-244492

<u>العربية</u> <u>الصناعة</u> <u>الالمنيوم/ارا</u> <u>ل</u>	2014	4,068,566	825,189	5,576,206	926,756	837,536	-16866
	2015	5,987,915	1,919,349	5,051,869	524,337	250,684	-586852
	2016	6,516,470	528,555	5,121,889	70,020	-290,434	-541118
<u>الوطنية</u> <u>الصناعة</u> <u>الصلب</u>	2014	-1,717,112	1,463,110	3,274,633	2,194,399	356,750	510764
	2015	-1,814,321	97,209	4,600,140	1,325,507	302,033	-54717
	2016	-1,433,639	380,682	5,056,575	456,435	50	-301983
<u>مناجم</u> <u>الفوسفات</u> <u>الأردنية</u>	2014	199,188,000	20,124,000	63,000,000	147,436,000	109,852,000	-8236000
	2015	213,483,000	14,295,000	56,057,000	6,943,000	125,674,000	15822000
	2016	186,066,000	27,417,000	3,405,000	52,652,000	133,880,000	8206000
<u>مصانع</u> <u>الاسمنت</u> <u>الأردنية</u>	2014	-12,644,469	4,429,843	109,089,770	9,140,494	-14,359,683	7804128
	2015	-7,145,531	5,498,938	100,755,810	8,333,960	-18,340,763	-3981080
	2016	4,354,982	11,500,513	93,400,749	7,355,061	-16,757,232	1583531
<u>البوتاس</u> <u>العربية</u>	2014	115,834,000	10,243,000	226,068,000	46,864,000	105,427,000	18712000
	2015	96,236,000	19,598,000	176,126,000	49,942,000	134,345,000	28918000
	2016	119,451,000	23,215,000	167,650,000	8,476,000	140,482,000	6137000
<u>حديد الأردن</u>	2014	24,174,001	8,735,965	41,045,842	1,194,247	-26,208,285	6635111
	2015	16,959,766	7,214,235	40,516,327	529,515	-18,239,035	7969250
	2016	14,195,522	2,764,244	40,263,929	252,398	-15,320,826	2918209

<u>الوطنية</u>	2014	8,541,109	905,722	5,752,248	34,863	-4,125,540	-864437
<u>لصناعات</u>	2015	7,611,661	929,448	5,552,064	200,184	-2,606,174	1519366
<u>الالمنيوم</u>	2016	8,022,556	410,895	4,903,969	648,095	-1,778,494	827680
<u>الاستثمارات</u>	2014	11,709,669	7,570,434	- 20,971,646	1,684,239	9,543,045	2796087
<u>والصناعات</u>	2015	-437,938	12,147,607	- 17,479,147	3,492,499	11,597,74 3	2054698
<u>المتكاملة</u>	2016	4,568,802	5,006,740	- 14,317,370	3,161,777	11,318,31 8	-279425
<u>شركة</u>	2014	2,089,464	267,091	974,410	187,684	925,861	1758
<u>الترافيرتين</u>	2015	2,468,773	379,309	830,552	143,858	702,016	-223845
	2016	2,316,496	152,277	628,533	202,019	575,183	-126833
<u>الوطنية</u>	2014	15,514	65,630	-44,992	9,778	225,584	-4141
<u>لانتاج النفط</u>	2015	19,292	3,778	-53,622	8,630	212,939	-12645
<u>والطاقة</u>							
<u>الكهربائية</u>							
<u>من الصخر</u>	2016	17,978	1,314	-53,520	102	210,429	-2510
<u>الزيتي</u>							
Service Sector	السنة	WC	ΔWC	NCO	ΔNCO	FIN	ΔFIN
<u>الاسواق</u>	2014	7,381,210	1,591,805	4,191,692	131,842	1,550	-750
<u>الحررة</u>	2015	6,770,958	610,252	6,480,605	2,288,913	1,550	0
<u>الاردنية</u>	2016	7,968,160	1,197,202	10,218,694	3,738,089	1,550	0
<u>المركز</u>	2014	2,723,471	89,428	-305,338	63,469	850,192	62711
<u>الاردني</u>	2015	3,053,418	329,947	-241,983	63,355	815,597	-34595
	2016	3,317,226	263,808	-171,297	70,686	784,783	-30814

