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# Corporate Governance and Earnings Management: Evidence From Listed Firms at Palestine Exchange

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This thesis was defended successfully on 13th of May 2018 and approved by:

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# Declaration

I'm the undersigned Khaled Akram Zuriqi declare that this thesis has been composed solely by myself and that it has not been submitted, in whole or in part, in any previous application for a degree. Except where states otherwise by reference or acknowledgment, the work presented is entirely my own, I declare that I have followed the regulations, instructions and laws of Arab American university.

Signature………………. Date:16/12/2018

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## Abstract

The agency problem gives an incentive to present corporate governance codes that help to reduce the conflict of interest between company owners and the managers. This study uses the corporate governance indicators to assess the relationship between CG and earnings management. Managers uses earnings management to overstate or understate the figures to serve their own interest. Data were collected for the 33 sampled companies in this study from the annual reports of the listed companies at Palestine stock exchange. The modified cross sectional jones model was used to define the value of earnings management. The independent variable (CG indicators) were board independence, board size, ownership concentration, CEO duality and the audit quality. In addition to control variables to control for size and performance of the firm, these variables are company size, return on asset and leverage. By using the regression model a significant correlation between EM and size for the year 2015 and between EM and ownership concentration, size and return on asset for the year 2016 were found. The overall regression result shows that the model fits with the variable used. The R-squared (coefficient of determination) values shows that approximately 65% and 73% of the variability of earnings management is accounted for by the variables in the model.

**Key Words:** Corporate Governance, Earnings management, governance principles, discretionary accruals, board of directors.

## Table of Contents

## Tables

## Table of figures



## list of abbreviations

CG: Corporate Governance.

EM: Earnings Management.

OECD: Organization for Economic Cooperation and Development.

PCMA: Palestinian capital market authority.

PEX: Palestinian Securities Exchange

DA: Discretionary Accruals.

NDA: Non-Discretionary Accruals.

# Chapter one

# Introduction

## 1.1 Background

Corporate governance refers to the set of guidelines, practices and actions that set to make sure that the company managers works to achieve the goal of the firm and make sure that manager work to maximize shareholders wealth in ethical manner (what is corporate governance, n.d.).

According to the organization for economic cooperation and development (OECD), the corporate governance has six main principles. “1) Ensuring the basis for an effective corporate governance framework. 2) The rights and equitable treatment of shareholders and key ownership functions. 3) Institutional investors, stock markets, and other intermediaries; 4) The role of stakeholders. 5) Disclosure and transparency. 6) The responsibilities of the board”. These principles are used as a reference when assessing the corporate governance within the companies (OECD, 2015).

According to applied corporate governance web site, which is a web site for the named company that provides consultancy in corporate governance and offer advocacy and trainings in CG field, it states that the CG best practice principles are. “1) ethical approach 2) balanced objectives; 3) each party plays his part; 4) decision-making process; 5) equal concern; 6) accountability and transparency” also these principles are used to make sure that CG practices are exist or not within the company (Kendall & Kendall, n.d.).

The principles outlined are used to achieve the strategic goal and the objectives that intended to be achieved in the company strategic plan not to start a war between shareholders and management (Kendall & Kendall, n.d.). From this point, alignment between CG practices and strategic planning purpose can be shown, which is the achievement of the strategic goals of the organization and maximizing the shareholders benefit.

According to Gulzar & Wang, (2011) earnings management is the modification of financial statements data by company managements to deceive stakeholders or to impact contractual decisions, by using selective Generally Accepted Accounting Principles (GAAP)

The relationship between corporate governance and earnings management are questionable, by reviewing many literatures, the researcher can't find an agreement on the relation between those variables. Since there is a difference in findings, some researcher found a positive relationship, others found a negative and some found no relationship between corporate governance and earnings management.

## 1.2 Problem Statement

Managers tend to use the earning management in order to meet their benchmark (Rennekamp , Rupar , & Seybert , 2016) , or to mislead some stakeholders about the actual performance of the company or to influence contractual outcomes that depend on the performance reported in the financial statements (Healy & Wahlen, 1999). 52% of a sample of 26 listed companies in Palestine stock exchange are engaged in earnings management (Alareeni & Aljuaidi, 2014). However there are no prior researches addressed the relationship between corporate governance and earnings management in Palestine (Abdelkarim & Amer, 2011). The aim of this qualitative study is to examine the relationship between corporate governance and earnings management the case of Palestine stock exchange listed companies. Empirical data for 33 out of 49 listed companies at Palestine stock exchange were analyzed to test the relationship between corporate governance and earnings management.

## 1.3 Purpose of the study

This quantitative study is going to describe the relationship between corporate governance variables and earnings management. This quantitative study uses the multiple regression model to test the relationship between those variables. The multiple regression is used because the data set of those variables are scale data and the purpose of this research is to conduct a relationship inquiry between those two variables. The study use corporate governance as the independent variable and earnings management as the dependent variable in addition to control variables to mitigate the size and performance differences effect on the findings.

By surveying and studying the characteristics of board of directors and level of earnings management of 33 out of 48 listed companies at Palestine stock exchange this study will test the relationship between corporate governance and earnings management among publicly traded companies in Palestine.

## 1.4 Significance of the study

The significance of the study comes from the lake of literature on this topic there is no literature or research but once conducted by Abdelkarem and Amer (2011). To address the relationship between corporate governance and earnings management, this research will provide additional finding and empirical evidence for the relationship between corporate governance and earnings management in publicly traded companies in Palestine.

## 1.5 Limitation of the study

The study will be limited to publicly traded companies at Palestine stock exchange since there is no empirical data for private traded companies to measure the level of corporate governance and level of earnings management.

# Chapter two

# Literature Review

## 2.1 Strategic planning and Corporate Governance

Strategic planning is “Systematic process of envisioning a desired future, translating this vision into broadly defined goals or objectives and a sequence of steps to achieve them”. Goals are achieved through directing the resources, and ensure that all employees works to achieve this goal, in addition to its assessment tool by tracking the actions and achievements, the board also has an oversight rule in the strategic plan process, operations and the implementation progress (Kinross, 2012). CG defined as the set of guidelines, practices and actions that set to make sure that the company managers works to achieve the goal of the firm and make sure that manager work to maximize shareholders wealth in ethical manner. (what is corporate governance, n.d.). Under this definition, CG guidelines set to ensure that management working on achieving company’s goals, the goals and objectives that were drafted in the company’s strategic plan. Board of directors who have an overseeing rule should be in the process of identifying the company future goals, the objective, resources and actions needed to achieve this goal. The board makes sure that resources and operations are on right way to achieve these goals, if not they have to identify the reasons and steer the entire operation into the track (Wondra, 2017).

From those tow definitions of strategic planning and the corporate governance an interconnection between can be found between them, since the alignment in their purpose of achieving the company goals.

In addition, corporate governance refers to the set of policies, procedures, and practices that lead the board of director to ensure accountability, fairness, and transparency in a company's relationship with its all stakeholders (definition/corporate-governance, n.d.). According to Shleifer and Vishny (1997), corporate governance deals with making sure those suppliers of money (Creditors and Investors) for companies will get a yield on their investment. A successful corporate governance system in developed countries like the United States, Germany and japan provide a legal protection for those investors (Shleifer & Vishny, 1997). CG were defined in the code of corporate governance in Palestine as "Set of rules and procedures by which the company's management and supervision are carried out through the coordination of relations between the board of directors and the executive management and the shareholders and all other concerned parties including the social and the environmental responsibilities for the company". According to Kassar (2004), there is no doubt regarding the significance of corporate governance in socio-economic development, economic growth, and prosperity, also if the environment of governance has been improved by increasing the rule of laws, regulations and accountability this will create new jobs, increase the trade and international Capital investment.

## 2.2 Agency theory and corporate governance

Entities were thirsty for the corporate governance evolution to face the agency problem between the company owners (shareholders) and the company directors (Saltaji, 2013).

The agency relation defined as the relation between any two parties in contractual agreement in which they agreed on providing a service from the agent (manager) to the principal (owner) and take decisions and actions on principal behalf (Jensen & Meckling, 1976). The agency theory suggests that there is no alignment between the owners and the managers interest, the conflict of interest arise from the goal of management to maximize their own capital and wealth on the other hand shareholders need to maximize the value of the firm by maximizing the value of its assets (Moldoveanu & Martin, 2001).

This agency problem arise from the separation of ownership from management, the theory suggest that the conflict of interest have three parties, these parties are shareholders, managers and creditors (Saltaji, 2013).

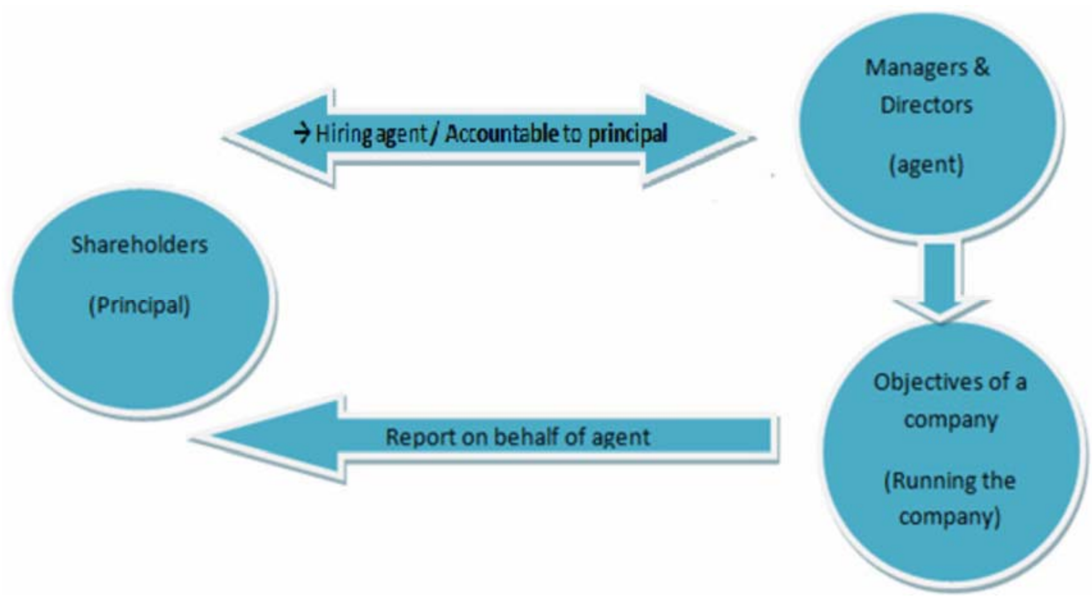


Figure 1: Parties of agency theory, Saltaji (2013)

According to Saltaji (2013), agency cost is divided to three main categories as follows:

- Monitoring Cost: the monitoring costs are the money paid to assess, compensate and manage the manager's behaviors; in addition, owners need to pay auditing costs and training cost for top management. Governance codes help to reduce the conflict of interest between owners and the management of the company by implementing a control system to monitor the management, this monitoring will help restrict the manager's behavior.
- Bonding cost: bonding costs are cost incurred by managers to make sure that they are working for the best interest of company owners, these cost are a result of working according to monitoring system.
- Residual loss or costs incurred due to the agency problem other than monitoring, bonding costs are residual losses, the failure in gathering the owners, and manager's interest after implementing the necessary controls will result in other losses known as residual loss.