<u>التجارة الدولية</u>							
<u>التسهيلات التجارية الاردنية</u>	2014	-537,811	2,789,867	- 38,280,970	3,053,931	28,446,63 6	718532
	2015	-1,966,840	1,429,029	- 41,479,478	3,198,508	28,298,78 7	-147849
	2016	-3,631,979	1,665,139	- 39,230,295	2,249,183	29,987,39 9	1688612
<u>المتخصصة للتجارة والاستثمارات</u>	2014	1,025,690	1,108,301	545,326	24,972	0	0
	2015	537,581	488,109	523,176	22,150	0	0
	2016	705,538	167,957	526,432	3,256	0	0
<u>بندار للتجارة والاستثمار</u>	2014	-4,917,986	3,257,310	- 32,773,672	582,482	26,747,48 7	2486731
	2015	31,210,140	36,128,126	-7,363,171	25,410,50 1	-3,977,618	-30725105
	2016	34,517,661	3,307,521	-7,393,695	30,524	-4,538,229	-560611
<u>مجموعة أوفتك القابضة</u>	2014	5,518,960	101,563	- 26,992,423	382,234	25,794,68 3	422019
	2015	5,647,971	129,011	-267,122	26,725,30 1	-1,364,431	-27159114
	2016	10,155,096	4,507,125	-270,689	3,567	-3,203,768	-1839337
<u>الجنوب للإلكترونيات</u>	2014	-824,968	718,561	- 15,778,489	17,766,38 5	10,922,76 8	9431675
	2015	-188,280	636,688	- 15,828,484	49,995	10,589,75 1	-333017

	2016	531,851	720,131	- 11,416,960	4,411,524	11,414,75 1	825000
<u>آفاق للطاقة</u>	2014	-53,004,880	14,772,465	157,173,48 0	26,229,11 3	19,000	1294500
	2015	-92,887,086	39,882,206	194,156,78 6	36,983,30 6	26,250	7250
	2016	-122,190,682	29,303,596	228,610,50 2	34,453,71 6	134,000	107750
<u>انجاز للتنمية والمشاريع المتعددة</u>	2014	-1,791,712	782,065	- 31,588,443	13,932,95 6	31,613,15 5	13930105
	2015	-579,728	1,211,984	- 32,214,100	625,657	32,274,89 5	661740
	2016	20,579,112	21,158,840	20,661,834	52,875,93 4	-28,277,288	-60552183
<u>الزرقاء للتعليم والاستثمار</u>	2014	-7,910,038	5,213,365	34,740,047	9,266,977	63,775	14383
	2015	-5,134,633	2,775,405	39,605,871	4,865,824	61,522	-2253
	2016	-5,627,514	492,881	42,314,607	2,708,736	66,894	5372

Financia I Sector	السنة	TACC	Total Assets	TACC/Total Assets	[TACC/Total Assets] (EQ)
<u>البنك الأردني</u>	2014	78036670	2609714566	0.030	0.030
	2015	44913112	2844731503	0.016	0.016
<u>الكويتي</u>	2016	107316114	2739985416	0.039	0.039
<u>البنك التجاري الأردني</u>	2014	84830184	1165263284	0.073	0.073
	2015	190335350	1487563166	0.128	0.128
	2016	191750476	1265300360	0.152	0.152
<u>بنك الاسكان للتجارة والتمويل</u>	2014	361233113	7594929467	0.048	0.048
	2015	144473323	7922698728	0.018	0.018
	2016	148675198	7820225195	0.019	0.019
<u>بنك الاستثمار العربي الأردني</u>	2014	481412386	1750223699	0.275	0.275
	2015	31836509	1793206868	0.018	0.018
	2016	30666805	1809584756	0.017	0.017
<u>بنك الاتحاد</u>	2014	282273673	2256420333	0.125	0.125
	2015	36501468	2389129640	0.015	0.015
	2016	92624992	2559740250	0.036	0.036
<u>بنك المؤسسة العربية المصرفية/ل لاردن</u>	2014	152578073	1099926447	0.139	0.139
	2015	118239546	1029034055	0.115	0.115
	2016	49694694	1113522127	0.045	0.045
	2014	3701683	805163338	0.005	0.005

<u>البنك</u>	2015	37898076	845419891	0.045	0.045
<u>الاستثماري</u>	2016	19207278	949576672	0.020	0.020
<u>بنك المال</u>	2014	189886384	2061689519	0.092	0.092
<u>الأردني</u>	2015	135350094	1986231309	0.068	0.068
	2016	12012805	2007324042	0.006	0.006
<u>بنك</u>	2014	203333455	866560175	0.235	0.235
<u>سوسيته</u>	2015	225552629	1210141450	0.186	0.186
<u>جنرال -</u>	2016	68231717	1303175615	0.052	0.052
<u>الأردن</u>					
<u>بنك القاهرة</u>	2014	146983600	2353354996	0.062	0.062
<u>عمان</u>	2015	48909265	2532062104	0.019	0.019
	2016	59207259	2491183233	0.024	0.024
<u>بنك الاردن</u>	2014	69224305	2190187366	0.032	0.032
	2015	196131814	2206221873	0.089	0.089
	2016	-54749039	2338839064	-0.023	0.023
<u>البنك</u>	2014	608000554	2325144263	0.261	0.261
<u>الاهلي</u>	2015	42000037	2494628998	0.017	0.017
<u>الاردني</u>	2016	228303680	2815518550	0.081	0.081
<u>البنك العربي</u>	2014	1608528250	25859777000	0.062	0.062
	2015	1609127850	25859162000	0.062	0.062
	2016	1437178800	24254246000	0.059	0.059
Financia I Sector	السنة	TACC	Total Assets	TACC/Total Assets	[TACC/Total Assets] (EQ)
<u>الصناعية</u>	2014	2221690	28045940	0.079	0.079
<u>التجارية</u>	2015	3427620	25911755	0.132	0.132

<u>الزراعية /</u> <u>الانتاج</u>	2016	2492264	26744485	0.093	0.093
<u>المتصدرة</u>	2014	846420	7616644	0.111	0.111
<u>للأعمال</u>	2015	444044	6815250	0.065	0.065
<u>والمشاريع</u>	2016	2937539	4643227	0.633	0.633
<u>الصناعات</u>	2014	801446	7738391	0.104	0.104
<u>الكيميائية</u>	2015	2232622	6555716	0.341	0.341
<u>الأردنية</u>	2016	309848	6840064	0.045	0.045
<u>الوطنية</u>	2014	2255348	16089445	0.140	0.140
<u>لصناعة</u>	2015	4316422	19043384	0.227	0.227
<u>الكالورين</u>	2016	-915573	20791489	-0.044	0.044
<u>الموارد</u>	2014	4067539	22171861	0.183	0.183
<u>الصناعية</u>	2015	2796884	19291682	0.145	0.145
<u>الأردنية</u>	2016	524652	19030714	0.028	0.028
<u>المتكاملة</u>	2014	1193651	13931260	0.086	0.086
<u>للمشاريع</u>	2015	2676746	12017553	0.223	0.223
<u>المتعددة</u>	2016	27653407	5683230	4.866	1.087
<u>العربية</u>	2014	11079914	29630450	0.374	0.374
<u>لصناعة</u>	2015	1645470	28493129	0.058	0.058
<u>المبيدات</u>					
<u>والأدوية</u>	2016	2890644	28920888	0.100	0.100
<u>البيطرية</u>					
<u>الوطنية</u>	2014	928720	34691763	0.027	0.027
<u>لصناعة</u>	2015	1567175	34153497	0.046	0.046
<u>الكوابل</u>	2016	2094841	27913613	0.075	0.075