Figure 2: Types of agency cost, Source: Saltaji(2013)

## 2.3 Principles of corporate governance

Corporate governance is very important for company's survival, growth and the economic stability. The CG participates in bridging the gap between those have an excess amount of money that they need to invest and those have a shortage in money and need to borrow money in the market. As these practices build confidence and reliability to stakeholder and stockholder that there rights and money are protected and safe. Also these practice help the companies to access fund overseas easily and with lower interest rates on their loans. Because of that, there was a need to address a regulatory framework that support the corporate governance. In 1999 the Organization for Economic Cooperation and Development (OECD) has issued the OECD principles, which have been modified and revised in 2003 and approved by OECD governments in April 2004. In 2015 the principles were reviewed again under the supervision of OECD CG committee the 35 member countries in OECD and all non OECD countries G20 countries with participation from Basel committee on banking supervision, the financial stability board and the world bank group. (OECD, 2015)

In April 2015 a draft of the principles were discussed by G20/OECD, and adopted by OECD countries in July 8, 2015, the non-OECD countries the G20 countries submitted the principles in 15-16 November 2015 in G20 meeting and were validated as G20/OECD Principles of corporate governance (OECD, 2015).

There are six main areas that were addressed by OECD principles, these areas are "I) Ensuring the basis for an effective corporate governance framework. II) The rights and equitable treatment of shareholders and key ownership functions. III)

Institutional investors, stock markets, and other intermediaries. IV) The role of stakeholders; V) Disclosure and transparency. VI) The responsibilities of the board" (OECD, 2015).

**2.2.1** The first principle is Ensuring the basis for an effective corporate governance framework; this framework should encourage and contribute to the transparency, well-functioning markets, the efficient use and distribution of the available assets. In addition, this framework should be aligned with the bylaws and regulations to be effective and trustworthy for the parties who intended to start a relationship with this institution. The regulations and legislation that drown by the CG framework in one institution cannot be that effective and well-functioning within other organizations or countries. Due to the differences in the context and the surrounding circumstances, beside to differences in the context other issues should be taken into consideration during the development process of the framework to avoid the excessive application of rules and regulations, support the initiatives and bound the threats of conflict of interest. The issue is the need for and the result from these international dialogue and co-operation, once the need and the result are considered the company can meet the expected outcomes from this framework.

Another important factor must be taken into consideration in preparing the CG framework, there must be a consistency between the rule of law and the legal and regulations that affect the CG practices, also they should be enforceable and obvious. The framework should dictate the hierarchy within the institution, the reporting process and the responsibilities of each department to avoid any overlaps and conflicts.

The stock market has a vital role in supporting the CG, the rules and regulations within the stock market should be supportive and enforceable toward achieving effective CG (OECD, 2015).

**2.2.2** "The second principle is the rights and equitable treatment of shareholders and key ownership functions". Shareholders are the owners of the corporation so they have a role in managing the company by choosing the board of directors who are responsible of taking actions and policies in managing the firm. The shareholders have this right and the right to vote in board meetings, so the framework should be supportive, protective and facilitator for the exercise of shareholders rights and make sure that all types of shareholders, individuals, companies, local or foreigners have the same treatment as the others.

Shareholders must have the ability to ask questions to the board of directors and choose issues need to be discussed in the board meeting agenda to encourage them to attend those meetings. In addition to that, there must be an address for any related party transaction to be approved, this approval help in addressing and avoiding the conflict of interest (OECD, 2015).

**2.2.3** "The third principle is related to institutional investors, stock markets, and other intermediaries". The existence of financial intermediaries in the investment chain considered as a motivation for good corporate governance. Since they interact as independent advisors for the investors, under this principle the institutional investors like pension funds, mutual funds and insurance companies must address their intentions concerning the corporate governance and their intentions regarding how they will use their voting rights. Due to the fact that the framework built to save the shareholding rights, under this principle the votes exercised by custodians or nominees must reflect the tendency, thoughts and needs of the shareholders. Corporate governance practices contribute in lowering conflict of interests, because under this principle, the institutional investors as pension funds must address any conflict of interest may happen and how will they overcome this conflict. In addition to institutional investors, the intermediaries, analyst, experts, and all parties that provide analysis that affect the investor's opinion must address any conflict of interest that may affect their independency.

**2.2.4** The fourth principle is about the role of stakeholders in corporate governance. Beside to its recognition for shareholder's rights, the CG framework should spot the stakeholders rights that preserved by laws and regulations or by cross arrangements regulation. Under this principle, the framework should respect and protect these rights, which should help the stakeholders to reform any violation in their rights. The employee participation in CG process, board of directors, negotiation and consultation should be permitted to develop the participation of stakeholders in CG process. This participation should be linked with an access to appropriate and trustworthy data from stakeholder's side to fulfill their responsibilities. In addition to the aforementioned rights, under this principle the stakeholders should have the right to freely address and report any unlawful, immoral and wrong behaviors to the board and to the authorities, without being questioned or limit their rights.

**2.2.5** The fifth principle is about disclosure and transparency. Publicly traded companies obligated by laws and regulations to publish at least an annual report, in this report the company must address its financial statements, performance, ownership, governance adapted by the firm, risks, structure of the firm, board member, executives, and all important information. The framework of corporate governance should guarantee the timely, reliability, validity and precision of these disclosures, this disclosure must be comply with laws, regulations and standards, also under this principle the financial statements must be audited by independent and competent external auditor, with high auditing standards to make sure that the financial statements represent the actual performance of the firm.

**2.2.6** The sixth and final principle according to (OECD, 2015) is the responsibility of the board, board of directors are representatives for the shareholders, since the board elected by the shareholders, board of director have the responsibility to oversee over the management and make sure that management are working to achieve the company goals and objectives, the board have the responsibility to question top management and have effective monitoring over them, beside to the accountability of top management to the board, board members are also accountable to shareholders, board members must work in good faith and do their best to achieve the company goals, the board decisions affect all the shareholders because of that the framework should be designed as mentioned earlier to make sure all shareholders are treated fairly, because of those responsibilities on the board, they should have high ethical standards and save the all parties interest, ethics and other regulations must be addressed in company code of ethics that required in the first standard, duties of the board includes also reviewing the strategic plan of the company, budgets, objectives, monitoring governance practices, selecting competent executives, aligning the interest of the shareholders with company interest, ensures reliable election process on board voting and all overseeing objectives related to company disclosures, independently and objectively, to fulfil this responsibilities, board must have a timely and reliable access to all needed information.

## 2.4 Corporate governance in Palestine

Corporate governance theme in Palestine started to come out in 2005 (Abdelkarim & Amer, 2011). Many educational programs were adapted to increase the awareness about the dynamic rule of corporate governance. Three years later Palestinian capital market authority (PCMA), the Palestinian Securities Exchange (PEX), and a number of related institutions have drafted the corporate governance code, the code have been drafted based on corporate governance principles released by the Organization for Economic Cooperation and Development (Abdelkarim & Amer, 2011).

The CG code is obligatory to all companies that operate under the PCMA (publicly traded companies), the rule of these codes is to improve performance, market reliability, and boost the investment wheel through increasing the market reliability. The code roles were derived from the laws and regulation used in Palestine, so companies are obligated by law to implement these codes. Due to existence of codes that not combatable with the old companies law; a list of recommendations and rules were added in an amendment to give the companies more flexibility in their form, size activates and management style (Committee, Corporate Governance National, 2009).

## 2.5 Corporate governance and earnings management

According to Healy and Wahlen (1999), earnings management is using the judgment and estimates in economic transactions that will affect the reported financial statements for two reasons, to mislead some stakeholders about the actual performance of the company or to influence contractual outcomes that depend on the performance reported in the financial statements (Healy & Wahlen, 1999).

Researchers have found two ways that managers can manage their earnings, either by accounting methods (FIFO, LIFO, depreciation method, useful life…) or by managing their accruals, accrual managing has the attention since its skillful management techniques used to avoid exposure from outsiders (Ducharme, Malatesta, & Sefick, 2001). Many studies have been conducted to identify the relationship between corporate governance and earnings management through studying the corporate governance characteristics. Whoever a few research have been studied the corporate governance and its impact on companies enactment and there is no prior research addressed the relationship between corporate governance and earnings management in Palestine (Abdelkarim & Amer, 2011).

According to Hu (2010), there is a relationship between corporate governance and discretionary accruals, he stated that the greater the corporate governance practices the lower size of discretionary accruals, meaning the lower earnings management. The first study that addressed the relationship between corporate governance characteristics and earnings management in Palestine was in 2011 by two academics from Birzeit University, Dr. Naser Abdelkarem, and Leila Amer. The study addressed the relationship between the dependent variable, earnings management and Board Independence, Board Size, Ownership Concentration, CEO duality and Audit Quality as the independent variables. Earnings management have been quantified by calculating discretionary accruals, using the Modified Cross Sectional

Jones Model (Abdelkarim & Amer, 2011). According to Dechow et al. (1995) as cited by (Abdelkarim & Amer, 2011) Modified Cross Sectional Jones Model is the best model used in detecting earnings management compared to other discretionary accrual models.

## 2.6 Board Independence

Board independence refers to the number of non-executives board members who have the ability to make independent judgment in areas that have a probable conflict of interest (Board independence of listed companies, 2007).

There is an argument in literature about the relationship between board independence and earnings management, according to Uadiale (2012), the greater the proportion of board independence the lower likelihood of earnings management. This finding in consistence with results found by Beasley (1996). And in contrast with results found by Abdelkarem and Amer (2011) that show positive relationship between board independence and earnings management and in contrast with result found by Gulzar and Wang (2011) and results found by Hashim and Devi (2008) that shows no significant relationship between board independence and earnings management.