<u>والأسلاك</u> <u>الكهربائية</u>					
<u>العربية</u>	2014	-54660	10174739	-0.005	0.005
<u>للصناعات</u>	2015	1018521	8786448	0.116	0.116
<u>الكهربائية</u>	2016	1282300	7451813	0.172	0.172
<u>مصانع</u>	2014	2852697	52908633	0.054	0.054
<u>الكابلات</u>	2015	4146597	52067952	0.080	0.080
<u>المتحدة</u>	2016	11303808	47105970	0.240	0.240
<u>الأردنية</u>	2014	-155612	8125372	-0.019	0.019
<u>لصناعة</u>	2015	1852547	7369810	0.251	0.251
<u>الأنابيب</u>	2016	846882	7069186	0.120	0.120
<u>الأردنية</u>	2014	1733383	15452994	0.112	0.112
<u>للصناعات</u>	2015	3627619	13917488	0.261	0.261
<u>الخشبية /</u> <u>جوايكو</u>	2016	1230322	11670950	0.105	0.105
<u>العربية</u>	2014	-50257	20893262	-0.002	0.002
<u>لصناعة</u>	2015	770597	18135297	0.042	0.042
<u>المواسير</u> <u>المعدنية</u>	2016	745464	16407509	0.045	0.045
<u>القدس</u>	2014	601549	9656795	0.062	0.062
<u>للصناعات</u>	2015	2788937	10004550	0.279	0.279
<u>الخرسانية</u>	2016	1693151	11434714	0.148	0.148
	2014	1370656	16152659	0.085	0.085
	2015	658553	15790055	0.042	0.042

<u>أساس</u>					
<u>للصناعات</u>	2016	597363	15771011	0.038	0.038
<u>الخرسانية</u>					
<u>سبباً لسكب</u>	2014	75662	1142994	0.066	0.066
<u>المعادن</u>	2015	51328	1024703	0.050	0.050
	2016	76002	969946	0.078	0.078
<u>الأردنية</u>	2014	3815154	56516987	0.068	0.068
<u>لتجهيز</u>	2015	5888839	62712570	0.094	0.094
<u>وتسويق</u>					
<u>الدواجن</u>	2016	5771778	68403224	0.084	0.084
<u>ومنتجاتها</u>					
<u>الألبان</u>	2014	1210919	11652263	0.104	0.104
<u>الأردنية</u>	2015	378755	11601753	0.033	0.033
	2016	123069	13385478	0.009	0.009
<u>الاستثمارات</u>	2014	1210852	25999984	0.047	0.047
<u>العامة</u>	2015	4592502	26858239	0.171	0.171
	2016	1840647	27336624	0.067	0.067
<u>القرية</u>	2014	-395190	4704746	-0.084	0.084
<u>للصناعات</u>	2015	1283340	3092290	0.415	0.415
<u>الغذائية</u>					
<u>والزيوت</u>	2016	1498698	2384566	0.628	0.628
<u>النباتية</u>					
<u>العالمية</u>	2014	1461410	11521969	0.127	0.127
<u>الحديثة</u>	2015	2895408	11146023	0.260	0.260
<u>للزيوت</u>					
<u>النباتية</u>	2016	1629073	11764873	0.138	0.138