## 2.7 Board Size

Board Size Identified by the number of board members, Empirical research has acknowledged that board size may be related to firm performance (Gulzar & Wang, 2011). According to Abdelkarem and Amer (2011) there is a negative correlation between board size and earnings management in 2009 and a positive relationship in 2010, (Gulzar and Wang 2011) and (Hashim and Devi 2008) found that there is no relationship between board size and earnings management.

## 2.8 Ownership Concentration

The overlap between ownership and control can mitigate any conflict of interest raised form agency problem, which in turn will lead to increase the value of the firm (Man & Wong, 2013). According to Shleifer and Vishny (1997), the ownership concentration can boost the board-monitoring rule, some studies found a positive association between ownership and earnings management Hashim and Devi (2008). Abdelkarem and Amer (2011) found a negative association in 2010 results on the other hand no association in 2009 results.

## 2.9 CEO duality

CEO duality defined as a CEO of the company is the chairperson of the board of director, on the other hand a non-duality mean different person for CEO and another for board of director (Gulzar & Wang, 2011). There is a debate in the effect of CEO duality on earnings management; some studies suggest that CEO duality has no significant relationship with earnings management as found by (Hashim and Devi 2008) and Abdelkarem and Amer (2011). Others found a positive association as found by (Gulzar & Wang, 2011), the positive association found by Gulzar and Wang means if a person wear the hate of CEO and the chairperson of board of directors the probability to manipulate the earnings will increase.

## 2.10 Audit Quality

One of the important factors that affect the reliability of financial information is audit quality (Yaşar, 2013), prior research focus on studying the relationship between audit quality factors like existence of audit committee, the experience of audit committee members and big four audited firms (Abdelkarim & Amer, 2011). According to

Yaşar (2013) the audit quality has no relationship with earnings management neither on big four audited firms nor none big four audited firms in Turkish firms Gulzar and Wang (2011). couldn't find enough evidence on the relationship between audit committee existence and earnings management, this finding is in consistence with Abdelkarem and Amer (2011) finding for 2010 analyzed data which found being audited by a big four firm doesn't have an association with earnings management. However in testing the association for 2009 data Abdelkarem and Amer (2011) found a negative correlation between big four audited firms and earnings management, which mean being audited by a big four company restrict the interact of earnings management (Abdelkarim & Amer, 2011).

**Research hypothesis**

By reviewing the aforementioned researches a debate can be found in the nature of the relation, from this point the following hypothesis were developed to test the relationship.

H0: there is no relationship between corporate governance characteristics (Board independence, Board size, CEO duality, audit quality, ownership concentration controlled by size, return on asset, leverage and earnings management).

H1: there is a relationship between corporate governance characteristics, (Board independence, board size, CEO duality, audit quality, ownership concentration controlled by size, return on asset, leverage, and earnings management).

# Chapter three

# Methodology

## 3.1 Sample and data collection

As the objective of this study is to determine the relationship between corporate governance characteristics and earnings management, the target population of this study is all the listed companies at Palestine stock exchange. The total listed companies was 48 companies however the sample of 33 companies were analyzed as of December 31 2015 and December 31 2016, the selected companies exclude the financial sector (banks and insurance companies) since the existence of special governance regulations for this sector (Abdelkarim & Amer, 2011). In addition, the sample excludes another one company that was suspended from trading.

The total number of listed companies in 2015 and 2016 were 48 companies, in Feb 20th 2017 a new company (Sanad Construction Resources) were listed in Palestine stock exchange, while another one were delisted in June 20th, 2017 since it transform to a privately trading company (The Arab Palestinian Shopping Centers, BRAVO) (Palestine Exchange News Archive, n.d.).

The data were collected using empirical data from the annual report of 2015 and 2016 for the selected companies to measure the earnings management and the corporate governance characteristics. In addition to the annual reports, a preliminary data were used for Arab Real Estate Establishment Company for the year ended 31/12/2016, since there was no annual report disclosed as the date of 26th of December 2017. The preliminary report for 2016 does not include any data about the ownership concentration so the percentages were used as the year ended in 31st of December 2015.

## 3.2 Conceptual model and variables of the study.

Corporate governance is a function of multiple factors as described below, all variables both dependent and independent variables are summarized in figure 1.

**CG= f (B_Indep, B_Size, Dual, Big_4, Own_Con)**

**Where:**

**CG**: Corporate governance: a function of 5 variables

**B_Indep**: No of independent non-executive directors/total no. of board members.

**B_Size**: Board Size (measured as total number of the board)

**Dual**: Dummy Variable known as CEO Duality (1 if duality exists, 0 otherwise)

**Big_4**: Dummy Variable known as Audited by Big 4 (1 if audited by Big 4 auditing firm, 0 otherwise)

**Own_Con**: the cumulative percentage of shares held by block shareholders who own at least 5% of the firm's shares.

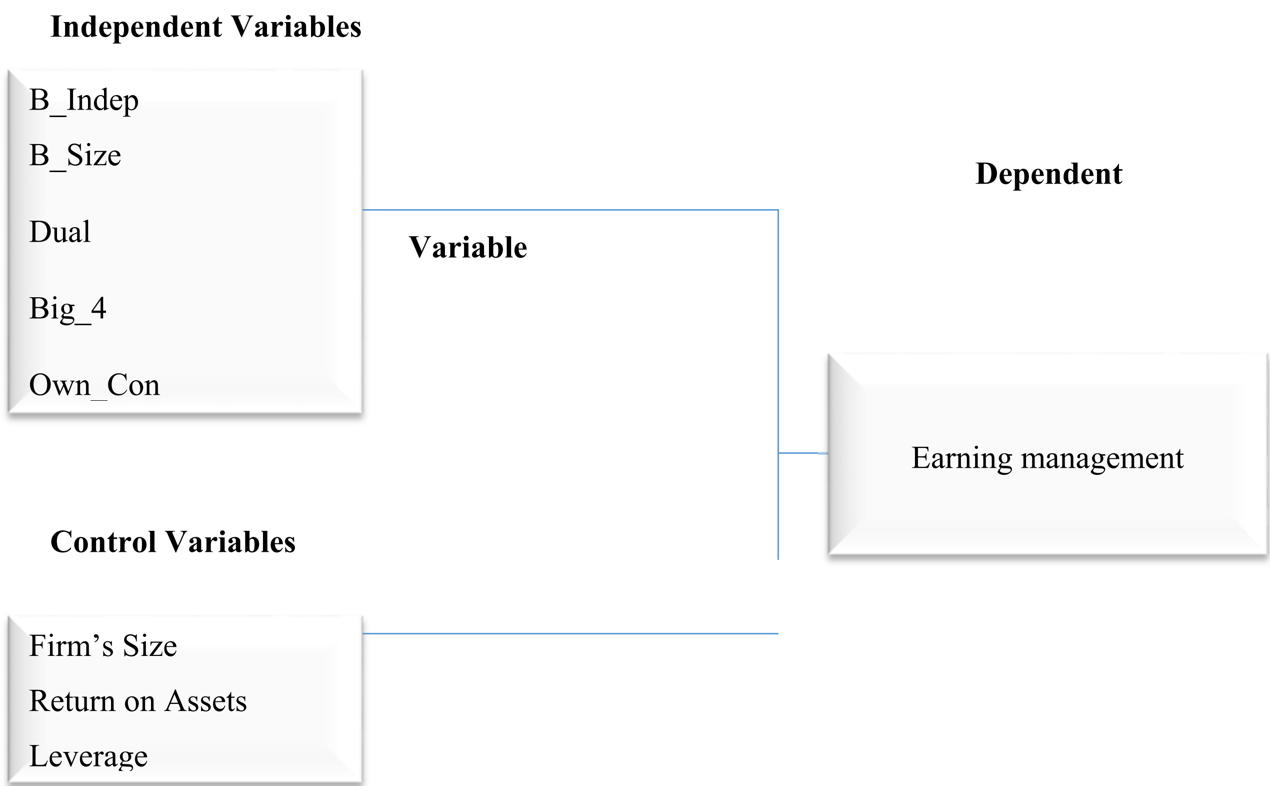


Figure 3: Variables of the study

### 3.3 Statistical approach (Regression and correlation matrix).

According to Man & Wong (2013), there are four different models used to recognize earnings management. The first model is the discretionary model, using the jones model 1991, another model is assets turnover (ATO)/profits margin (PM) diagnostic, earnings management proxies: classification shifting and earnings management proxies: restatements, the most used model in theories is the discretionary accruals model using the jones model (Man & Wong, 2013).

As mentioned earlier researchers found that one of the most skillful methods used in earnings management is managing company accruals. To calculate total accruals there are two methods used, balance sheet and cash flow statement approaches, in this study the cash flow statement approach were used, since it's the more preferred by researchers when comparing the two methods (Ali shah et. al, 2009).

Total accruals were calculated in this approach using the following equation:

$$\mathbf{TAc_t = N.I_t - CFO_t}$$

**Where:**

**$TAc_t$:** is total accruals in year t.

**N.It:** is Net Income or Earnings before extraordinary items in year t.

**$CFO_t$:** is cash flows from operating activities in year t.

In this research the cross-sectional Modified-Jones model were used to measure earnings management, in this model all variables are scaled to begging total asset as follow:

$$\frac{TAci,t}{Ai,t-1} = \alpha_0 \left(\frac{1}{Ai,t-1}\right) + \alpha_1 \left(\frac{\Delta\ REVi,t}{Ai,t-1}\right) + \alpha_2 \left(\frac{PPEi,t}{Ai,t-1}\right) + \varepsilon_{i,t} \ldots (1)$$

**Where:**

TAci, t = Total Accruals for company i in year t (measured as the difference between earnings before extraordinary items and cash flows from operations).

Ai, t-1 = Total assets for company i in year t.

Δ REVi,t = Change in net sales for company i in year t.

PPEi.t = Gross property, plant and equipment for company i in year t.

εi, t = the regression error terms, assumed cross-sectional uncorrelated and normally distributed with mean zero.

After regressing total accruals that have been calculated in cash flow method lagged by total assets to revenue and property planet and equipment also lagged to total asset, the calculated coefficients $\boldsymbol{\alpha_0}$, $\boldsymbol{\alpha_1}$ and $\boldsymbol{\alpha_2}$ were used to calculate the discretionary accruals using the following equation:

$$NDA_t = \alpha_0 \left(\frac{1}{Ai,t-1}\right) + \alpha_1 \left(\frac{\Delta\, REVi,t - \Delta RECi,t}{Ai,t-1}\right) + \alpha_2 \left(\frac{PPEi,t}{Ai,t-1}\right) \ldots. \ (2)$$

**<u>Where</u>**

$\alpha0$, $\alpha1$ and $\alpha2$ = the fitted coefficients from equation (1)

$NDA_{t:}$ is non-discretionary accruals

The use of change in receivable is the modification made to the original jones model 1991, this modification is done by (Dechow, Sloan, & Sweeney, 1995), since they believe the receivables must not be included in the calculation of nondiscretionary accruals and they modify the model because the management may manage its credit sales. (Man & Wong, 2013)

Then the discretionary accrual component were calculated using the following equation, since the discretionary accruals is the difference between total accrual and non-discretionary accruals.

$$|\ DAc_{i,\,t}\ | = \frac{TAci,t}{Ai,t-1} - NDA_t$$

**<u>Where</u>**

$|\ DAc_{i,\,t}\ |$= absolute value of the managed component of total accruals for sample company i in year t.

To test the hypothesis about the existence of a relationship between corporate governance and earnings management the following regression model was used:

The absolute value of discretionary accrual were used as dependent variable as earnings management measurement.

$$\left| DA_t \right| = \alpha + \beta 1\ B\_Indep + \beta 2\ B\_Size + \beta 3\ Dual + \beta 4\ Big\_4 + \beta 5\ Own\_Con + Size + ROA + Leverage + \varepsilon_{i,t}$$

**Where:**

**Dependent variable**

**$DA_t$**: Absolute Discretionary Accruals (measure of earnings management)

**Independent variable**

**B_Indep**: No of independent non-executive directors/total no. of board members.

**B_Size**: Board Size (measured as total number of the board)

**Dual**: Dummy Variable known as CEO Duality (1 if duality exists, 0 otherwise)

**Big_4**: Dummy Variable known as Audited by Big 4 (1 if audited by Big 4 auditing firm, 0 otherwise)

**Own_Con**: the cumulative percentage of shares held by block shareholders who own at least 5% of the firm's shares.

**Control Variables**

**Size:** Natural Logarithm of Total Assets

**ROA:** Net Income before Extraordinary Items scaled by lagged total assets

**Leverage:** Ratio of total debt to total assets.

The use of control variables according to (Gulzar & Wang, 2011) is due to the helpful rule of these variables in reducing the level of earnings management; these variables affect the decision of the firm to enroll in earnings management.

# Chapter Four

## Results and findings

The first step in the jones model is to determine the coefficients to calculate the discretionary accruals for both years, to use this number as the dependent variable of the study, the following table represent the coefficients used in jones model.

| **Coefficients** | | | |
|---|---|---|---|
| | Year | 2015 | 2016 |
| α0 | 1 / Total assets t-1 | 80,9313.39 | 1,567,965.51 |
| α1 | (change in REVi,t- change in AR,t ) / Assets t-1 | 0.408 | 0.318028 |
| α2 | Gross Property Plant and Equipment Year t / Total Assets, t-1 | -0.053924 | -0.119648 |

By running a liner regression for the following equation, $\frac{TAci,t}{Ai,t-1} = \alpha_0\ (\frac{1}{Ai,t-1}) + \alpha_1\ (\frac{\Delta\ REVi,t}{Ai,t-1}) + \alpha_2\ (\frac{PPEi,t}{Ai,t-1}) + \varepsilon_{i,t}$ the researcher calculate the needed coefficients to be used in equation number 2. The first part of the equation represent the non-discretionary accruals and the second part which is $\varepsilon_{i,t}$ is the discretionary accruals figure that used as the dependent variable of the study, this figure is calculated as follow:

$$|\ DAc_{i,\ t}\ | = \frac{TAci,t}{Ai,t-1} - (\alpha_0\ (\frac{1}{Ai,t-1}) + \alpha_1\ (\frac{\Delta\ REVi,t - \Delta RECi,t}{Ai,t-1}) + \alpha_2\ (\frac{PPEi,t}{Ai,t-1}))$$

### 4.1 Descriptive statistics

In table one result shows that the mean value of the discretionary accruals is 0.1326 and 0.1969 for the year 2015 and 2016 respectively. With a minimum value of 0.0008 and 0.0012, and a maximum value of 0.5920 and 1.4699 for the years 2015 and 2016 respectively. Discretionary accruals are the abnormal level of accruals, this measure used as the indicator of earnings management. A higher level of discretionary accruals indicates a higher potential earnings management, but results can't make sure that an earnings management exist from the number itself, this is an indicative number. Further investigation is required to make a judgment for the use of earnings management.

About 55% of the sample companies were 100% independent for the years 2015 and 2016, the other 45% were not completely independent, with a minimum of 71% independent board with a mean value of 93% independent board. The board independence is required by the code of corporate governance in Palestine to be at least 2 independent members within the board. These figures indicate that the listed companies were abide to the code regulations, the board size has different levels with a minimum board size of 5 and a maximum of 15 members for the years 2015 and 2016, with a mean value of 9 and 8 members for the years 2015 and 2016 respectively. About 18% of the companies has CEO duality, for both years, the code of corporate governance in Palestine stated that it's preferable to not have any executives in the board or the board management for better accountability, although results show that 18% of companies still have a CEO duality, the board director is the CEO of the firm. Regarding the audit quality indicator, results show that about 70% and 67% of the companies audited by a big four auditing firm for the years 2015 and 2016 respectively. Ownership concentration value fluctuated from 0% to about 91% and with a mean value of 57% for the year 2015, and from 0% to nearly 93% with a mean value of 59% for the year 2016, a 0% means that the company owner ship is completely dispersed between shareholders. The profitability figure, ROA value were ranged from minimum value of about -32% to a maximum value of 22% with a mean value of 1.6% for the year 2015, and from a minimum value of about -79% to a maximum value of 21%, with a mean value of 0.9% for the year of 2016. The financial leverage of the company which indicate the percentage of total debt to total asset were ranged from a minimum value of 1.7% and 1.8% for the year 2015 and 2016 respectively and a maximum value of 57% and 55%, with a mean value of 28% and 29% for the years 2015 and 2016 respectively. Higher leverage levels mean a higher level of risk the company is taking, but it provide the company a profit multiplier effect, to generate profits from creditors funds, even though there is no long term lending's for the companies a high level of leverage of 57% and 55% within the sample can be found.

Table 1: Descriptive statistics

| | 2015 | | | 2016 | | |
|---|---|---|---|---|---|---|
| Variable | Minimum | Maximum | Mean | Minimum | Maximum | Mean |
| DAcit | 0.0008 | 0.5920 | 0.1326 | 0.0012 | 1.4699 | 0.1969 |
| B_Indep | 0.71 | 1.00 | 0.93 | 0.73 | 1.00 | 0.94 |
| B_Size | 5 | 15 | 8.73 | 5 | 15 | 8.48 |
| Dual | 0 | 1 | .18 | 0 | 1 | .18 |
| BIG_4 | 0 | 1 | .70 | 0 | 1 | .67 |
| Own_Con | 0.000 | 0.913 | 0.572 | 0.000 | 0.925 | 0.586 |
| Size | 13.71 | 20.53 | 16.9533 | 13.51 | 20.74 | 16.96 |
| ROA | -32.16% | 21.87% | 1.61% | -78.79% | 21.44% | 0.852% |
| Leverage | 1.66% | 56.71% | 27.76% | 1.76% | 54.68% | 28.71% |

| **CEO Duality, 2015, 2016** | | | **BIG 4 Auditing, 2015** | | **BIG 4 Auditing Firm, 2016** | |
|---|---|---|---|---|---|---|
| | Frequency | Percent | Frequency | Percent | Frequency | Percent |
| NO | 27 | 82% | 10 | 30.0 | 11 | 33% |
| Yes | 6 | 18% | 23 | 70.0 | 22 | 67% |
| Total | 33 | 100.0 | 33 | 100.0 | 33 | 100.0 |

| **B_INDEB** |
|---|

| | Frequency | Percent |
|---|---|---|
| Other | 15 | 45.5 |
| 100% Indep | 18 | 54.5 |
| Total | 33 | 100.0 |

### 4.2 Multivariate Analysis

Before start in analyzing the data using the linear regression model, a test for the multicollinearity must be done, the multicollinearity is defined as the existence of high correlation between the independent factors under study, (statisticssolutions/Testing of Assumptions, 2018) the following tables shows the correlation between the factors of the study using the person correlation matrix.

Table 2: Correlation matrix for the year 2015

| Correlations | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | B_Size | CEODuality | BIG4 | Own_Con | Size | ROA | Leverage | B_Indep | DAcit |
| B_Size | Pearson Correlation | 1 | | | | | | | | |
| | Sig. (2-tailed) | | | | | | | | | |
| CEODuality | Pearson Correlation | 0.021 | 1 | | | | | | | |
| | Sig. (2-tailed) | 0.909 | | | | | | | | |
| BIG4 | Pearson Correlation | 0.335 | -0.031 | 1 | | | | | | |
| | Sig. (2-tailed) | 0.057 | 0.864 | | | | | | | |
| Own_Con | Pearson Correlation | 0.012 | -0.231 | .480** | 1 | | | | | |
| | Sig. (2-tailed) | 0.946 | 0.196 | 0.005 | | | | | | |
| Size | Pearson Correlation | .486** | 0.21 | .418* | 0.122 | 1 | | | | |
| | Sig. (2-tailed) | 0.004 | 0.241 | 0.015 | 0.498 | | | | | |
| ROA | Pearson Correlation | 0.037 | -0.026 | -0.085 | -0.036 | 0.332 | 1 | | | |
| | Sig. (2-tailed) | 0.837 | 0.888 | 0.637 | 0.843 | 0.059 | | | | |
| Leverage | Pearson Correlation | 0.026 | 0.164 | 0.122 | 0.067 | 0.027 | -.401* | 1 | | |
| | Sig. (2-tailed) | 0.884 | 0.363 | 0.499 | 0.712 | 0.881 | 0.021 | | | |
| B_Indep | Pearson Correlation | -0.037 | -.747** | 0.006 | 0.191 | -0.278 | -0.13 | 0.237 | 1 | |
| | Sig. (2-tailed) | 0.839 | 0.000 | 0.974 | 0.288 | 0.117 | 0.489 | 0.185 | | |
| DAcit | Pearson Correlation | -.371* | -0.33 | -0.237 | -0.147 | -.733** | -.384* | 0.153 | .420* | 1 |
| | Sig. (2-tailed) | 0.033 | 0.061 | 0.184 | 0.414 | 0.000 | 0.027 | 0.396 | 0.015 | |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | | | | | | | |
| *. Correlation is significant at the 0.05 level (2-tailed). | | | | | | | | | | |