<u>الوطنية</u>	2014	10781641	90984504	0.118	0.118
<u>للدواجن</u>	2015	6333488	85470544	0.074	0.074
	2016	11295982	75246121	0.150	0.150
<u>المصانع</u>	2014	11687108	36092130	0.324	0.324
<u>العربية</u>	2015	156750	34071608	0.005	0.005
<u>الدولية</u>					
<u>للأغذية</u>	2016	-256134	27866000	-0.009	0.009
<u>والاستثمار</u>					
<u>دار الغذاء</u>	2014	3302470	14120707	0.234	0.234
	2015	95542	13271410	0.007	0.007
	2016	2129681	14003444	0.152	0.152
<u>مصانع</u>	2014	1184418	6247550	0.190	0.190
<u>الزيوت</u>	2015	1720949	6380732	0.270	0.270
<u>النباتية</u>					
<u>الأردنية</u>	2016	1029352	6887859	0.149	0.149
<u>سنيورة</u>	2014	1492215	41478219	0.036	0.036
<u>للصناعات</u>	2015	4885418	49378101	0.099	0.099
<u>الغذائية</u>	2016	6344631	59252138	0.107	0.107
<u>العامة</u>	2014	302666	1886703	0.160	0.160
<u>للتعدين</u>	2015	586373	1196113	0.490	0.490
	2016	225724	394795	0.572	0.572
<u>العربية</u>	2014	1735079	18305745	0.095	0.095
<u>لصناعة</u>	2015	1856834	16312501	0.114	0.114
<u>الالمنيوم/ارا</u>					
<u>لـ</u>	2016	57457	15879089	0.004	0.004
	2014	4168273	5471443	0.762	0.762

<u>الوطنية</u>	2015	1367999	6818752	0.201	0.201
<u>الصناعة</u>	2016	535134	11481541	0.047	0.047
<u>الصلب</u>					
<u>مناجم</u>	2014	159324000	1211466000	0.132	0.132
<u>الفوسفات</u>	2015	37060000	1174183000	0.032	0.032
<u>الأردنية</u>	2016	88275000	1136295000	0.078	0.078
<u>مصانع</u>	2014	21374465	190300011	0.112	0.112
<u>الاسمنت</u>	2015	9851818	195011262	0.051	0.051
<u>الأردنية</u>	2016	20439105	187462429	0.109	0.109
<u>البوتاس</u>	2014	75819000	948423000	0.080	0.080
<u>العربية</u>	2015	98458000	1016122000	0.097	0.097
	2016	37828000	920654000	0.041	0.041
<u>حديد الأردن</u>	2014	16565323	74522888	0.222	0.222
	2015	15713000	67864246	0.232	0.232
	2016	5934851	66848655	0.089	0.089
<u>الوطنية</u>	2014	76148	16438498	0.005	0.005
<u>لصناعات</u>	2015	2648998	14701980	0.180	0.180
<u>الالمنيوم</u>	2016	1886670	14185840	0.133	0.133
<u>الاستثمارات</u>	2014	12050760	39001096	0.309	0.309
<u>والصناعات</u>	2015	17694804	30102558	0.588	0.588
<u>المتكاملة</u>	2016	7889092	26485161	0.298	0.298
<u>شركة</u>	2014	456533	5604474	0.081	0.081
<u>الترافرتين</u>	2015	299322	5642084	0.053	0.053
	2016	227463	5476620	0.042	0.042
	2014	71267	1692658	0.042	0.042

<u>الوطنية</u>	2015	-237	1611731	0.000	0.000
<u>إنتاج النفط</u>					
<u>والطاقة</u>					
<u>الكهربائية</u>	2016	-1094	1521553	-0.001	0.001
<u>من الصخر</u>					
<u>الزيتي</u>					
Financia					[TACC/Total
I Sector	السنة	TACC	Total Assets	TACC/Total	Assets
				Assets	(EQ)
<u>الاسواق</u>	2014	1722897	48226237	0.036	0.036
<u>الحرّة</u>	2015	2899165	51329568	0.056	0.056
<u>الأردنية</u>	2016	4935291	56939162	0.087	0.087
<u>المركز</u>	2014	215608	8618597	0.025	0.025
<u>الأردني</u>	2015	358707	8915086	0.040	0.040
<u>للتجارة</u>					
<u>الدولية</u>	2016	303680	8594436	0.035	0.035
<u>التسهيلات</u>	2014	6562330	33677110	0.195	0.195
<u>التجارية</u>	2015	4479688	39312625	0.114	0.114
<u>الأردنية</u>	2016	5602934	41051880	0.136	0.136
<u>المتخصصة</u>	2014	1133273	2582976	0.439	0.439
<u>للتجارة</u>	2015	510259	1616323	0.316	0.316
<u>والاستثمارا</u>					
<u>ت</u>	2016	171213	2218183	0.077	0.077
	2014	6326523	37000725	0.171	0.171
	2015	30813522	40005742	0.770	0.770