Table 3: Correlation matrix for the year 2016

| Correlations | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | B_Indep | B_Size | Dual | Big4 | Own_Con | Size | ROA | Leverage | DAcit |
| B_Indep | Pearson Correlation | 1 | | | | | | | | |
| | Sig. (2-tailed) | | | | | | | | | |
| B_Size | Pearson Correlation | -0.16 | 1 | | | | | | | |
| | Sig. (2-tailed) | 0.375 | | | | | | | | |
| Dual | Pearson Correlation | -.683** | 0.103 | 1 | | | | | | |
| | Sig. (2-tailed) | 0.000 | 0.569 | | | | | | | |
| Big4 | Pearson Correlation | 0.074 | 0.254 | 0.000 | 1 | | | | | |
| | Sig. (2-tailed) | 0.682 | 0.154 | 1 | | | | | | |
| Own_Con | Pearson Correlation | 0.161 | -0.045 | -0.264 | .441* | 1 | | | | |
| | Sig. (2-tailed) | 0.371 | 0.804 | 0.138 | 0.01 | | | | | |
| Size | Pearson Correlation | -0.271 | .532** | 0.218 | .426* | 0.081 | 1 | | | |
| | Sig. (2-tailed) | 0.127 | 0.001 | 0.223 | 0.013 | 0.655 | | | | |
| ROA | Pearson Correlation | -0.093 | 0.034 | 0.017 | -0.143 | -0.142 | 0.276 | 1 | | |
| | Sig. (2-tailed) | 0.609 | 0.852 | 0.925 | 0.429 | 0.43 | 0.12 | | | |
| Leverage | Pearson Correlation | 0.212 | 0.009 | 0.141 | 0.2 | -0.042 | 0.051 | -0.296 | 1 | |
| | Sig. (2-tailed) | 0.237 | 0.959 | 0.433 | 0.265 | 0.815 | 0.78 | 0.095 | | |
| DAcit | Pearson Correlation | 0.301 | -.378* | -0.205 | -0.18 | -0.162 | -.699** | -.585** | 0.216 | 1 |
| | Sig. (2-tailed) | 0.088 | 0.03 | 0.253 | 0.315 | 0.367 | 0.000 | 0.000 | 0.228 | |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | | | | | | | |
| *. Correlation is significant at the 0.05 level (2-tailed). | | | | | | | | | | |

From the above tables a significant correlation can be found between some independent variables but the highest correlation was between CEO duality and board independence, with a correlation value of - 0.747 and -0.683 for the years 2015 and 2016 respectively. Now to make sure that collinearity exists the variance inflation factor in the regression model for both years were tested. According to Akinwande, Agboola, & Dikko, (2015) if the value of VIF greater than 5 this represent a collinearity between variables. In table, 6 results show that the highest value for VIF is 3.445 and 2.466 for the board independence variable, since no value is greater than 5 there are no collinearity between the study variables.

To use the regression model and test the correlation normality test for data must be done, since parametric (correlation, regression and t tests) need to be tested for data normality (Ghasemi & Zahediasl, 2012).

The following table, the normality test using One-Sample Kolmogorov-Smirnov test for both years 2015 and 2016, the hypothesis for the normality test is as follow:

Ho: The sampled population is normally distributed.

H1: The sampled population is not normally distributed

Table 4: Normality test

| **One-Sample Kolmogorov-Smirnov Test, Normality Test** | | | |
|---|---|---|---|
| | | DAcit , 2015 | DAcit , 2016 |
| N | | 33 | 33 |
| Normal Parameters [a,b] | Mean | 13.2564% | 19.684848% |
| | Std. Deviation | 14.23498% | 34.7949776% |
| Most Extreme Differences | Absolute | .177 | .311 |
| | Positive | .170 | .311 |
| | Negative | -.177 | -.287 |
| Test Statistic | | .177 | .311 |
| Asymp. Sig. (2-tailed) | | .010[c] | .000[c] |
| a. Test distribution is Normal. | | | |
| b. Calculated from data. | | | |
| c. Lilliefors Significance Correction. | | | |

From the table above findings show that the P-value for the K-S test is lower than the 5% alpha level, so reject the null hypothesis for both years, and conclude that the data are not normally distributed. The assumption of normality are not met, but according to Ghasemi & Zahediasl, (2012) normality violation for large sample size, larger than 30 will not cause any problem and can still use the parametric test. He also added that data that have a sample size greater than 30 tend to be normally distributed regardless of the data distribution shape, so researcher continue using the parametric test in this research since our sample size is 33 listed companies.

According to (Samuels & Marshall) there are a graphical method to represent the normality of data, there are two common figures that gives an indicator for the shape of data, the following figures represent the distribution of data for the dependent variable.

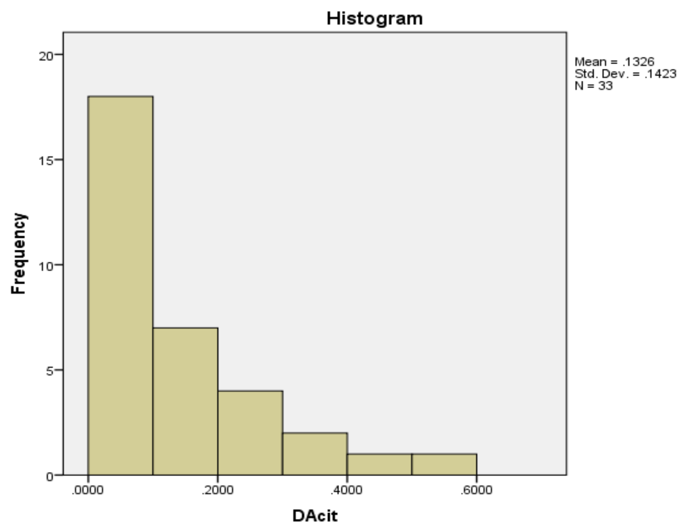


Figure 4: Histogram for data normality test, 2015

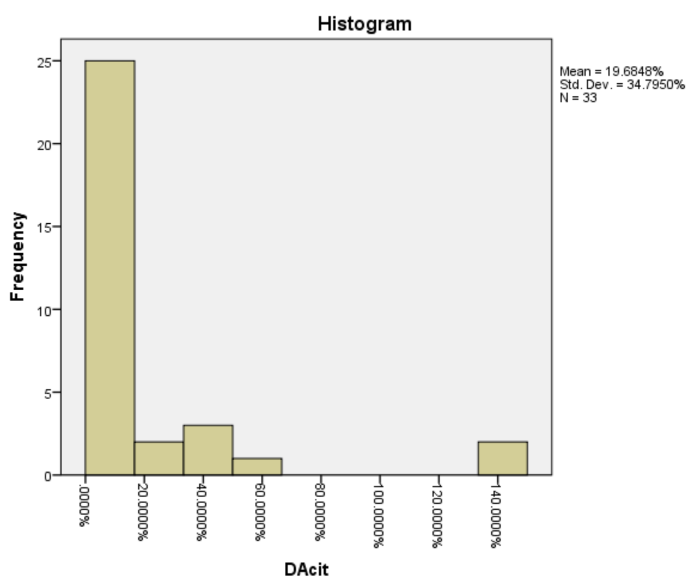


Figure 5: Histogram for data normality test, 2016

The histogram figure emphasize the test of normality findings, as shown the data for both years 2015 and 2016 figures respectively represent a skewed data, not a normally distributed data.

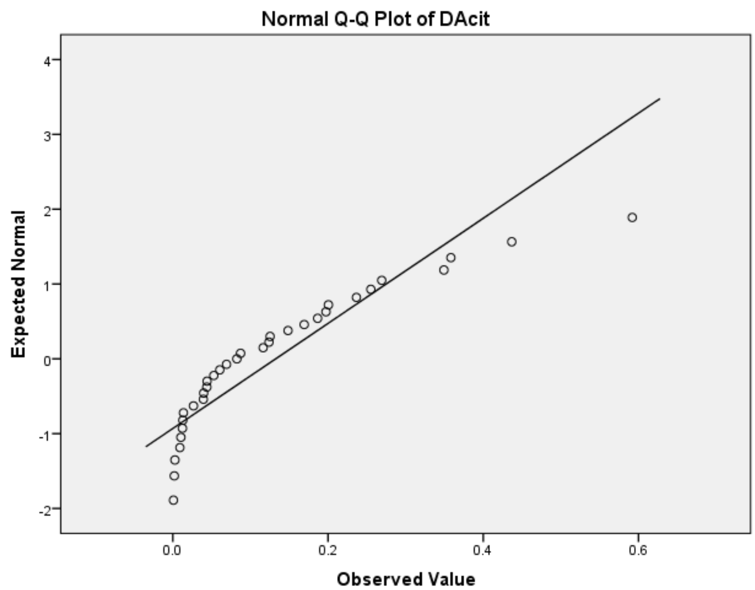


Figure 6: Normal Q-Q Plot for data normality test, 2015

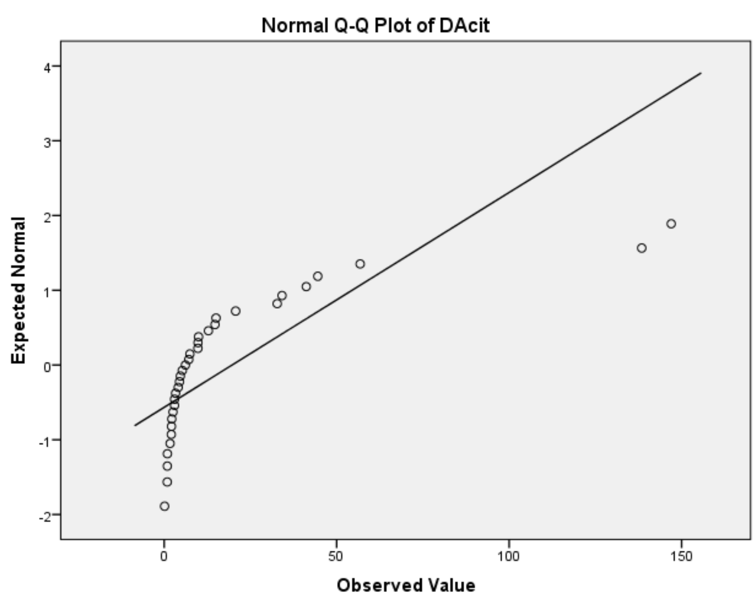


Figure 7: Normal Q-Q Plot for data normality test, 2016

Another figure to represent the graphical representation of data normality test is the normal Q-Q plot, the data should be distributed around the straight line, as data closes to the line the more the data becoming normally distributed, in our sample we can see the pattern of the scatters for both years figures, which indicate a not normally distributed data.

### 4.3 Regression Findings

Tables 4 through six represent the results of multivariate regression model, in order to measure the explanatory power of corporate governance variables (independent variables) against the discretionary accruals (dependent variable).

The R value (coefficient of correlation) is 0.809 and 0.856 for the years 2015 and 2016 respectively, indicate that there is a strong direct leaner relationship between the discretionary accruals (dependent variable) and the corporate governance parameters, (independent variables), B_Indep, B_Size, Dual, Big4, Own_Con, Size, ROA and Leverage.

The R-squared (coefficient of determination) in table 4 is 0.654 and 0.733 for the years 2015 and 2016 respectively, meaning that approximately 65% and 73% of the variability of earnings management is accounted for by the variables in the model, for the years 2015 and 2016 respectively, which means that the independent variables reliably predict the dependent variable (Discretionary accruals).

In table 4 we can found that, the Durban-Watson test value were 1.684 and 1.859 for the years 2015 and 2016 respectively. The Durban-Watson test is used for measuring the auto correlation in the regression residuals; the auto correlation can lead to under estimating the standard error and can cause a thing that a predictor is significant, while it's not significant. These value shows that there is no serial correlation since the values are less than 3 and more than 1, Field(2009) suggests that values under 1 or more than 3 are a definite cause for concern.

Table 5: Regression Model

| 2015 | | | | 2016 | | |
|---|---|---|---|---|---|---|
| Model | R | R Square | Durbin-Watson | R | R Square | Durbin-Watson |
| 1 | .809[a] | .654 | 1.684 | 0.856[a] | .733 | 1.859 |
| a. Predictors: (Constant), Leverage, B_Size, Own_Con, Dual, ROA, BIG4, Size, B_Indep | | | | | | |

Table Five shows the result for the fit of this model for the Palestinian case, F-test value were 5.665 and 8.233 with a P-value of less than 0.001 for the years 2015 and 2016 respectively. Since the P-value is less than alpha level (0.05), then we can conclude that the model is fit the data for the Palestinian listed companies, P-value of the F-test also indicate if the overall model is significant. With a p-value of zero to three decimal places, the overall model is statistically significant at alpha level of 1%, we could say that the group of variables B_Indep, B_Size, Dual, BIG4, Own_Con, Size, ROA and Leverage can be used to reliably predict Dac (the dependent variable).

Table 6: Model Fit

| 2015 | | | | 2016 | | |
|---|---|---|---|---|---|---|
| Model | df | F | Sig. | df | F | Sig. |
| Regression | 8 | 5.665 | .000[b] | 8 | 8.233 | .000[b] |
| Residual | 24 | | | 24 | | |
| Total | 32 | | | 32 | | |
| a. Dependent Variable: DAcit | | | | | | |
| b. Predictors: (Constant), B_Indep, B_Size, Dual, BIG4, Own_Con, Size, ROA, Leverage | | | | | | |

Table 6 represents the significance level between the dependent variable Dac and the independent variables. The test statistic value for board independence variable is .371 and 0.122 with a P-value of 0.714 and 0.904 for the years 2015 and 2016 respectively, so we can conclude that there is no statistical significance between the Dac and the board independence for both years since P-value is higher than alpha level. This result is consistent with Gulzar & Wang (2011), Chtourou et al. 2001, Choi et al. (2004), Hashim & Devi (2008) and Rahman and Ali (2006) and is in contrast with the results found by Klein (2002), Xie et al. (2003), Mansor et al (2013) and Peasnell et al. (2001) where independent directors were positively related to DAC. The coefficient value of the B_Indep is 0.001 and 0.089 for the years 2015 and 2016, the coefficient describes the relationship between the dependent and independent variable, and how much the independent variable will affect this dependent variable. One-unit increase in the B_Indep will cause the Dac to increase by 0.001 and 0.089 for the years 2015 and 2016. The best explanation for this finding is that since the roles of overseeing financial reporting process have been delegated to the audit committee, since 1993 (Abdullah & Nasir, 2004). A higher number of independent directors will not help constrain earnings management as their discussions are more related to the long-term aspects of the company rather than financial reporting issues (Hashim & Devi, 2008). The positive direction of the coefficient in findings raises doubt as to whether independent directors in Palestinian firms are truly independent (Abdelkarim & Amer, 2011).

According to Omoye, (2014) the positive direction of the relation between earnings management and board independents is due to that independent directors tend to increase firm profitability to get a steady compensation.

Board size, the test statistic value for board size variable is -0.741 and -0.886 with a P-value of 0.466 and 0.384 for the years 2015 and 2016 respectively, from these figures we can conclude that there is no statistical significance between the Dac and the board size for both years since P-value is higher than alpha level. The coefficient value of the B_Size is -0.006 and -1.645 for the years 2015 and 2016, that means a one unit increase in the B_Size will cause the Dac to be 0.006 and 1.645 lower for the years 2015 and 2016. This finding is consistent with Omoye (2014) and Abbott, Park, & Parker (2000), while it's in contrast with Gulzar & Wang (2011), Mansor, Che-Ahmad, Zaluki, & Osman (2013), Xie, Davidson, & DaDalt (2003) and Abdelkarim & Amer (2011). The coefficient of B_Size negative direction is in consistent with Xie et al. (2003), Abdelkarim & Amer (2011), this finding can be illustrated that a larger board is more likely to be controlled by CEO's and less likely to be effectively functioned Jensen M. C. (1993).

CEO duality, the test statistic value for CEO duality variable is -0.966 and -0.902 with a P-value of 0.343 and 0.376 for the years 2015 and 2016 respectively, since P-value is higher than alpha level 5%, we can conclude that there is no statistical significance between discretionary accruals and the CEO duality. The finding present that the separation between the chair of the board of director and CEO position does not affect earnings management in the Palestinian listed companies. this result is consistent with Abdullah & Nasir (2004), Abdul Rahman & Mohamed

Ali (2006), Abdelkarim & Amer (2011) and Hashim & Devi (2008), and in contrast with Klein (2002) and Gulzar & Wang (2011) who founds a significant positive relation between these variables. The explanation of the significant relation is that the separation could allow transparent business, and increase the level of accountability within the company. The relation between Dac and Dual, is negatively associated with a negative coefficient with the value of -0.076 and -12.998 for the years 2015 and 2016 respectively, the negative coefficient indicates that as duality decreases this will increase EM practices.

Audit quality, this variable is a dummy variable with the Big 4 auditing firm as the indicator for the audit quality. If the firm is audited by a big four company or others, the test statistics value for this variable were 0.723 and 0.727 with a P-value of 0.476 and 0.474 for the years 2015 and 2016 respectively, for this variable fail to reject the null hypotheses, so can say there is no significance correlation between Big_4 and Dac. The positive coefficient indicates the positive direction of the variable change impact, with a coefficient value of 0.035 and 7.354 for the years 2015 and 2016 respectively. This finding is consistent with Yaşar (2013), Chtourou, Bedard, & Courteau (2001) and with Abdelkarim & Amer (2011) for the test on 2010 and in contrast with Abdelkarim & Amer (2011) for the year of 2009 findings. And in contrast with Mansor, Che-Ahmad, Zaluki, & Osman (2013) who stated that the presence of qualified auditor can prevent the auditee from practicing earnings management, this direct impact is consistent with coefficient positive direction in this study.

Ownership concentration, the distribution of ownership between the shareholders are another factor that was tested. In 2015 the test statistic value was -1.422 with P-value 0.168 which is larger than 5% alpha level so we fail to reject the null hypothesis, and we can say that there is no statistical correlation between ownership concentration and the earnings management for the year 2015. This finding is consistent with Bowen, Rajgopal, & Venkatachalam (2008), Abdul Rahman & Mohamed Ali (2006), on the other hand the test statistic value for 2016 were -2.126 with a P-value 0.044 which is less than 5% alpha level. so we reject the null hypothesis and we find a statistical significance between the ownership concentration and the earnings management for the year 2016. The coefficient for 2016 were negatively associated with the Dac variable (the dependent variable), with a value of -0.377, the negative association present that the more concentrated the ownership the more effective the management in restring the earnings management as presented by Abdelkarim & Amer (2011). This finding also consistent with Shleifer & Vishny (1997), who find a concentrated ownership can increase the monitoring effectiveness, the agency theory also stat that a less concentrated company may have an incentive to manipulate and manage company earnings by the managers to achieve their personal benefits. In another research Gulzar & Wang (2011) has found a significance but positive correlation between discretionary accruals and ownership concentration.

The control variables show different findings, according to Becker, Defond, Jiambalvo, & Subramanyam (1998) the size of the firm may affect the characteristics of board and the audit committee, in addition to the level of earnings management, the size variable has t-value of -3.506 and -3.326 with a P-value of 0.002 and 0.003 for the years 2015 and 2016 respectively, we must reject the null hypotheses and conclude that there is a significance correlation between the earnings management indicator Dac and the control variable size for both years, this result is consistent with Yaşar (2013), this finding with a negative coefficient value of -0.052 and -10.605 for the 2015 and 2016 indicate that a one point decrease in the size would increase the Dac with 0.052 and 10.605 for the years 2015 and 2016 respectively, this negative relation is consistent with Mansor, Che-Ahmad, Zaluki, & Osman (2013), Abdelkarim & Amer (2011), this finding is explained as firm size increases earnings management decreases, this decrease explained by Mansor et al (2013) that smaller companies actions may not be examined, on the other hand larger companies has more constrains and controls that restrain them from practicing earnings management. Abdelkarim & Amer (2011). Others find that size are positively related to earnings management, due to the political cost, as company size increases the government examination on the larger firms, so they tend to lower their earrings to not have any political costs, Abdullah & Nasir (2004). Also this finding is in contrast with Gulzar & Wang (2011) who founds no significant relation between Dac and firm size.