<u>بندار</u>					
<u>للتجارة</u>	2016	2777434	40599844	0.068	0.068
<u>والاستثمار</u>					
<u>مجموعة</u>	2014	905816	53099282	0.017	0.017
<u>أوفتك</u>	2015	-304802	54665814	-0.006	0.006
<u>القابضة</u>	2016	2671355	61027970	0.044	0.044
<u>الجنوب</u>	2014	27916621	24936621	1.120	0.120
<u>للالكتروني</u>	2015	353666	20494693	0.017	0.017
<u>ات</u>	2016	5956655	15643114	0.381	0.381
<u>أفاق للطاقة</u>	2014	42296078	269177132	0.157	0.157
	2015	76872762	302489622	0.254	0.254
	2016	63865062	356588986	0.179	0.179
<u>انجاز</u>	2014	28645126	31613155	0.906	0.906
<u>للتنمية</u>	2015	2499381	32274999	0.077	0.077
<u>والمشاريع</u>					
<u>المتعددة</u>	2016	13482591	186346785	0.072	0.072
<u>الزرقاء</u>	2014	14494725	44662385	0.325	0.325
<u>للتعليم</u>	2015	7638976	49246750	0.155	0.155
<u>والاستثمار</u>	2016	3206989	51231477	0.063	0.063