From table 4, the value of the test statistic for the ROA figure is -0.792 and -3.494 with a P-value of 0.436 and 0.002 for the years 2015 and 2016 respectively, since the P-value for 2015 is greater than the alpha level 5%, we can conclude that there is no significant correlation between ROA and Dac for the year 2015. This finding is in contrast with (Abdelkarim & Amer, 2011) who finds a positive significance correlation within Palestine stock exchange listed companies, and in contrast with Becker, Defond, Jiambalvo, & Subramanyam (1998) and Saleh, Iskandar, & Rahmat (2005) the positive correlation between ROA and Dac according to Abdelkarim & Amer (2011) that higher performance companies are more vulnerable to engage in earnings management.

In 2016 the P-value of the ROA variable is 0.002 which is less than 5%, so we reject the null hypothesis and conclude that there is a significant negative correlation between Dac and ROA for the 2016. This finding is consistent with Abdelkarim & Amer (2011), Mansor, Che-Ahmad, Zaluki, & Osman (2013) and Gulzar & Wang (2011) who found a correlation between ROA and Dac, but unlike Abdelkarim et al (2011) and Mansor et al., 2013, we found a negative correlation. This finding is consistent with Gulzar et al., 2011 who found a negative correlation between ROA and Dac within Chinese listed companies. The explanation for this finding is that the lower the company profits the higher the company to engage in earnings management, either to reflect a positive image of the company position or to shrink the negative image on the company performance (Saleh, Iskandar, & Rahmat, 2005).

Another correlation between the control variable leverage and the dependent variable the Dac shows that there is no significant correlation between the leverage and Dac this result shown in table six. The coefficient of this variable were 0.001 and 0.199 with a P-value of 0.396 and 0.437 (higher than 5%), for the year 2015 and 2016 respectively, this finding is consistent with Gulzar & Wang (2011), and in contrast with Saleh, Iskandar, & Rahmat (2005) and Abdelkarim et al., 2011, who found a positive significant correlation between discretionary accruals and leverage level. The coefficient for the leverage variable were positive this is supported by the theory that as the leverage increases (higher debt) the company is more vulnerable for debt covenant violation, which mean a higher incentive for engaging in earnings management. (Saleh, Iskandar, & Rahmat, 2005), Becker et al., 1998 stated that companies with high level of debt have the incentive for income increasing earnings management.

Table 7: Regression model

| Model | 2015 | | | | | 2016 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | B | T | Sig. | Tolerance | VIF | B | t | Sig. | Tolerance | VIF |
| (Constant) | .974 | 2.238 | .035 | | | 219.915 | 2.432 | .023 | | |
| B_Indep | .001 | .371 | .714 | .290 | 3.445 | .089 | .122 | .904 | .406 | 2.466 |
| B_Size | -.006 | -.741 | .466 | .699 | 1.430 | -1.645 | -.886 | .384 | .679 | 1.473 |
| Dual | -.076 | -.966 | .343 | .309 | 3.239 | -12.998 | -.902 | .376 | .423 | 2.363 |
| BIG4 | .035 | .723 | .476 | .575 | 1.738 | 7.354 | .727 | .474 | .575 | 1.740 |
| Own_Con | -.001 | -1.422 | .168 | .696 | 1.436 | -.377 | -2.126 | .044 | .693 | 1.443 |
| Size | -.052 | -3.506 | .002 | .489 | 2.045 | -10.605 | -3.326 | .003 | .476 | 2.102 |
| ROA | -.002 | -.792 | .436 | .659 | 1.517 | -.966 | -3.494 | .002 | .734 | 1.362 |
| Leverage | .001 | .865 | .396 | .556 | 1.798 | .199 | .791 | .437 | .696 | 1.437 |
| a. Dependent Variable: DAcit | | | | | | | | | | |

### 4.4 Bivariate analysis

Another test that can describe the relation between the earnings management factor with corporate governance and the control variable is the use of bivariate analysis, using the Pearson correlation. Table 7 were generated using SPSS, the table below shows that we have a significant positive direct relation between board independence and earnings management, with P-value 0.008 and 0.044, with coefficient of correlation value 0.420 and 0.310 for the years 2015 and 2016 respectively. The coefficient of correlation (R) represent the power of the relation, the value of R indicates a low positive correlation.

Board size has a significant negative relation with discretionary accruals with a P-value of 0.017 and .015 and with a R value of -0.371 and -0.378 for the years 2015 and 2016 respectively, also the correlation value her is low as the board independence variable.

The CEO duality variable has a significant negative correlation for the year 2015 and insignificant correlation in 2016, with a P-value of 0.030 and 0.126 and R value of -0.330 and -0.205 for the years 2015 and 2016 respectively.

The quality of audit (Big4) and ownership concentration (Own_Con) has no significant correlation for both years, since the P-value of the test statistic is higher than the alpha level (5%) with P-value of 0.092 and 0.158 for Big4 variable and 0.207 and 0.184 for Own_Con variable for the years 2015 and 2016 respectively.

Firm size was found to have significant strong negative relationship with discretionary accruals, with a P-value of less than 0.005 for both years, and R value of -73% and -70% for the years 2015 and 2016 respectively.

The control variable return on asset has a P-value of 0.014 and 0.000 for the year 2015 and 2016; with a P-value less than alpha, (5%) we can reject the null hypothesis and can conclude that there is a significant relation between ROA and Dac for both years. The coefficient of correlation has the value of -38% and -58%, which indicates a negative weak and medium relationship for the years 2015 and 2016 respectively.

The third control variable leverage, were found to have insignificant correlation with earnings management, since the P-value, 0.198 and 0.114 for the years 2015 and 2016 is higher than 5%, so we fail to reject the null hypothesis.

*Table 8: Bivariate analysis, Pearson correlation*

| **Correlations** | | 2015 | | 2016 | |
|---|---|---|---|---|---|
| | | DAcit | Sig. (1-tailed) | DAcit | Sig. (1-tailed) |
| Pearson Correlation | DAcit | 1.000 | . | 1.000 | . |
| | B_Indep | .420 | .008 | .301 | .044 |
| | B_Size | -.371 | .017 | -.378 | .015 |
| | Dual | -.330 | .030 | -.205 | .126 |
| | Big4 | -.237 | .092 | -.180 | .158 |
| | Own_Con | -.147 | .207 | -.162 | .184 |
| | Size | -.733 | .000 | -.699 | .000 |
| | ROA | -.384 | .014 | -.585 | .000 |
| | Leverage | .153 | .198 | .216 | .114 |

# Chapter Five

# Conclusion

In this thesis, the researcher examines the relationship between CG and EM controlled by some company indicators (Size, ROA and Leverage). Earnings management measured by the discretionary accruals and the corporate governance indicators in addition to control variables that have an effect on governance and on earnings management.

The tested variables for corporate governance were, board independence, board size, CEO duality, audit quality and ownership concentration. The control variables were the firm size, return on asset and the financial leverage. The relation between these variables were tested using the linear regression model by using the discretionary accruals as the dependent variable and all the aforementioned variables as the independent variable.

The discretionary accruals were calculated by using the modified jones model, and the given number were regressed again to test the relation between earnings management and corporate governance. The used model is fitted with the variables used since the P-value of anova test in the regression model is less than alpha level 5%.

As result, this thesis addresses the following results:

**1** The researcher found a significant inverse correlation between earnings management and ownership concentration for the year 2016 but not for the year 2015 that show the ownership concentration for the year 2015 have insignificant correlation with earnings management.

**2** This study found significant inverse relationship between earnings management and the control variable size for both years 2015 and 2016.

**3** The return on asset control variable were found to have insignificant correlation for the year 2015 and a significant inverse correlation in the year 2016.

**4** The board independence, board size, CEO duality, audit quality and the control variable leverage were found to have insignificant correlation between them and the earnings management.

**References**

Abbott, L. J., Park, Y., & Parker, S. (2000). The effects of audit committee activity and independence on corporate fraud. *Managerial Finance*, 55-68.

Abdelkarim, N., & Amer, L. H. (2011). Retrieved from wbiconpro.com: https://www.wbiconpro.com/322-Leila%20Hussein%20.pdf

Abdul Rahman, R., & Mohamed Ali, F. H. (2006). Board, audit committee, culture and earnings management: Malaysian evidence. *Managerial Auditing Journal*, 783-804.

Abdullah, S. N., & Nasir, N. M. (2004). ACCRUAL MANAGEMENT AND THE INDEPENDENCE OF THE BOARDS OF DIRECTORS AND AUDIT COMMITTEES. *Journal of Economics and Management*, 49-80.

Akinwande, O., Agboola, S., & Dikko, H. (2015). Variance Inflation Factor: As a Condition for the Inclusion of Suppressor Variable(s) in Regression Analysis. *Open Journal of Statistics*, 754-767.

Alareeni, B., & Aljuaidi, O. (2014). The Modified Jones and Yoon Models in Detecting Earnings Management in Palestine. *International Journal of Innovation and Applied Studies*, 1472-1484.

Beasley, M. S. (1996). Relationship Between the Board of Director Composition and Financial Statement Fraud. *The Accounting Review*, 443-465.

Becker, C., Defond, M., Jiambalvo, J., & Subramanyam, K. R. (1998). The Effect of Audit Quality on Earnings Management. *Contemporary Accounting Research*, 1–24.

Board independence of listed companies. (2007). *TECHNICAL COMMITTEE OF THE INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS.* Retrieved 13 1, 2017, from https://www.iosco.org/library/pubdocs/pdf/IOSCOPD238.pdf

Bowen, R. M., Rajgopal, S., & Venkatachalam, M. (2008). Accounting Discretion, Corporate Governance, and Firm Performance. *Contemporary Accounting Research*, 351–405.

Chtourou, S. M., Bedard, J., & Courteau, L. (2001). Corporate Governance and Earnings Management.

Committee, Corporate Governance National. (2009). *Code of Corporate Governance in Palestine.* Palestine: Capital Market Authority.

Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting Earnings Management. *The Accounting Review*, 193-225.

*definition/corporate-governance*. (n.d.). Retrieved 1 11, 2017, from businessdictionary.com: http://www.businessdictionary.com/definition/corporate-governance.html

Ducharme, L., Malatesta, P., & Sefick, S. (2001). Earnings Management: IPO Valuation. *Journal of Accounting, Auditing & Finance*, 369-396. doi:https://doi.org/10.1177/0148558X0101600409

Ghasemi, A., & Zahediasl, S. (2012). Normality Tests for Statistical Analysis: A Guide for Non-Statisticians. *International Journal of Endocrinology and Metabolism*, 486–489. doi:10.5812/ijem.3505

Gulzar, A., & Wang, Z. (2011). Corporate Governance Characteristics and Earnings Management: Empirical Evidence from Chinese Listed Firms. *International Journal of Accounting and Financial Reporting*, 133-151.

Hashim, H. A., & Devi, S. (2008). Board Independence, CEO Duality and Accrual Management: Malaysian Evidence. *Asian Journal of Business and Accounting*, 27-46.

Healy, P., & Wahlen, J. (1999). A revirw of the earnings management literature and its implecations for standard setting . *Accounting Horizons*, 365-383.

HU, L. (2010). DOES CORPORATE GOVERNANCE MATTER, EVIDENCE FROM EARNINGS MANAGEMENT PRACTICES IN SINGPAPORE. SINGPAPORE. Retrieved 1 13, 2017, from http://ink.library.smu.edu.sg/etd_coll/56/

Jensen, M. C. (1993). The modern Industrial Revolution, Exit, and the Failure of the Interna Control Systems. *Journal of Finance*, 831-880.

Jensen, M. C., & Meckling, W. H. (1976). THEORY OF THE FIRM: MANAGERIAL BEHAVIOR, AGENCY COSTS AND OWNERSHIP STRUCTURE. *Journal of Financial Economics*, 305-360.

Kassar, A. (2004). Improving Transparency and Disclosure. *The Second MENA Regional Corporate Governance Forum.* Lebanon: Technopress.

Kendall, N., & Kendall, A. (n.d.). *best-corporate-governance-practice*. Retrieved 12 23, 2017, from applied-corporate-governance: http://www.applied-corporate-governance.com/best-corporate-governance-practice.html

Kinross, K. M. (2012). *Corporate Governance: The Role of Board in Strategic Planning.* Columbus: Bricker & Eckler Practice Group.

Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics*, 375-400.

Man, C.-k., & Wong, B. (2013). Corporate Governance And Earnings Management: A Survey Of Literature. *The Journal of Applied Business Research*, 391-418.

Mansor, Che-Ahmad, Zaluki, A., & Osman. (2013). Corporate Governance and Earnings Management: A Study on the Malaysian Family and Non-Family Owned PLCs. *ScienceDirect*, 221-229.

Moldoveanu, M., & Martin, R. (2001). *Agency Theory and the Design of Efficient Governance Mechanisms.* Toronto: Joint Committee on Corporate Governance.

OECD. (2015). *G20/OECD Principles of Corporate Governance.* Paris: OECD Publishing. doi:10.1787/9789264236882-en

Omoye, A. (2014). Corporate Goverance Determinants of Earnings Management:Evidence from Nigerian Quoted Companies. *Mediterranean Journal of Social Sciences*, 553-564.

*Palestine Exchange News Archive*. (n.d.). Retrieved 12 29, 2017, from Palestine Exchange: http://www.pex.ps/psewebsite/English/NewsArchieve.aspx

Rahmat, M. M., Iskandar, T. M., & Saleh, N. M. (2009). Audit committee characteristics in financially distressed and non-distressed companies. *Managerial Auditing Journal*, 624-638.

Rennekamp , K. m., Rupar , K., & Seybert , N. (2016, may 5). Retrieved from papers: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2757150

Saleh, N. M., Iskandar, T. M., & Rahmat, M. M. (2005). Earnings Management and Board Characteristics: Evidence from Malaysia. *Jurnal Pengurusan*, 77-103.

Saltaji, I. M. (2013). Corporate governance and agency theory how to control agency costs. *Internal Auditing & Risk Management*, 47-60.

Samuels, P., & Marshall, E. (2018, 02 20). *sheffield.* Retrieved from University of Sheffield: https://www.sheffield.ac.uk/polopoly_fs/1.579181!/file/stcp-marshallsamuels-NormalityS.pdf

Shleifer, A., & Vishny, R. (1997). A Survy of Corporate Governance. *The Journal of Finance*, 737-7783.

*statisticssolutions/Testing of Assumptions*. (2018). Retrieved from statisticssolutions: http://www.statisticssolutions.com/testing-of-assumptions/

Uadiale, O. M. (2012). Earnings Management and Corporate Governance in Nigeria. *Research Journal of Finance and Accounting*, 1-10.

*what is corporate governance*. (n.d.). Retrieved 1 31, 2017, from The Governance Institute: https://www.icsa.org.uk/about-us/policy/what-is-corporate-governance

Wondra, J. (2017, September 26). Retrieved from bizfluent: https://bizfluent.com/about-6618246-role-governance-strategic-decision-making.html

Xie, B., Davidson, & DaDalt. (2003). Earnings management and corporate governance: The role of the board and the audit committee. *Journal of Corporate Finance*, 295-316.

Yaşar, A. (2013). Big Four Auditors' Audit Quality and Earnings Management: Evidence from Turkish Stock Market. *International Journal of Business and Social Science*, 153-163.

**Appendex1: List of Sample Companies.**

| Company Name | Company Code |
|---|---|
| Palestine Development & Investment | PADICO |
| Palestine Real Estate Investment | PRICO |
| Jerusalem Cigarette | JCC |
| Union Construction And Investment | UCI |
| The Arab Hotels | AHC |
| Palaqar For Real Estate Development & Management | PALAQAR |
| Palestinian Company For Distribution & Logistics Services | WASSEL |
| The Ramallah Summer Resorts | RSR |
| The National Carton Industry | NCI |
| Jerusalem Real Estate Investment | JREI |
| PALESTINE INDUSTRIA Investment | PIIC |
| Palestine Poultry | AZIZA |
| Palestine Plastic Industries | LADAEN |
| Jerusalem Pharmaceuticals | JPH |
| Arab Investors | ARAB |
| Wataniya Palestine Mobile Telecommunications | WATANIYA |
| Al-Aqariya Trading Investment | AQARIYA |
| Beit Jala Pharmaceutical | BJP |
| Golden Wheat Mills | GMC |
| Birzeit Pharmaceuticals | BPC |
| Palestine Investment & Development | PID |
| Palestine Electric | PEC |
| Nablus Surgical Center | NSC |
| Arab Palestinian Investment | APIC |
| Al-Wataniah Towers | ABRAJ |
| National Aluminum And Profile | NAPCO |
| Palestine Telecommunications | PALTEL |
| Arab Palestinian Shopping Centers | BRAVO |
| Arab Company For Paints Products | APC |
| Al Shark Electrode | ELECTRODE |
| Dar Al-Shifa Pharmaceuticals | PHARMACARE |
| The Vegetable Oil Industries | VOIC |

## الملخص

تعتبر مشكلة تضارب المصالح بين مالكي الشركات و بين الإدارة التنفيذية من أهم المشاكل التي ساهمت في تطوير نظام حوكمة الشركات و ذلك من أجل التغلب على هذه المشكلة و التي تعرف بنظرية الوكالة, و يتم تعريف حوكمة الشركات على انها مجموعة القوانين, الإجراءات و القواعد التي تنظم علاقة مجلس الإدارة بالإدارة التنفيذية و التي يضمن من خلالها مجلس الإدارة بأن إدارة الشركة تعمل على تحقيق أهداف مالكي الشركة.

نظرا لأهمية حوكمة الشركات و لعلاقتها بتحقيق الخطط الإستراتيجية من خلال الرقابة على إدارة الشركة فإنه لا بد من دراسة علاقة حوكمة الشركات و تأثيرها على التلاعب في الأرباح, حيث تقوم الإدارة بالتلاعب في الأرباح من خلال رفعالأرباح أو تخفيضها بإستخدام المبادئ المحاسبية و ذلك من أجل تحقيق مصالحهم الخاصة. من خلال هذه الدراسة تم فحص هذه العلاقة من خلال فحص العلاقة بين العامل التابع و هو التلاعب بالأرباح و العوامل المستقلة و المتمثلة بمؤشرات حوكمة الشركات (استقلالية مجلس الإدارة , حجم مجلس الإدارة , إزدوجية دور رئيس مجلس الإدراة), المدقق الخارجي , و تركيز الملكية, بالإضافة الى عوامل متحكمة (حجم الشركة , العائد على الأصول و الرافعة المالية).

تم جمع بيانات الدراسة من التقارير المالية السنوية لعامي 2015 و 2016 لثلاث و ثلاثون شركة مدرجة في هيئة سوق رأس مال فلسطين من أصل ثمان و أربعون شركة مدرجة حيث تم استثناء الشركات المالية (البنوك وشركات التأمين) من عينة البحث كون هذه الشركات لها قوانين حوكمة خاصة بها صادرة عن سلطة النقد الفلسطينية. تم استخدام The modified cross sectional jones model من أجل بحث العلاقة بين المتغيرات بحيث تم فصل المصاريف المستحقة الى قسمين و حساب قيمتها من خلال معادلة التدفق النقدي, تم ادخال النتائج الى نظام التحليل الإحصائي و عمل نموذج انحدار من أجل الحصول على النتائج الخاصة بالرسالة. من خلال عرض النتائج فقد تبين أن 55% من الشركات المدرجة كان مجلس ادارتها مستقل بنسبة 100% عن الإدارة التنفيذية في عام 2015 بينما بلغت النسبة 45% في عام 2016, تراوح حجم مجلس إدارة الشركات المدرجة من 5 أعضاء الى 15 عضو في عامي 2015 و 2016 بمعدل 9 أعضاء لعام 2015 و 8 أعضاء لعام 2016, بلغت نسبة إزداوجية الإدارة لرئيس مجلس الإدارة و الإدارة التنفيذية 18% من الشركات لعامي 2015 و 2016. بلغت نسبة الشركات الي يتم تدقيقها من شركات التدقيق الأربعة الكبرى ما نسبته 70% و 67% لعامي 2015 و 2016 على التوالي. تراوحت نسبة تركيز الملكية من 0% الى 92% بمعدل 58% لكلا العامين. تراوح العائد على الأصول من -32% الى 22% بمعدل 1.6% لعام 2015 و بين -79% الى 21% و بمعدل 0.9% لعام 2016, كما تبين من النتائج أن نسبة الرافعة المالية تتراوح بين 1.7% و 56% بمعدل 56% لكلا العامين.

كما خلصت النتائج الى وجود علاقة بين إدارة الأرباح و حجم الشركة لبينات العام 2015, و علاقة بين إدارة الأرباح و تركيز الملكية, الحجم و العائد على الأصول لبيانات العام 2016, كما أظهرت النتائج بأن متغيرات الدراسة تفسر 65% و 73% من التغير في إدارة الأرباح لعامي 2015 و 2016 على التوالي.