Appendix (4): Outputs of statistical analysis

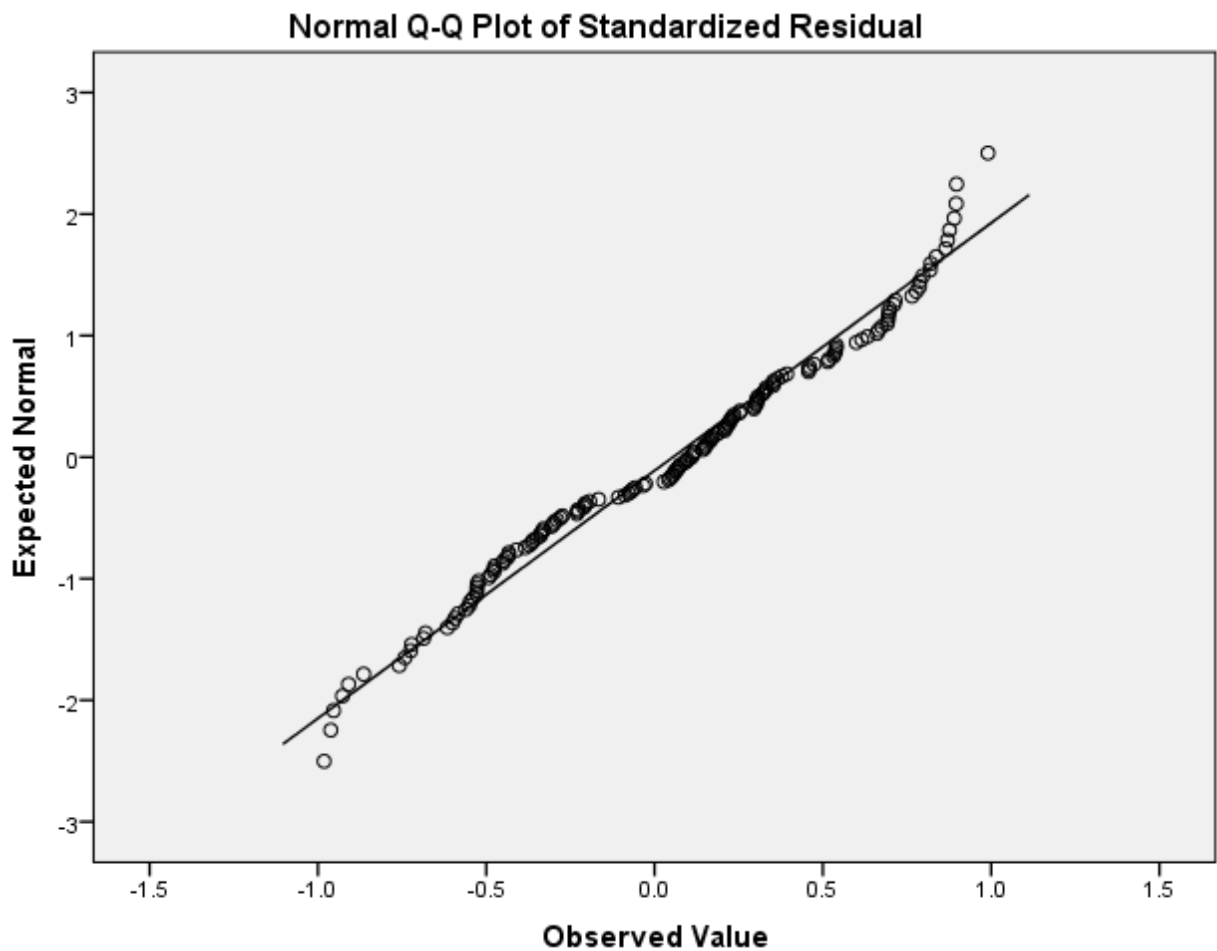
Explore

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual	.067	161	.072	.974	161	.004

a. Lilliefors Significance Correction

Standardized Residual



Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	number of meetings held by the audit committee , number of the board of directors members , number of meetings held by the board of directors , number of the audit committee members ^b		. Enter

a. Dependent Variable: earnings quality

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.235 ^a	.055	.034	.16246

a. Predictors: (Constant), number of meetings held by the audit committee , number of the board of directors members , number of meetings held by the board of directors , number of the audit committee members

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.270	4	.067	2.553	.041 ^b
	Residual	4.619	175	.026		
	Total	4.889	179			

a. Dependent Variable: earnings quality

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.249	.057		4.383	.000		
	number of the board of directors members	-.010	.005	-.168	-2.013	.046	.775	1.290
	number of meetings held by the board of directors	.001	.006	.020	.233	.816	.716	1.396
	number of the audit committee members	-.006	.010	-.054	-.597	.552	.658	1.520
	number of meetings held by the audit committee	-.004	.006	-.070	-.649	.517	.462	2.165

a. Dependent Variable: earnings quality

Correlations

Correlations

		earnings quality	number of the board of directors members	number of meetings held by the board of directors	number of the audit committee members	number of meetings held by the audit committee
earnings quality	Pearson	1	-.216**	-.043	-.151*	-.165*
	Correlation					
	Sig. (2-tailed)		.004	.568	.043	.027
	N	180	180	180	180	180
number of the board of directors members	Pearson	-.216**	1	.128	.362**	.445**
	Correlation					
	Sig. (2-tailed)	.004		.086	.000	.000
	N	180	180	180	180	180
number of meetings held by the board of directors	Pearson	-.043	.128	1	.123	.496**
	Correlation					
	Sig. (2-tailed)	.568	.086		.099	.000
	N	180	180	180	180	180
number of the audit committee members	Pearson	-.151*	.362**	.123	1	.548**
	Correlation					
	Sig. (2-tailed)	.043	.000	.099		.000
	N	180	180	180	180	180
number of meetings held by the audit committee	Pearson	-.165*	.445**	.496**	.548**	1
	Correlation					
	Sig. (2-tailed)	.027	.000	.000	.000	
	N	180	180	180	180	180

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
v2014	60	.00	.91	.1445	.16222
v2015	60	.00	.77	.1404	.14932
v2016	60	.00	1.09	.1279	.18465
Allyears	180	.00	1.09	.1376	.16526
Valid N (listwise)	60				

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Allyears	180	1.081	.181	3.293	.360
Valid N (listwise)	180				